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DESIGNING FOR A LIVEABLE POST-APARTHEID INNER CITY THROUGH A MULTI-FUNCTIONAL PUBLIC ENVIRONMENT

“The public environment as platform for change”

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A dissertation submitted to the Faculty of Architecture,
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degree of Master of Urban Design.

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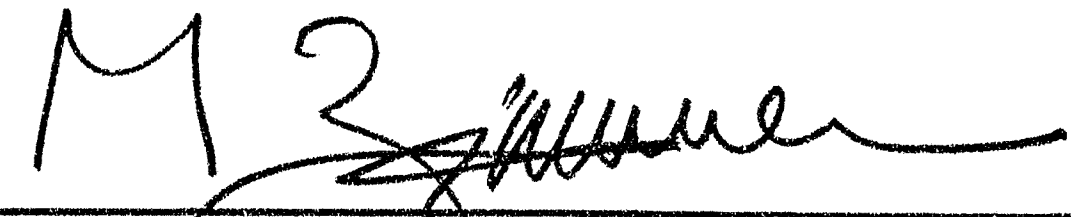
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Declaration

I declare that this dissertation is my own unaided work. It is submitted for the degree of Master of Urban Design in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.



Marcel Zimmermann

30th day of December, 1999

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Abstract

The focus of this dissertation is the establishment of the “public structure” urban design approach that enables the development of a multi-functional and liveable Inner City environment. The public environment is identified as the key element in the city, as it enables urban living and public life. The latter takes physically place, and is in part, directed by public space and its components, identified as ‘public structure’. It is the role of the urban designer to direct the physical design and layout of the public structure such that it supports urban life in all its facets.

The public structure approach is based on an understanding of public life from a socio-logical perspective, and the current state of public life in general terms and in the South African context. The characteristics and components of “public structure” are identified through urban design theory. The interrelationship between public structure and public life, society and the forces that shape it are identified and considered; again in general terms and in the South African context. A historic overview is undertaken which assesses the role of public structure in enabling a multifunctional and sociable public life in urban environments.

The principles elicited from the above analysis are combined with an assessment of urban design theory that is based on a philosophy of urbanism to yield the public structure urban design approach. The approach is applied in an Inner City case study and evaluated; from which conclusions are drawn and recommendations are made.

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CHAPTER 1

INTRODUCTION

This discourse aims to establish an urban design approach and spatial framework that yields a liveable and functional public environment within the inner city. This public environment must become a platform for changes to the apartheid inner city structure transforming it into a post-apartheid, truly South African inner city, in which the diverse peoples and culture that characterise our societal milieu find a liveable home, enabling them to meet their needs and achieve their potentialities.

The establishment of the problem and related aspects is the first step within the broader strategy and forms the focus of this introduction. The problems associated with urban environments have been attributed initially to the consequences of industrialisation, following with population growth, urbanisation and the concomitant growth of cities into extensive urban systems. The latter is a reflection of physical change and continuous adaptation of societies into urban cultures, and how that process of adaptation and change occurs within space and time. Many of the problems manifest in urban areas can be traced back to the make-up of societal structures and economic forces that have caused inequality, disadvantage and the generation of hazards.

In the above regard, the inner city problem is examined in the broader urban spatial and socio-economic context, with particular reference to the South African urban milieu. The discipline of urban design is defined and the role of the urban designer within the urban context. The problems associated with the inner city in international experiences are discussed in general, and the problems of the Johannesburg Inner City in particular. The identification of the problem and underlying causes establishes the status quo, from which opportunities for intervention can be ascertained, as well as assisting in the identification of the methodology / procedures that are required.

1.1 THE SOUTH AFRICAN URBAN CHALLENGE

Excerpt from the Truth and Reconciliation Commission report (1998) from a supplement produced by the Independent Newspapers and the Institute for Democracy in South Africa:

"The apartheid system was maintained through repressive means, depriving the majority of South Africans of the most basic of human rights, including civil, political, social and economic rights. Its legacy is a society in which large numbers of people suffer from pervasive poverty and lack of opportunities."

Excerpts from the South African Constitution, first from *Chapter 1: Founding Provisions* and second from *Chapter 2: Bill of Rights*:

"1. The Republic of South Africa is one sovereign state founded on a commitment to achieve equality, to promote and protect human dignity, and to advance fundamental human rights and freedoms."

"23. Everyone has the right -

- (a) to an environment that is not harmful to their health or well-being;*
- (b) to have their environment protected through reasonable legislative and other measures designed to -*
 - (i) prevent pollution and ecological degradation;*
 - (ii) promote conservation; and*
 - (iii) secure sustainable development and use of natural resources."*

1.1.1 Urban Integration

The physical form and urban structure of the South African city was initially shaped by a long history of European colonialism which initiated segregation, and a shorter but more focused and intense period of "Grand Apartheid". The policies of the latter period realised a spatial planning approach purposefully focused on the physical separation of "race-groups", which yielded a predominantly mono-functional spatial pattern and disparate urban form and has left the South African city dysfunctional. Dewar (1992:16) aptly summarises the South African city as

"settlements which are desperately inconvenient. Large quantities of South Africans spend up to four or five hours a day travelling to and from work, with considerable losses in terms of productivity, social and family life and parental supervision".

Since then, very few inroads have been made into breaking that disparate spatial pattern in the urban context; *urban integration* remains elusive and complex.

The advent of a new political dispensation in 1994 has borne a new sovereign democratic state with a constitution that is based on principles to achieve equality, to promote and protect human dignity, and to advance fundamental human rights and freedoms. The latter has freed marginalised communities from a political and legal perspective. However, in a spatial context, the urban geography of the apartheid city keeps marginalised communities physically trapped in "space and time". The urban environment they are experiencing still prevents and / or restricts them from meeting basic needs and carrying out basic urban activities; it continues to exclude them from democracy in the *de-facto* patterns of access to meet their needs, bars opportunity and restricts choices of living daily life in the city (Wood, 1998).

The urban "post-apartheid" context within which *urban integration* is to be achieved, is characterised by fast city growth and expansion caused by fully-fledged urbanisation and migration to cities in South Africa from sub-Saharan Africa. This is particularly evident in the Johannesburg Inner City, where not only informal traders from sub-Saharan Africa ply their trade, but also entrepreneurs that are settling and invest, building up small- to medium enterprises. Furthermore, the establishment of a uniform city tax-base has highlighted the grossly one-sided infrastructural and service investment of the past government, as well as the dis-economies that have resulted from the spatially separated urban structure. The former has also brought to prominence the vast amounts of finance and other resources that were utilised to keep the spatial apartheid development pattern in place. The misdirection and wastage of the latter resource base has led to the existing resource-scarce environment, which, for the foreseeable future remains unchanged. Combined with the socio-political friction of relative deprivation, in the context of an economy that is growing at a very slow rate, and an urban environment that remains spatially disparate, *urban integration* that enables communities and people within the South African milieu to lead peaceful and liveable lives, remains a challenging and formidable task in a socio-economic, physical and functional sense.

1.1.2 An Urban Context of continued Disparity and Marginalisation

New urban legislation has primarily focused on urban integration, reflected in the principles and strategies emerging initially from the Reconstruction and Development Programme and later enshrined through the Development Facilitation Act. These give clear direction to both policy and strategy, encompassing:

- creating greater complexity, intensity and compactness in the urban form;
- a specific refocus on public transportation;
- an emphasis on nodal, corridor and activity spine developments as structuring elements of the urban system;
- more efficient and intensive use of existing social and service infrastructure;
- regenerating the urban economy;
- infilling the “void” areas of discontinuity in the urban fabric;
- intensifying the urban fringe; and
- utilising open space systems and ecological principles to structure the form of the urban system, rather than being “sloap” (space left over after planning).

The fact that these policy directives and associated principles are left open to broad interpretation, and in some aspects can even be construed to pull in different directions, has resulted in a very open and contested debate of how these are to be physically translated on to the ground. Wood (1998:4) states that

“... even where strategic urban development frameworks are in place, the ability to make substantial changes and in-roads on the task of integrating cities is thwarted and bedevilled at the more local scales of planning”.

It is argued that the enormous variety of interests that are embodied within the existing spatial milieu of the urban environment constrain and delay change from happening at a large scale.

“This against the backdrop of, on one hand, the exigencies of housing and service delivery at scale by public or largely publicly funded agencies and developers and, on the other, the search by market-led development to find security, certainty and ‘islands of privilege’ in a system that is otherwise in flux. The effect, in many respects, is to reinforce the inherited geography of dislocation” (Wood, 1998:4).

Examples are that housing continues to be provided en masse well beyond the urban fringe, exacerbating the marginalisation of communities and undermining the principle of long-term sustainability. Market-led development is tending to flee downtown and spawn significant urban nodes in the “executive belt” in cities such as Johannesburg and to a lesser extent in Durban and Cape Town.

Thus, to date, the spatial shackles inherited by the post-apartheid city remain intact. The marginalised communities have yet to come into more equitable membership from a spatial and socio-economic perspective. As new urban planning systems remain ineffective and inefficient, exacerbated by the lack of urban management and incoherent development direction, the public environment of the South African city is being shaped predominantly by

- laissez faire* development forces from the private sector, as well as from the informal sector, as there are few mechanisms and urban management controls that are in place to guide and direct the restructuring and growth of the urban environment; and
- as there are few new alternatives in certain areas, the continued application of town-planning controls and mechanisms that emanate from “apartheid planning” principles and related urban planning policies. The latter have in the past specifically favoured and accommodated an affluent minority, and still continue to do so at present.

Urban integration remains elusive and disparity continues. This is underlined by Wood’s (1998:6) assessment of the existing urban milieu:

“On balance, it would not be unfair to say that South African cities, through the transition, are, quite understandably, characterised by

- *a lack of cogent direction for the future;*
- *little by way of significant steps toward structural change;*
- *little understanding (or even subversion) of what is implied by the principles enshrined in the Development Facilitation Act;*
- *the continued marginalisation of low income communities; and*
- *subsidy clashes (such as, for example, a “one-off” capital subsidy for first-time home owners irrespective of where they locate in the city or beyond its fringes that make dependence on crippling transportation subsidies an enduring pattern)”*

Clearly then the typical characteristic of the South African city remains that of the typical disparate “apartheid city”.

With the advent of the new democratic dispensation, the South African public urban environment began to be transformed, a process that is far from over and largely unguided. This in spite of the entrenched spatial disparities and seemingly ineffective and resource poor government, that is severely limited and restricted in its ability to restructure the South African urban milieu (and in some instances policy approaches and development strategies are so inappropriate that these directly continue to entrench the urban disparities). The spatially marginalised communities and resource-disadvantaged people are utilising and taking over the public environment in a manner that suits their needs and enables them to survive city life, albeit at a level of quality and success that is far from acceptable or even close to the ideal of a liveable environment. It is the “democratisation” of the public environment in the “rawest sense”, i.e. to the lowest common denominator. To date this transformation in the utilisation of the public environment has been characterised in some instances by violent conflict, severe competition for limited space between a wide variety of users, and the physical decline and degradation of that space in general.

The reaction by the private sector to this “raw democratisation” has been to continue with urban projects that are still largely based on exclusion, either overtly by restricting informal trade access, or covertly through high rentals, niche marketing, the extensive development of introverted indoor shopping centres and malls, office and business security parks and secured residential estates. In essence the reaction is characterised by the withdrawal to the more socio-politically stable and affluent suburban environments and their urban nodes, and by deduction, the investment secure environments.

It is clear that current urban planning policies and physical development strategies are not enabling, neither are they achieving the positive public environments that should be the liveable places for the city community.

1.2 A DYSFUNCTIONAL PUBLIC ENVIRONMENT

1.2.1 The Public Environment in Crisis- both in the Contemporary City and in the South African Urban Milieu

In the above urban context Wood (1998) stresses that the work of architecture and urban design should focus on the reintroduction of the public dimension of our cities, and considers it to be one of the most significant contributions to be made at this stage in the urban transition, regardless of whether such work is city-centre based or part of the emerging urban hinterland. This is particularly important considering the vital role and growth of the informal sector (and the inability of the formal economic sector to grow fast enough to create economic opportunities). The public environment, characterised by activities such as street trading, market squares, the various transit nodes (from combi-taxi to rail), derelict buildings and underdeveloped areas and spaces, is a vital element in transforming the existing urban environment into a place of opportunity for everyone, in particular the marginalised and the informal sector.

"It is also, indeed, one of the most important dimensions in the making of the African city as opposed to the European / colonial character on which South African cities have typically grown" (Wood, 1998:11).

Dewar and Uytendogaardt (1991:56) concur with these sentiments and stress the urgent need

"... to focus urban management attention on the collective dimensions of urban life. Particularly important in this are the public spaces".

1.2.2 The Critical Role of the Public Environment in achieving a Liveable City

Dewar and Uytendogaardt consider the essential social infrastructure of successful urban environments to be positively-made and celebrated public spaces. These form the places through which people experience and engage with the collective life that characterises the city, both at an informal and formal level.

"They are the primary elements affecting the quality of cities as experienced by all people. While being important to all, the role of public spaces in the lives of the urban poor is critical. When

people are poor, the full range of a family's needs cannot be met through the individual dwelling unit, which represents the locus of one family's, by definition, limited, resources. The public spaces, however, can represent the foci of an entire community's energies and resources. They are the places where most social experiences are played out The way in which they (the public spaces) are made profoundly affects the performance and the enjoyment of social experiences. When public spaces are rich social spaces, the entire environment is positive, regardless of the quality of individual buildings" (Dewar and Uytendogaardt, 1991:56).

In addition, the public spaces play a vital role in enabling and accommodating the informal and periodic activities that form a critical part of daily urban life. This encompasses a very important economic element by which petty commodity traders and producers gain access to trading and producing areas. Other activities include public meetings, spontaneous theatre, relaxation, entertainment, periodic markets, fairs, and informal sport / play, celebrations, etc..

1.3 THE URBAN DESIGN CHALLENGE IN THE SOUTH AFRICAN URBAN CONTEXT

1.3.1 The Discipline of Urban Design

The integration of the marginalised communities, which were forced onto the periphery of the urban system (and often well beyond the periphery), and who effectively remain marginalised by the inherited geography of poverty and dislocation from the urban system, remains the primary task and responsibility of urban planning, city management, public policy and all professions concerned with the built environment; and by implication the discipline of urban design.

Lang (1994:ix) defines urban design as:

"(Urban Design) is concerned with the design of the four dimensional physical layout of human settlements and their parts. It is the art of relating: structures to one another and to their natural setting to serve contemporary living (Stein, 1955), in time and over time".

In this context, Lang argues (1994), urban design is a complex endeavour (profession or art?) because it aims to achieve a diverse multitude of ends simultaneously. These ends comprise:

- the provision of shelter for activities and uses;

- to the creation of a sense of place;
- to ensuring the technological soundness of the built environment; and
- to the health of the fiscal and biological environments.

Consequently, urban design overlaps with the endeavours of many fields and is therefore also concerned with the interrelationship between various sets of professional concerns.

Boden (1997:lecture notes) defines urban design as an activity / profession

"that seeks to develop a framework for the design of the natural and built urban environment. This framework combines principles for spatial relationships with a plan structure and set of policies. It co-ordinates private actions to produce the best possible public environments, providing contextual cues for the architectural design of buildings and focusing on the interrelationships between major public and private urban elements, to enhance the settlement's (city's) legibility and cultural / contextual fit. It must therefore respond to the perceptions of all affected constituencies. Urban design therefore guides the efforts of various agents over extended time spans in different parts of the city. This is difficult because cultures and clients are multiple, requiring the preparation of ranges of design hypotheses, which reflect diverse values and interests, and consequent spin-offs, tradeoffs and payoffs. Whether physical or socio-economic, indeterminate resources, spatial programmes and controls also preclude the attainment of a complete end state".

Similarly Wood & Senior (1987:34) state that the public environment needs to be comprehensively designed to achieve a liveable city. In this regard they argue that urban design

"is a discipline formed in response to the identification of the problem that the public environment is neglected and has become the 'design vacuum' between town planning and architecture. ... (urban design) seeks to redress the apparent lack of concern for the contributions that the physical qualities of the urban environment make to the overall quality of life in cities."

In this regard Wood & Senior (1987:34) suggest the broad goal of urban design to be:

"to strive for a quality of physical urban environment which nurtures human dignity and culture through design, based on an understanding of the social, economic, physical, temporal, political and legal processes that influence the structure and form of cities."

The role of the urban designer is thus directly focused on the design of the built and natural urban public environment. The design constitutes a process and is not a final product nor masterplan, but comprises a

framework that yields sufficiently robust spatial directives and actions to guide the future development, growth and form of the urban environment. Simultaneously, the framework requires being sufficiently flexible to adapt, in order to accommodate the changing and evolving urban environment caused by the multitude of actions characteristic of human activity. The focus of the design framework is the urban public environment and the interrelationship between public and private. It is considered that a functional, diverse and 'healthy' urban public environment is fundamental to achieving a liveable city in general, and the South African city in particular.

Urban design is thus directly focused on the design of the built and natural public and semi-public environment, and its relationship to the private domain. Urban design entails two focus areas: procedure and physical product, with the product changing in time and space. Accordingly urban design is not final product orientated nor does it aim to achieve a masterplan, but comprises frameworks that yield spatial directives and physical development actions, which are robust enough to guide future growth, development and built form of the urban environment. Simultaneously, the urban design framework must be sufficiently flexible to adapt over time, in order to accommodate the continuously changing and evolving urban environment caused by the multitude of actions characteristic of human activity. The focus of the framework is the urban public and semi-public environment and its interrelationship with the private, based on an understanding of the physical, environmental, social, economic and political context of its time. It is considered that a functional, diverse and 'healthy' urban public environment is fundamental to achieving a liveable city in general, and the South African inner city in particular.

Lynch (1985:46) aptly summarises this process of design as

"The process of decision (and of design, which is a subset of decision) is one of managing the progressive development and definition of a problem, to the point where situation, client, aim and solution are sufficiently well-fitted to take action".

1.3.2 The Role of the Urban Designer

In the aforementioned context of urban design as an activity, the role of the urban designer needs to be identified. This must be considered with

the knowledge that to date no single substantive model for the future city or how it should perform has been developed, neither is it universally applicable (Lang, 1994, pp 419). The focus must therefore be on the processes that shape cities and how these are to be directed, in manner that gives certainty for the future and resolves current problems and issues.

In the broadest sense, the development and growth of the city and the urban system occurs within a time-place-social context. Accordingly the urban environment is to a significant degree a physical reflection and manifestation of the social context of which it forms part. For example, if an urban society engenders gross inequalities, these will find their realisation in the urban environment, because that is where the consequences of urban society's culture, laws and controls (i.e. its action and non-action, or what is done and not done) physically manifest themselves. For example if the technological base of an economy produces hazardous by-products, which are not correctly disposed of or processed, then these may accumulate within urban areas, causing health and other problems that are detrimental and dangerous to society and the urban environment. Alternatively if social needs, aspirations and opportunities are not met, as was the case in South Africa, by

"... essential forms of change and broadening opportunities, the diverse forms of evidence for these 'failures' will occur most clearly in cities." (Herbert et al., 1990:294)

The one consistent variable that impinges upon urban design is *change*. Throughout time, as societies and cultures change, so the city form and function has adapted and changed, and as society changes and adapts continuously, so does the urban environment. In this regard the urban environment is viewed as a system that is in a continuous state of flux, there is no predictable finite end, neither is there an ideal city form or type. Accordingly the urban designer is required to respond to changes in a manner that creates other / further changes that achieve a viable urban future, resulting in an urban environment that is able to change and adapt. How this should be undertaken is dealt with in greater detail in Chapter 6. It suffices to outline two important principles for urban designers because of the many changes that are occurring, on a continual basis, in urban life and form:

- The work is to avoid imposing a particular way of life or redirecting the fundamental principles and morals that constitute the society, unless, as Lang (1994:419) states, *"a lifestyle is doing social harm or inhibiting the lives of other people"*.
- The work should also avoid making assumptions that present patterns, based on factual assessment and / or observation, will continue into the future. Simultaneously it must be considered that certain patterns and trends endure for significant periods of time.

However, ideas and thoughts about the future and the resolution of current challenges and issues, need to be based on where society is presently and that which can be applied or adapted from its past / history.

Given these viewpoints, the role of the urban designer is (added to and adapted from Lang, 1994:420):

- To develop spatial and non-spatial directives and/or principles for the present public environment's relationship to the private realm, in order to achieve its utilisation by society to maximum benefit, effect and efficiency; as well as to the possible future nature of the public environment and the opportunities entailed therein.
- To establish future visions of the urban environment that are firmly based on a thorough understanding and recognition of the societal and cultural context.
- To enable the evolution of the built environment and its public realm such that it unfolds incrementally and is sufficiently open-ended for flexibility, allowing for the inclusion of the conscious or 'unconscious' inputs from the *thousand designers* (Crane, 1964).
- To undertake the design process, recognising the political nature of urban design and that it takes place within existing societal structures, in a manner that champions the following aims:
 - social justice, regardless of gender, age, and cultural origin;
 - physical layouts that do not inhibit social change unless such changes are unjust or antisocial; and
 - defending the public interest- understood in the context that present definitions of the 'public interest' are limited and that

different interest groups define it in different ways and can be biased. (Lang, 1994:423)

- e. To direct the spatial, social and psychological responses of design proposals and directives such that these nurture the dignity of people, engender community and avoid gross error, agreeing with Lang (1994:420) that:

“..., but being wrong is not a privilege that urban designers, any more than other designers, have (Bazjanac 1974; Rittel, 1984; Rittel and Webber 1984)”.

1.4 THE PUBLIC ENVIRONMENT AS PLATFORM FOR CHANGE: GOALS AND OBJECTIVES OF THE STUDY

This dissertation specifically seeks to reinforce the role of the urban designer in the South African urban context, by focusing on the inherent opportunity that the design of the public environment holds in the spatial restructuring of the “post-apartheid” city, with particular focus on the *Inner City*.

The positive aspect in the problematic South African urban context is that all cities continuously adapt to changing circumstances, shifting & adjusting their equilibrium in terms of the dynamics of urban forces. Thus the only certainty is the process of change, and in the South African context that change has to be directed, managed and resourced in a manner that achieves an integrated urban environment. This enables the development of a city that affords everyone / all communities the opportunities of and advantages of urban living - i.e. a liveable environment positively supporting human endeavour in all its facets.

Urban integration thus suggests a diverse urban environment, that is complex, accommodates human activities and functions at various levels, allowing a variety of activities and uses, from meeting basic needs to achieving prosperity in the broadest sense of all its people and communities - i.e.

“*The making of sustainable, economically vibrant, life-enhancing environments for people in community*” (Wood, 1998:10).

This dissertation is based on the belief that a healthy functioning and positive public environment is a critical component toward achieving *urban integration*. The public environment is the spatial domain where

formal and informal economies, as well as the diverse communities, come together (currently characterised by socio-economic and physical friction). In this regard the public environment: the streets, public places and buildings, market squares, transit nodes and publicly-owned land-holdings, becomes the most important dimension in the making of the African city (Wood, 1998) and squarely places the onus on the urban planner, the architect and the urban designer to make their contribution. The urban designer in particular, through the discipline’s role and function, is to direct and enable the development of a public environment that enables a liveable city, which is desperately needed and sought.

It is thus the specific goal to establish an urban design framework that outlines spatial design principles, which enable the physical development of a multi-functional, diverse and safe public environment: This framework, in the context of *urban integration*, must be underpinned by two objectives: first, to achieve “*sustainability*” (i.e. be socio-economically, politically and physically such that there is no disadvantage or threat to future generations); second, to enable “*multi-functionality*” (allow for a variety of actors / users and diverse functions at many levels with regard to urban activity and communities, that are adaptable over time). It is considered that this directs and guides the development of a syntax of urban public space networks that allow for the complexity and crossover of the diverse cultures and people, pointing to the underpinnings and the emergence of the truly “South African” city.

1.5 THE STUDY APPROACH

A series of concepts have been eluded to in the introduction:

- the term “public”;
- the “public environment”; and
- the concept that the physical city is a spatial mirror of contemporary society and its historical organisational principles. It reflects the previous and currently prevailing operating principles (rules, norms and values) – of culture, technology, economy, and social behaviour – of the society within which the city (urban environment) has developed. The city is the most vivid outcome of social, cultural, political, economic and environmental processes.

In this regard, Lynch (1989:48) also assists in defining the urban environment, what he terms *settlement form*:

“... is the spatial arrangement of persons doing things, the resulting spatial flows of persons, goods, and information, and the physical features which modify space in some way significant to those actions, including enclosures, surfaces, channels, ambiances, and objects. ... (including) the cyclical and secular changes in those spatial distributions, the control of space, and the perceptions of it. (The last two, of course, are raids into the domain of social institutions and of mental life)”.

In this regard, where then is the line drawn for the field of enquiry – the context – of urban design, because it entails such a broad spectrum – urban geography, planning, architecture, civil engineering, natural sciences (biology), social sciences, psychology, etc. The chosen field for urban design comprises the spatial and temporal extent of human actions and the physical things which are the context of those actions, plus sufficient knowledge about social, economic, cultural, environmental and psychological aspects and fields that are most directly linked to that spatiotemporal distribution, and which are significant at the appropriate scale of enquiry (Lynch, 1989).

As a result the methodology of this dissertation is structured in terms of a construct of the urban system as outlined in Figure 1-2 (over the page): The interrelationship between the PUBLIC SPACE / ENVIRONMENT and the public realm / sphere, the private realm / sphere and private space / environment, within the overall urban societal context and in particular focus on the inner city. It is based on the fact that the public space / environment is the continuous seam throughout the urban system, linking the parts into the whole, as well as being shaped by the parts (spatial and non-spatial) and vice versa.

This view of the urban system ensures a holistic approach, encompasses all the various components, as well as enabling specific focus of various aspects.

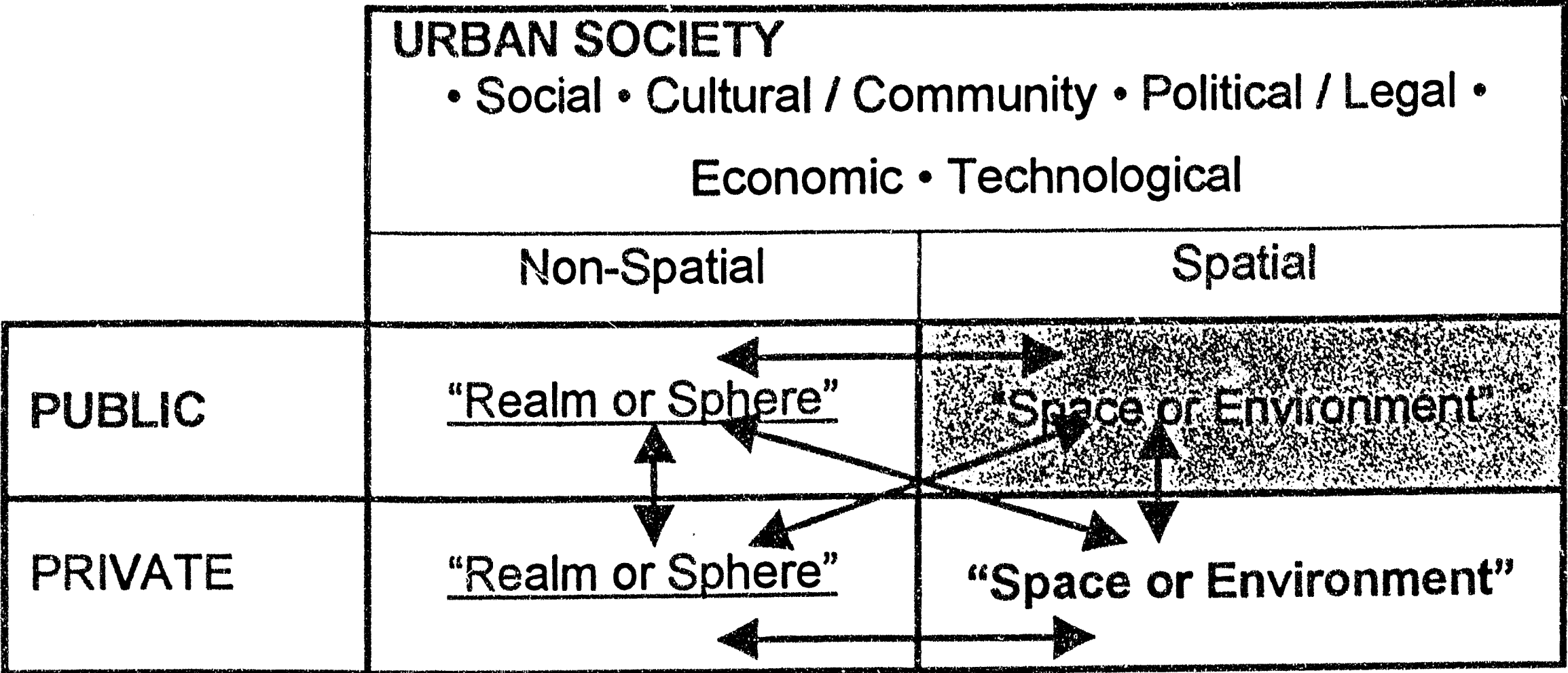


Figure 1-1: The Urban System

The methodology of the discourse is outlined in terms of each of its proposed sections.

- Chapter 1:** The problem, statement of intent, goals and objectives, methodology and summary conclusions outlined.
- Chapter 2:** An understanding of the environment, urban life and the concept of “public life”, and the reason for its importance in the context of urban living. The decline of a sociable public life, its consequences on urban living in general and in the South African post-apartheid context.
- Chapter 3:** Identifying and defining public space, its components and characteristics, from which the concept of “public structure” is elicited. An assessment is undertaken of public structure in the contemporary western city and in the South African urban context of a fragmented and urbanising milieu. The conclusions drawn establish the role of public structure within the urban environment in general terms and the importance of its role in the South African urban context.
- Chapter 4:** A historic overview of the role of public space, i.e. public structure in enabling the development and growth of liveable urban environments. This is undertaken in relation to the evolution of the contemporary city and that of the South African city

with particular reference to Johannesburg. Various principles of enablement are elicited.

- Chapter 5:** A review of urban design theory and practice that promotes urbanism and is underpinned by the notion of capital structure, which considers that a viable and liveable urban life is achievable, provided that the correct design approach is undertaken. In this regard the role of an urban design approach in meeting basic needs is also assessed. The theory is evaluated against a set of criteria to establish its validity and practicality as a base for the public structure urban design approach.
- Chapter 6:** Outlines the characteristics of the public structure urban design approach, its design principles and their components. Various design considerations are identified in relation to each of the components.
- Chapter 7:** A review of the body of procedural theory is undertaken in order to establish an appropriate public structure urban design process.
- Chapter 8:** A case study is undertaken for the Ellis Park Precinct in the Johannesburg Inner City. An analysis has shown that the precinct is utilised predominantly monofunctionally (for big sport and mass entertainment events). However it has significant infrastructure, facilities and underutilised open space, which have the latent potential to turn the precinct into a multifunctional environment, serving its local and adjoining community, as well as metropolitan and national interests. The aim is to establish an urban design framework and form response through the application of the public structure urban design approach, identifying spatial principles, development parameters and criteria that yield a diverse and multi-functional public environment for the Ellis Park

Precinct. The end product is a design proposal and spatial directives and principles.

- Chapter 9:** An evaluation of the public structure urban design approach, from which conclusions are drawn and recommendations made.

This dissertation places a renewed emphasis on the urban spatial public environment, providing a revised vision of what this urban public environment should be and how it should function within the South African urban milieu.

1.6 SUMMARY OF FINDINGS

- The urban environment is a complex mélange of use, activities and physical forms that enable (sometimes more successfully and in other instances less so) people to meet their needs and accommodate their complex human social interactions and relationships.
- Urban design practice focuses on the public structure of the urban environment. This requires that any urban design approach and procedure is informed and directed by the societal elements and forces that shape both public structure and the activities that occur within it, encompassed in the notion of urban public life. It is the role of urban design to enable the development of a multi-functional and liveable urban environment. This is achieved by shaping and designing public structure in a manner that societal activity systems are accommodated, and human and biogenic environment needs are met, as directed and influenced by nature and culture with their respective agents.
- A sociable public life is a prerequisite for the development of a liveable urban environment. The function of sociability is particularly important because it forms the seam between public and private life, thereby enabling urban life. The establishment of sociability is best supported within the physical and spatial context of a public space environment that is multifunctional and supports a diverse urban milieu.

- In the South African context, there is a flight from the public realm as a result of an unsociable, conflicting, violent and crime-ridden public life. The factors contributing to this are: (i) Withdrawal into the private realm of those people who have the means and resources to do so, (ii) violent contestation, as the marginalised and disadvantaged have claimed their stake in the city, (iii) uncertainty about the future as a result of a policy and urban development vacuum, (iv) an ineffective and limited urban government with regard to management and maintenance, caused by inexperience and lack of resources, and (v) the emergence of crime, which is affecting all sectors of society, militarises public life and privatises it.
- The rejuvenation of the public realm requires an urban design approach that is based on a philosophy of “ubuntu” (humanness, good disposition, and good moral nature), that encompasses the notions of sociability and civility. Four principles underpin the “ubuntu” philosophy: (i) Social differentiation without exclusion, (ii) variety (multi-use of social space), (iii) “eroticism” (attraction, pleasure and excitement of urban life), and (iv) publicity (a being together of strangers, diverse and overlapping). The latter is supported by the historic overview, which shows that “good” public spaces were supportive, democratic and meaningful to urban living. They accommodated a variety of activities and functions, evolved into a multitude of types, and assisted in creating a more humane or civil urban culture.
- Public life is physically undertaken in the public- and semi-public space of the urban environment. The public- and semi-public space and its components are defined as *public structure*. This public structure permeates the various segments of the urban environment. It physically interrelates with and structures the component parts of the urban environment within a particular district. Simultaneously it structures the urban environment as a whole by the linkages and connections that public structure establishes between the distinct districts of the city: the inner city; areas of first- and second- generation suburbs; the emerging “edge city” environments; and the townships (including informal settlements).
- Public structure (public space) in the 20th Century post-industrial city has fallen into decline, predominantly dispersed into separate, isolated and mono-functional components, that serve different groups. This is in the context of a multi-cultural, changing society, becoming culturally much more complex.
- The character, quality and functionality of the public structure to support public life and a multifunctional and diverse urban milieu varies greatly throughout the urban environment. This has been directed and influenced in the South African urban context by a variety of economic, demographic, socio-cultural, technological and political forces, the natural physical environment, and the past strategies of racial control. As a result public structure in the South African urban context is mono-functional, designed for specific and independent functions and / or social groups, and in many instances is physically inadequate to support human activities and functions. It falls short of enabling a multi-functional and liveable urban life (where it does achieve this, it is at great cost).
- In the South African urban context, public structure requires to facilitate the development of a multi-functional (in the broadest sense of the word) urban environment, that meets diverse socio-cultural, economic, institutional and environmental and human needs. Consequently, a public structure-centred approach that directs the growth and development of urban environments must be inherently multi-functional, physically accommodating and support a multitude and variety of functions and activities.
- A multi-functional and liveable urban milieu is achieved through the application of the “Public Structure Urban Design Approach”, which encompasses the following principles:
 - Develop a complex urban environment.
 - Meet people’s urban living needs.
 - Facilitate social ordering.
 - Make places through the three dimensional design of the physical quality and space syntax of the public environment.
 - Treat movement as an activity in space.
- Access by urban dwellers to a range of resources, facilities and services, transport modes, information, diverse environments and autonomy.
- Balance and synergy between the urban environment and the natural environment with its ecological processes.
- Approach city building as a process of becoming.

CHAPTER 2

THE ENVIRONMENT, URBAN SOCIETY AND PUBLIC LIFE

The city or human settlement is the physical result of human endeavour, a spatial mirror of contemporary and past societies and their organisational principles. Consequently, as urban design is concerned fundamentally with enhancing the quality of human lives, it must have an understanding of the nature of the human environment and its qualities, as a basis for decision-making in urban design (Lang, 1994). The human environment is complex, as outlined by Lang (1994), comprising the natural world and one inhabited by other people, other animals and organisms, and the artificial structures - particularly of humans - created by them. Consequently human settlements are part of a larger environment, a *sociophysical* world.

The focus of urban design is the physical structure and layout of human settlements that are the outcome of human living and form its built environment setting. The quality of the built environment strongly impacts on the quality of human living and settlements, but by no means is it the major determinant. The complex inter-relationship between human society and human habitat requires an ecological approach, that views the human being holistically, as an integral part of and contributor to the physical and socio-cultural environments (Lang, 1994).

The focus in this chapter is on an overall approach to understanding the richness of human society, the richness of the environment, and the complexity of the relationship between people and environment (i.e. the fundamental processes of human behaviour). This general approach to understanding the environment and people forms the framework in terms of which the problem, a dysfunctional public environment that is in crisis, is identified. It also underpins the design approach and concomitant spatial design principles needed to resolve the problems, with a particular focus on the South African inner city, to yield a liveable post-apartheid inner city.

2.1 THE ENVIRONMENT

Lang (1994) defines the environment or *sociophysical* world as comprising two distinct yet intricately interrelated and over-lapping components:

- the multifaceted *physical environment*; and
- the multifaceted *socio-cultural environment*

The built environment professions, and in particular urban design, focus on the development and shaping of the *physical* environment to meet that human biological need. Simultaneously, the formers' actions and associated elements impact upon the sociogenic environment, by meeting socio-cultural needs and their meanings and symbolism, which shape - to a certain degree - people's reactions, feelings and behaviour concerning the world around them and themselves.

2.1.1 The Physical Environment (natural, and artificially built)

The physical environment, a composition of interlocking terrestrial and animate components, provides the setting - or physical framework - of human life. This physical environment, in its broadest sense, encompasses the natural and built environment, which are inter-related and overlapping components.

The natural environment and the forces that shape it (climate, gravity etc.) have been historically, and still are, fundamental aspects that shape human settlements. A thorough consideration of the natural elements of the physical environment is required, particularly in the context of technology which enables one to overcome many of the natural constraints and restrictions, as well as the increasing demand for water and energy supplies due to the ever increasing world population. The elements generally comprise (however in the context of place – specific and regional differentiates):

- the fauna and flora that exist in a place;
- the geological composition of the earth;
- the nature of the terrain above and below ground, slope, geological composition and relationship to sea level;
- the particular climate of a place - its seasonal changes, temperature ranges, rainfall patterns, prevailing wind directions and humidity.

These factors are determined partly by latitude, but also by altitude, and the location in relationship to land masses, ocean currents and winds; as well as the physical layout, natural and artificial, i.e. by settlement patterns and their building typologies:

- the aesthetic character derived from the terrain, fauna and flora; &
- the degree of adaptation of the biogenic character, i.e. the relationship of exotic to native species, in view of the required natural balance.

The other part of the physical environment is the built environment, the artificial environment brought about by changes people and human societies have made to the physical structure of the world through buildings, structures and infrastructure systems. It also encompasses the natural systems that are interlaced with this artificial environment (regardless of whether these have been reshaped, redirected or manicured by people). In the broadest sense, the built environment is considered as the artificial arrangement of the surfaces of the world (including natural systems) that have been manipulated by people. The manipulations in turn enable, or disable and restrict, human activity patterns and aesthetic displays and qualities (Lang, 1994). These are changed according to human needs, or by new patterns that fulfil existing needs in a better way.

The function of urban design requires an understanding of the nature of the changes, the functions and purposes such changes should serve, and the procedures for directing changes to enable the establishment of liveable built environments.

2.1.2 The Socio-Cultural Environment

2.1.2(i) Understanding Society

The socio-cultural environment is the inter-relationship between a society and the culture of the environment. The social system comprises a set of individuals who interact on a regular, although not necessarily a frequent or a face-to-face, basis, in order to achieve specific ends (Lang, 1994).

The interaction between members of social systems occurs in terms of mutually agreed on norms, values and rules. People in societies are

mostly part of a number of social systems, depending on their origins, stage in life cycle, socio-economic status, and the activities in which they engage. These social systems are structured in terms of two types of *organisations* according to Gottschalk (1975), termed *communal* and *formal* organisations.

2.1.2(ii) Communal and Formal Organisations or *Gemeinschaft* and *Gesellschaft*

The descriptions, as well as similarities and differences, of the *communal* and *formal* organisations are outlined in Table 2-1. The type of organisation determines the nature of its spatial configuration and the physical environment pattern that best suits it (Lang, 1994).

The structure of society proposed by Gottschalk is similar to that of Tönnies (1964), who coined the opposing terms of *Gemeinschaft* and *Gesellschaft* describing social organisation. The defining characteristic of each were two types of human will, rational will (*Kurwille*) and natural will (*Wesenwille*). The predominance of natural will, comprising concord, folkways, norms, values and religion yields *Gemeinschaft* or culture. The predominance of the rational will comprising the cosmopolitan and public opinion yields *Gesellschaft* or society

The predisposition of society to form communal (*Gemeinschaft*) and formal (*Gesellschaft*) organisations is on the one hand dependent on the personalities, competencies / abilities and available resources. On the other the *culture* of which this society is part, is the overriding factor. This is applicable both to social and business organisations.

2.1.2(iii) Culture

Culture is defined in terms of anthropology as the implicit and explicit rules and norms (being ‘complete and detailed instructions on how to perform culturally significant actions’, (Schneider, 1976 and Daniel, 1984, in Boden, 1993), and meanings and symbols shared by a group of people. These rules, norms, meanings and symbols direct and influence basic daily activities, lifestyle, how people relate, and attitudes towards the physical environment and the built environment. The former fall within a society's overall religious ethos- the attitudes toward life and death, explanations for human existence, and its ethical system (Lang, 1994).

Boden (1993) regroups Kiesing's (1990) twenty topics of cultural studies, into four clusters, in order to establish a framework for the social use and design of space:

- a. family and kinship, community and men's and women's worlds;
- b. power, politics, law and custom, and inequality and social structures;
- c. economics; and
- d. religious beliefs, ceremonial rituals and cosmic views.

Culture of a people or society influences both the spatial and non-spatial aspects of these groupings or elements of culture. The rules, norms, meanings and symbols either change over time as a culture adapts and changes (not necessarily all the rules, norms, meanings and symbols change), whilst other aspects of the culture remain unchanged over time, becoming in a sense generic.

2.1.3 A Construct of the Physical and Socio-Cultural Environment

Having defined in greater detail the nature of the *physical* and *socio-cultural* environment a construct of the complete environment, within which urban design work takes place, is proposed (refer Figure 2-1). The “best” environment is considered to be one where the *physical* matches and suits the *socio-cultural*, and vice versa.

It is acknowledged that the proposed construct is a simplified version of a very complex and diverse world. In this regard it is only being used as a tool to focus further investigation into aspects particular to urban design. This requires a more refined understanding of urban society, community, the public realm and public space. The following section comprises a detailed discussion on the latter.

Some Similarities Between Formal and Communal Organizations	
1. Both are solidary interactional systems. (<i>sic</i>)	
2. Both are relatively highly institutionalized in that they possess a developed normative structure, a high level of value consensus, and patterned reciprocal expectations.	
3. Both may include subsystems of their own as well as of the opposite type.	
4. Sentimental collectivity orientations (loyalty, commitment) are a variable.	
Differences Between Formal and Communal Organizations	
(Each of the dimensions may be considered as representing a continuum.)	
Formal Organizations	Communal Organizations
1. Oriented toward a specific defining goal	Not oriented toward a specific defining goal
2. Functional collectivity orientation	No functional collectivity orientation
3. Linked by contract, i.e., by specified and limited cooperation	Linked by generalized cooperation (active and passive)
4. Mechanistic interaction	Structured freewheeling
5. A variety of roles and a formal hierarchy	A variety of roles but no formal hierarchy
6. Normative, utilitarian, and coercive forms of power are legitimate	Only normative power is legitimate
7. Created externally or by its elements	Generated by its elements
8. The inclusive system defines the roles of the subsystems	The inclusive system is defined by the subsystems

Table 2-1: Formal and Communal Organisations, Source: Gottschalk in Lang, 1994:23

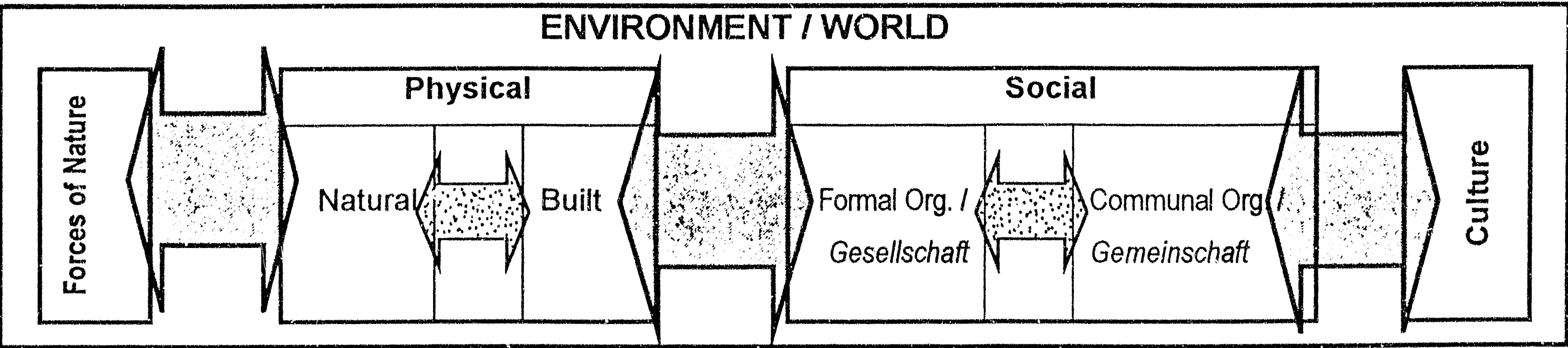


Figure 2-1: Proposed Construct of the Environment

2.2 URBAN SOCIETY

"The contemporary world no longer presents a picture of small isolated groups of human beings scattered over a vast territory, as Sumner described primitive society. The distinctive feature of the mode of living of man in the modern age is his concentration into gigantic aggregations around which cluster lesser centres and from which radiate the ideas and practices that we call civilisation.

... The influences which cities exert upon the social life of man are greater than the ratio of the urban population would indicate, for the city is not only in ever larger degrees the dwelling-place and the workshop of modern man, but it is the initiating and controlling centre of economic, political and cultural life that has drawn the most remote parts of the world into its orbit and woven diverse areas, peoples, and activities into a cosmos".
(Wirth, 1938:58, *Urbanism as a Way of Life*)

2.2.1 Urbanism

Wirth (1938) defines the city from a sociological perspective as being a relatively large, dense and permanent settlement of socially heterogeneous individuals.

"The city has thus historically been (and still is) the melting pot of races, peoples and cultures, and a most favourable breeding ground of new biological and cultural hybrids. It has not only tolerated but also rewarded individual differences. It has brought together people from the ends of the earth because they are different and thus useful to one another, rather than because they are homogeneous and like-minded" (Wirth, 1938:66).

From this definition, and based on three identified variables of numbers of population, density of settlement, and degree of heterogeneity of inhabitants, which outline the characteristics of urban life, Wirth (1938) identifies urbanism as a characteristic mode of life that is underpinned by three interrelated aspects:

- a physical structure comprising a population base, a technology, and an ecological order;
- a system of social organisation involving a characteristic social structure, a series of social institutions, and a typical pattern of social relationships; and
- a set of attitudes and ideas, and a constellation of personalities engaging in typical forms of collective behaviour and subject to characteristic mechanisms of social control.

Gans (1990), in the postscript on his own 1962 essay, states the following on Wirth's (1938:188) *"Urbanism as a Way of Life"*, it:

"remains the most often cited article and probably the most often read one as well. It still supplies the simplest and seemingly most accurate definition of the city..."

Gans (1990) points out that both his 1962 article and that of Wirth are time bound. He concludes that writing about cities will now even be more time bound, because of cities' increasing participation in the world economy, and the significant changes that will occur through this, which will be diverse and largely unpredictable.

"This may lengthen the life of Wirth's classic article even further, because it transcends economic conditions and thus provides a seemingly timeless definition of the city that is never totally inaccurate. It may become a bit more accurate as, in growing metropolitan areas, areas we now call suburbs become larger in population, higher in density, and more diverse in population" (Gans, 1990:191).

The city way of life – urbanism – is an established and entrenched way of life, as evidenced in the continued survival and growth of cities and urban areas. Urbanism has exposed people and society to a vast variety of stimuli, values, cultures and choices. This has resulted in the reconstitution of various forms of community, where city dwellers within the urban area have developed urban communities that serve their personal and psychological functions. Such 'reconstruction' and adaptation of urban community has enabled the continued growth and expansion of urbanism. This is despite the normlessness, anxiety, alienation and indecision that urban living sometimes causes. However, urban living also affords a rich variety of values, cultures and choices, enabling a sense of freedom, liberation and opportunity.

2.2.2 Urban Society: Understanding the Concept Community

The traditional approach to the definition and understanding of 'community' focused on two bipolar concepts, ranging from community versus society, folk versus urban communities, *Gemeinschaft* versus *Gesellschaft*, mechanic versus organic societies and sacred versus secular societies. In principle, the two opposites focused on the one hand on the deep sense of person-to-person emotional commitment and the strong sense of identity that existed in the isolated, small rural community. On the other the urban community and its rationality, impersonality, isolation and anomie; i.e. its normlessness. This is clearly reflected in Tönnies (1964) work, where the two terms

Gemeinschaft and *Gesellschaft* were translated into village - being *Gemeinschaft*, and city - being *Gesellschaft*. Tönnies (1964) argued that through the development of city life and ever increasing urbanism, society was moving from *Gemeinschaft* to *Gesellschaft*, which in his view meant the destruction of culture.

The erosion of cultural values was given impetus by the common drive of market forces focusing on profit and capital accumulation. Furthermore universalization - the internationalisation of cities and urban areas through western and / or outside values, norms and economic systems - have not only eroded indigenous cultures and diluted traditional values, but have undermined a society's uniqueness and the genius loci of its city.

Accordingly a refocus beyond the mere simplification of modern society or urbanism into *"Gemeinschaft"* and *"Gesellschaft"*, to an appreciation of diversity as a positive aspect of urban society and a more refined understanding of community is required. Particularly considering the fact that communities within urban environments have developed and reconstituted themselves in complex and diverse ways. In most part urban communities are voluntary in nature and their residential location occurs within a framework of selected values, institutions and cultures, rather than on residential space per se. Exceptions to this are the social engineering policies of past communist regimes and Apartheid in South Africa.

2.2.2(i) Views on 'Community'

Community organisation is driven by a multitude of factors, encompassing cultural, social, class and ethnic choices, income patterns, and issues around crime and safety, ethnic tension and conflict and problems generic to the process of urbanisation. The choices made created communities of a wide variety, achieved through the almost infinite selection of activities available throughout the city, their patterns of consumption and preference. These communities were established through political organisation, having discovered the opportunities that political action brings and related possibilities in control over patronage, life style and the distribution of socio-economic resources.

The original notion of community was envisaged to be that of the rural village, which changed drastically with the development of modern life - urbanism - and the city. By the 20th Century the "loss of community" had become a sociological cliché (Kasinitz, 1995), to which a wide variety of urban social problems are attributed. Following World War II it became apparent that the notion of community in the city persisted, despite the individualising effects of modern life.

This is reiterated by Gans' argument in 1968, that the concept of community far less depends on the size of the community, as claimed by Wirth in 1938. Rather, economic status, stage in life cycle, age and even cultural tastes are considered to be much more important, and are a counter or correction to Wirth's spatial determinism (Kasinitz, 1995). Other factors that foster communities and determine their nature, are public safety, in particular urban crime and incivility, as well as "new localism" fostered by large-scale urban-renewal efforts.

Suttles and Fischer redefined this view of community in the city in the 1960's and 1970's. The former detailed how residential identity and boundaries are formed by political conflicts, perceived threats from ethnic and racial "outsiders", and / or the "defence" of the turf by "vigilante" peer groups. The latter argues that the modern city creates numerous possibilities for

"... new types of social networks and subcultures based on a wide variety of identities and tastes, some of which would scarcely be possible in smaller and simpler human settlements" (Kasinitz, 1995:165).

Janowitz (1973) proposed an understanding of community in the metropolis, termed the "community of limited liability". This 'community' is defined as residential group that continues to shape the daily lives of urbanites. Participation in urban communities is predominantly voluntary, intentional and highly contingent. Not all people living in a neighbourhood need to be embedded deeply, or at all, in local social life. The physical and social boundaries are created by political structures, voluntary organisations and local institutions, and direct the face-to-face interaction of residents (Kasinitz, 1995).

During the 1980's, the phenomenon of "identity politics" became common to the point almost of the being the norm in cities, based on

collective identity and collective grievances, which created and promoted intense forms of communal solidarity.

"This was illustrated by the profusion of 'community planning boards', 'community school boards' and 'community advisory groups'". (Kasinitz, 1995:167)

However, as Sennett (1976) outlines, the dangers and limits of community politics lie in their restrictive aspects, as well as the potential for intolerance of diversity and difference, which is discussed later.

The above discussion on evolving and diverse definitions of community in urban environments highlights that communities change constantly – socially, economically, demographically, structurally and spatially.

It is within this milieu of communal activity in urban environments that urban design is practised. Urban society comprises a multitude of groups and diverse communities. This clearly implies that urban design incorporates a multi-communal approach, it does not favour a select community or interest group, but must consider the needs and interests of a variety of communities. In this regard Effrat's (1974) three types of community organisations still hold and are taken as a guide in urban design. They are the:

- a. *complete territorial community* – almost all of people's interactions take place at local level, place focused interactions;
- b. *community of limited liability* – characterised by people who have higher degrees of social and physical mobility, hence they are less place-bound, but have limited local obligations such as to neighbours; and
- c. *personal community* – comprises the web of common interest relationships of a person, being part of formal organisations, communal organisations or kinship systems. Their 'locations' are dispersed in space, being communities that are not necessarily space-bound.

2.2.2(ii) Three Levels of Social Order

In the continual quest for understanding and defining community, it has become clear that its complexity requires an approach that goes beyond a mere grouping of *Gemeinschaft* and *Gesellschaft*. In this regard Hunter (1985) proposed an approach recasting the central polarities of *Gemeinschaft* and *Gesellschaft* by analysing the nature of

control in urban neighbourhoods. This is based on the view that different forms of social order and social control mutually co-exist, and given varying conditions, will be dynamically constructed in new and different combinations.

Social control is concerned with the capacity of "self-regulation" by social groups (Janowitz, 1978) encompassing:

- a normative component for standards and values; and
- a structural component encompassing the distribution of resources that underpin the behaviour and function.

The emphasis on "self-regulation" allows social control to become an inherent part of the structure and process of social groups, i.e.

"...to the degree that social order exists, social control exists". (Hunter, 1985:210).

By focusing on the intersection of both cultural constraints and material conditions, the degree of order and control emerge, highlighting values and power. In this context Hunter (1985) identifies three levels of social order - the private, the parochial, and the public, around which communities are formed. These incorporate the previous three community types.

From the above approach, three levels of community organisations are proposed:

- a. The Private Level, encompassing *personal community*;
- b. The Parochial (Neighbourhood) Level, encompassing the *complete territorial community* and partly the *community of limited liability*; and
- c. The Public Level, encompassing the public 'community' and aspects of the *community of limited liability*.

Their characteristics are summarised in the Table 2-2 over the following page.

	Personal Community (Private Level)	Territorial Community and Limited Liability Community (Parochial Level)	Public 'Community' and Limited Liability Community (Public Level)
Basic Social Bond	Social order - "friends", comprises uniquely constructed ties and emergent social bonds 'negotiated' among participants, characterised by intimate relationships. Collective unit is a group of friends or kin. A support network, in the context of 'friendship' directs the group bonds. Within this private order friendships and kinship obligations are above claims to collective rights. <i>"As friend or kin one is expected to honour an extraordinary wide range of obligations without question"</i> (Hunter, 1985). The private order relies on the 'exchange' of sentiment to sustain it.	Social order - neighbour, being an acquaintance. Intermediate level in effect and sentiment, and in its degree of variability or uniformity. Collective unit is a local community. Group bond directed by a 'neighbouring' role, which varies between neighbour-hoods. Within co-residents of a community, the ratio between duties and rights is more balanced, as the context of "limited liability" produces a more balanced sense of mutual obligation and distributive justice. The structures rely on an exchange of voluntary labour.	Social order - fellow citizen, being a stranger, a neutral or reserved relationship, the most universal, most formal and most ritual. Collective unit is the state. The group bonds are directed by a pattern of civility or mutually acknowledged rights among equals. In the public order, public rights dominate over community or private rights. However, due to the expansion of citizenship from economic to civil rights, and the development rise of the welfare state, people are increasingly entitled to enjoy the expanded rights of a civil society, yet the obligations to others and the collective are increasingly limited and defined as voluntary (Hunter, 1985). The latter is caused by the economic and monetary nature of the exchange of citizen rights and duties - i.e. exchange of taxes for government services. The public order is increasingly defined in terms of a cost / benefit ratio "at links personal profit in social exchanges between citizens to the rights (benefits) and the duties (costs). Mostly the former are greater than the latter.
Institutional Locus	Found in both informal and more formal primary groups where the values of sentiment, social support, and esteem are the essential resources of the social order and the basis of social control.	Is based on the local interpersonal networks and interlocking of local institutions that serve the daily and sustenance needs of the residential community - local stores, schools, churches (religious institutions), and voluntary associations of various types. The values that underpin these are twofold: • mutual aid and sustenance; and • local community status, reputation, and power (the latter power arrangements are structured by the interrelationship of local institutional leaders – local businessmen, religious leaders, directors and board member of local voluntary organisations).	Anchored in the formal, bureaucratic agencies of the state, whose functions are the delivery of public goods and services to meet citizen's demands and needs. They are underpinned by values that enable efficacy, efficiency and equity. The public order is ultimately structured by the states' utilisation of its mandated power and functions. To the degree that the states goes beyond its mandate and infringes upon citizen rights, the sense of individual duty to the public collective is eroded, ultimately undermining the social control mechanisms of the rational legal public order.

Table 2-2: Characteristics of Community Organisation , Source: Hunter, 1985.

2.2.3 The Societal Focus of Urban Design

The refined understanding of society comprising three levels of social order within which communities develop has resulted in a more complex construct of the social environment within which urban design is practised(refer Figure 2-2).

The area shaded in grey in Figure 2-2 identifies the focus of urban design practice: It focuses on the parochial / neighbourhood communities and the public realm of urban life (encompassing state, political, legal, religious, sport and business insitutions). Urban design also takes into consideration their interrelationship with the culture of society and that of private life within society. As a consequence thereof, the physical focus of urban design, are the physical areas in the urban environment, which give public and parochial life its spatial expression. These are identified in the following chapter. For now the discussion focuses on the significant role that public life, and by implication parochial life, plays in urban society, and the significance for this on urban design and its function within society.

2.3 PUBLIC LIFE: A NECESSITY TO ACHIEVE A LIVEABLE URBAN ENVIRONMENT

2.3.1 A Dysfunctional Public Life

The current public realm in cities is at present not sociable, i.e. it is considered to be abstract, isolated, emotionally empty and inhospitable. It lacks civility, i.e. "when a person does not make himself a burden to others" (Sennett, 1974), - and is not fulfilling its potential to 'mediate' functionality and impersonality of Formal Organisation (*Gesellschaft*). As a result it has also been neglected with regard to the allocation of socio-economic resources for the public realm's physical upkeep and condition (i.e. public space), such as maintenance and upkeep, street cleaning, refuse collection, policing and security, and management. The reason for this situation has been investigated by Richard Sennett in his writings *The Fall of Public Man* and *The Conscience of the Eye*. These are examined in greater detail for the purpose of establishing the need for a public realm and that is vital in establishing a liveable urban environment.

"As materials for culture, the stones of the modern city seem badly laid by planners and architects, in that the shopping mall, the parking lot, the apartment house elevator do not suggest in their form the complexities of how people might live. What once were the experience of places appear now as mental operations" (Sennett, 1990).

The development of the industrial / modern city has subjected society to enormously varied and complex stimuli in economic, political, and erotic life (Sennett, 1990). The way society has coped with this milieu is by the development of codes in inwardness and unity, withdrawing from a sociable public realm, which has made it difficult to deal with the facts of diversity. What needs to be understood and accepted, as argued by Sennett (1990), is the experience of difference as a positive human value.

"What invention could bind stranger together? What could make social diversity as abundant and instructive as was natural diversity? These were urban difficulties of those who believed in wholeness, and they still are." (Sennett, 1990).

This is one of the most acute problems faced by the professions dealing with the built environment. Sennett (1990) states that human diversity is seemingly something beyond the powers of human design. His critique is scathing and direct:

"The planners who have devoted themselves to enlightened forms of "communication" work are experts in Gemeinschaft (Community Organisation). In the face of larger differences in the city they tend to withdraw to the local, intimate, communal scale. The modern planner lacks visual percepts of how races might be mixed in public places, or how to orchestrate the zoning and design of streets so that economically mixed uses work well. It is (sic) equally obscure on how to design house projects and schools that mix races, classes, or ages" (Sennett, 1990).

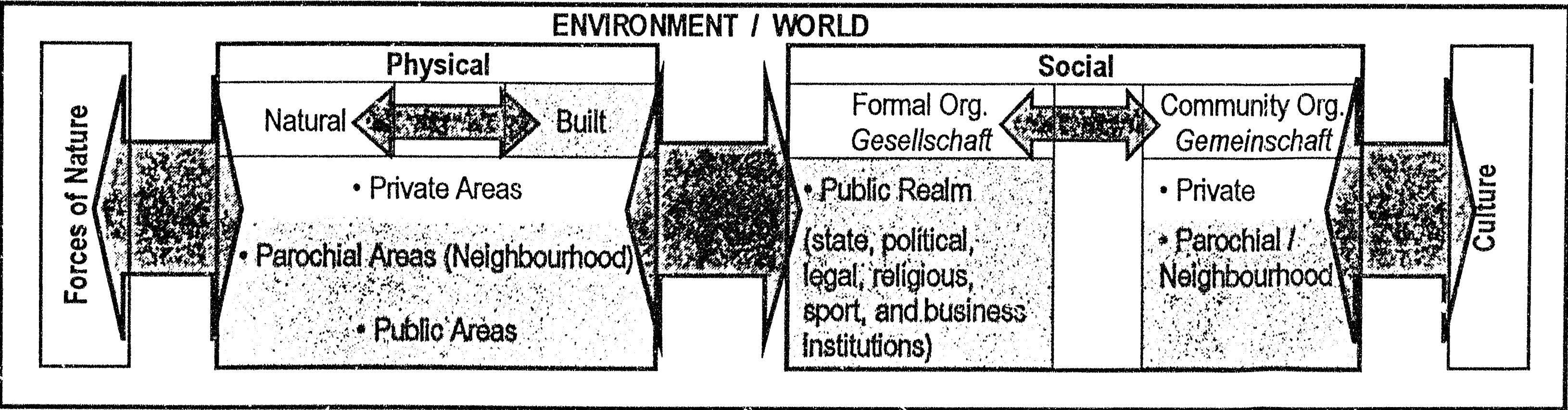


Figure 2-2: A more Complex Construct of the Environment

In his assessment, Sennett begins with an understanding of the word 'public' prior to its modern understanding, meaning to be a realm in social life outside and separate from the realm of family life and close friends. The public realm of life encompassed acquaintances and strangers, and included a relatively wide diversity of people. The focus of their public life was the capital city.

Directly associated with a diverse urban public realm is the notion of a cosmopolite. This, according to French and later English usage, is a

"man (person) who moves comfortably in diversity; he is comfortable in situations which have no links or parallels to what is familiar to him" (Sennett, 1974).

Given the context of 18th century 'public, the cosmopolitan man was considered the perfect type of 'public man'.

The public domain or realm was therefore clearly defined as city or social life outside the life of family and close friends. In this public realm diverse, complex social groups were brought into ineluctable (inescapable) contact. This public life was vital, in that connecting with strangers in an emotionally satisfying way, yet simultaneously remaining aloof from them, was seen as the means by which the human person / individual was transformed into the social - the civilised - being. This approach to public life characterised the 18th century cosmopolis. Accordingly man *made* himself in the public realm, whilst he *realized* his nature in the private realm, in particular in the family sphere (Sennett, 1974). The realization that parenting capabilities and deep friendship were seen to be natural potentialities.

This 'public man', summarised in lecture notes from R Lloyd, was essentially a citizen and a committed man, not necessarily only a leader or businessman. 'Public man's' characteristics were participation, accountability, responsibility on the one hand and expectation (and initiative) on the other. He lived a public social life by strictly defined social protocols and social custom.

"He loved his city passionately and considered his private world subservient to the public good" (Lloyd, 1998, lecture notes).

The spatial consequences of the 18th century city public realm, as the city grew and developed networks of sociability independent of royal control were marked by:

- the building of massive urban parks;
- the first attempts at pedestrian orientated streets; *"for the special purpose of pedestrian strolling as a form of relaxation"*;
- the development of coffee houses, then cafés and coaching inns into 'social centres';
- the opening of theatre and opera houses to the public; and
- the distribution of urban amenities to the broader spectrum of society (Sennett, 1974).

The result was a public realm in which interaction between diverse people (strangers) was independent of authoritarian or monopolistic control, and of fixed feudal privileges, but was guided by commonly accepted principles of public order and interaction (ritual, codes and signals).

Sennett (1974) does not romanticize this public life of the *ancien regime*, he just points to the fact that it created positive opportunities for group life (which have yet to be understood) amongst confusing, chaotic and ever changing social conditions. The fall of 'public man' of the 18th century cosmopolis is the origin of today's unbalanced personal life and empty public life. The lives of the modern day citizen lack the opportunities and vitality brought by the interchange with fellow citizens.

"The stranger is a threat; silence and observation have become the only ways to experience public life, especially street life, without being overwhelmed; each person believes in the right to be left alone" (Sennett, 1974).

In understanding this modern malaise, Sennett (1974), retraces the principles of public life of the *ancien regime*, that enabled people in the public realm to identify themselves as confidentially as they did within the shelter of the family, to 'recognise' each other on the street, and therefore making civility possible. Its demise by the industrial, secular and revolutionary pressures of the nineteenth century yielded an inward turning culture;

"... that the public world stage has been usurped by the private psychic scene, to the detriment of both individual and society" (Sennett, 1974).

The consequences of industrialisation, population growth and urbanisation yielded urban problems by which the city was increasingly viewed as a threat, both physically and socio-economically. Societal

stratification, based on wealth, ownership and employment (knowledge) resulted in the breakdown of the mutually accepted social accord of the public realm. As a result it became increasingly the domain of the wealthy and powerful. The social stratification and withdrawal from the public realm was augmented by advances in communication, transportation and physical development technologies, enabling those able to afford it, greater variety and choice in public interaction and social contact. The consequences have been that public life became increasingly contained in the home. Thus, with the retreat of 'public man' came '**anonymous man**', the demise of the physical public realm, namely public space. With the retreat of 'public man' emerged 'anonymous man', who defines his participation and sense of responsibility personally, assuming rights, and placing his private world above the public good.

The fundamental question for Sennett thus remains: how do people who need each other functionally, but do not necessarily share the same values and norms, nor culture and religion, live in the same place?

"That's a public problem that persists in all Western cities: ... How do differing people find a means of using the word 'we'?" (Sennett, "The Civitas of Seeing")

For the ancient Greeks it was an accepted principle that people from different backgrounds and culture needed to come together in a common place. This was epitomised in the word *synoikismos*, meaning "public" as well as "making a city".

The question is even more pertinent when eliciting the reasons for the decline of 'public man';

- lack of due humility;
- the loss of morality;
- naked greed;
- the wholesale suppression and oppression of people and societies through colonisation;
- economic decline and massive unemployment;
- urbanisation (depopulation of rural areas);
- the dehumanisation of life of working people;
- mass starvation and major epidemics of social diseases (i.e. cholera, etc.); and

- new technologies relating to transportation, communication and physical construction.

The above turned the cosmopolitan public realm into the anti-city morality of solitude, characterised by:

- judgmental caricatures of people such as equating poverty with laziness which became the norm;
- the work ethic and the need for punctuality;
- constraint in public display;
- sobriety in food and drink;
- flight from the city by the wealthy and powerful through the newly emerging technologies of mobility and communication, which also enabled their direction of the public realm;
- the creation of a self-contained world in the home;
- the suppression of public life, including diversity, complexity and disorder;
- the condemnation of waste;
- the reduction of public spending to essential public works of a functional nature; and
- capitalism which emphasises the impersonal state of monetary transactions. (Lloyd, lecture notes, 1998).

Many of these aspects are still applicable in the contemporary city and have been further entrenched. Sennett emphatically argues that this flight from the public realm by society is to its detriment. The flight is assisted by the theoretically complete choice and freedom of lifestyle and physical location in the modern city. The challenge is to enable a voluntary redirection of these tendencies, allowing man to once again become public, so that

"... city design will again become the expression of public ideas rather than of bureaucratic function" (Lloyd, 1998, lecture notes).

Without a knowledge of the public environment's guiding norms and rules, and with a refusal by people to accept and buy into them, the result was a dysfunctional and unliveable public realm. In this regard life in the public environment of the city is characterised by (and often requires):

- a degree of artificiality;
- sociability

- tolerance (respect);
- formality; and
- *"perhaps even repression"* (Kasinitz, 1995)

The associated rules that govern public behaviour are mostly subconscious to the user, generally remaining marginally aware of them. However, when the rules and norms stand out most sharply is when they are violated, particularly if life and human well-being is threatened. This highlights the broad socio-political and cultural consensus that is required for public places to function and enable a liveable urban life.

In conclusion, Sennett warns that the decline of public life reduces the knowledge of its guiding norms and rules.

2.3.2 Sociability: The Seam between Public and Private Life

The distinction between public and private has been

" a central and characteristic preoccupation of Western thought since classical antiquity, and has long served as a point of entry into some of the key issues of social and political analysis, of moral and political debate, and of the ordering of everyday life" (Weintraub,1995:286).

The differentiation of public and private warrants a brief discussion in the context of the above and the role of the urban designer to design a public realm that enables people to live quality, safe and healthy lives. This is particularly important in that the public / private distinctions is used as a conceptual framework that distinguishes between the private worlds of the family and intimacy, and the public worlds of sociability and economic life, as outlined previously. It is also critical in order to establish principles that enable the re-establishment of the rightful role of public life in urban society.

The notion of public / private distinction must be considered as one element of paired opposites; the one is contrasted against the other. The fundamental contrasts, according to Weintraub (1995) comprise:

- That which is hidden or withdrawn versus that which is open or revealed.
- That which is individual, or pertains only to the individual, versus what is collective, or affects the interests of a group of individuals.

("This individual / collective distinction can, by extension, take the form of a distinction between part and whole -of some social collectivity"). An individual pursues private interests, and a group special interests, which are not necessarily in the overall public interest.

Weintraub (1995) argues that there are four ways in which the distinction between public life and private life is being understood. These are discussed in greater detail in Appendix A. it suffices here to present them in summarised format in the following table:

	Public	Private
• Economic	State Administration, Political	Market Economy, Family/ Household, Individual
• Citizenship	Sociability, Community, State Administration, Political	Family/ Household, Individual
• Sociability	Sociability, Community, State Administration, Political, Market Economy	Family / Household, Individual
• Family / Household	Market Economy , State Administration, Political	Family/ Household, Individual
Table 2:3 Distinctions of Public & Private Life		

When analysing the table, it is apparent that "sociability" is the one component that considers all the differentiations of public / private life. In this regard "sociability" is the common seam or thread that encompasses all public / private considerations, and by implication the physical manifestation of "sociability", namely public space.

"Sociability" is based on a notion of a rich public life, which has been one of the characteristic achievements of the successful cosmopolitan city. It yields a complexification of public life, mediating between the intimacies of private life and the extreme impersonality and instrumentalism of Formal Organisations (*Gesellschaft*).

Sociability is based on a notion of cities having a rich public life. The concept emerges from an understanding of the historical transformation of Western societies and the emergence of the modern family in its changing relationship to the broader context of communal ties. The result is a drastic transformation of the relationship between the public and private realms, and of the character of each, becoming one of the great divides of modern life.

The transformation process of Western society resulted in the breakdown of the older public realm of polymorphous sociability, causing a sharp polarisation of social life between an increasingly impersonal public realm (of the market, the modern state and bureaucratic organisation) and a private realm of increasingly intense intimacy and emotionality (the modern family). This split is one of the defining characteristics of modern society:

Private Realm of Personal Life	Public realm of Gesellschaft
Personal, emotionally intense and intimate domain of family, friendship and relations.	Impersonal, severely instrumental domain of the market and formal institutions.

In this regard the private sphere is a kind of balancing mechanism providing meaning and meaningful activities to compensate for the abstract, isolated, emotionally empty and inhospitable public domain.

Both the satisfactions of intimate life and the advantages of impersonal institutions, would not want to be abandoned, as agreed by Sennett (1974). However, the situation becomes an unsatisfactory prospect when they confront us as sharply dichotomised and exclusive alternatives. The solution to this situation seemingly lies in the complexification that yields a public sphere of life, in the sense that sociability mediates between private life and public life.

2.3.3 Enabling Public Life through Sociability

The public life of sociability thus must form a central part in the social thinking about city life, which has its own distinctive conditions of vitality and fragility. It is very closely tied to the spatial organization of social life, considering that its physical domain is in the public space of street,

park and plaza, but also in neighbourhood, bar and café (Weintraub, 1995). Jane Jacobs and others have highlighted the physical configuration of the built environment, how it facilitates, channels and blocks the flows of everyday movement and activity, influences the character and possibilities of sociability. However, it is clear that the requirements of a successful sociable public space are more than physical in nature.

Sociable public space requires underlying conditions of basic trust, security, predictability and shared conventions against which the spontaneity of public life can develop (Weintraub, 1995). This cannot be enforced through physical design, although they become the fundamental conditions to enable diverse individuals and groups

"to dwell in peace together on civilised but essentially dignified and reserved terms" (Jacobs, 1961, in Weintraub, 1995:300).

In this regard the most defining virtue of sociable public space, which it requires and must reinforce, is civility - the matters of codes and conventions, either implicit or explicit. Once civility is established as a pattern (and it comes in a variety of social-historical forms), it is quite resilient, however it can collapse if put under severe strain, or not emerge at all through mutual fear, hostility or incomprehension. In addition sociable public space requires a range of political and economic resources, encompassing policing, refuse collection and street cleaning (i.e. maintenance and management). It is clear that sociability emerges from a complex interaction between spatial and social aspects.

The aforementioned aspects point to a larger issue: that sociability in itself cannot generate and maintain a political community; to bring about collective decision-making and related action. The required decisions, actions and policies, the political will either have to be undertaken by authority and / or administration, or be entirely omitted.

In itself the notion of sociability falls short of providing a complete understanding of public life in cities that include the political, that which ties the city together, to manage the relations between its different groups and interests, in order to make it work. In this regard the work of Sennett, in *The Fall of Public Man*, provides an understanding of the inter-relationship between the spatial organisation of cities and long-

term socio-historical processes, linking sociability and the political. The above understanding of public / private yields a very different understanding of sociable space versus civic space, although the two can be combined.

Sociable Space	Civic Space
- heterogeneous co-existence - a space of symbolic display - a complex blending of practical motives with interaction ritual and personal ties - physical proximity co-existing with social distance	- inclusive solidarity - conscious collective action - a particular space or place in the urban built environment

As highlighted earlier, 'sociability' encompasses all public / private considerations— it is the common seam or thread. This has a number of implications:

- As sociability is the "seam" or common thread, it places public life and its public space in an important position in the context of city development and growth, an area that is being more and more neglected.
- In terms of the environment construct previously, sociability is understood within a broader societal, cultural and physical context, thus requiring an understanding of how these factors are interrelated to enable sound decisions for the urban design of public space. This is discussed in the following section.
- It emphasises the important contribution urban design can make in the context of its focus on the public realm and public space.
- It enables a definition of 'public space' and its components in terms of public life based on sociability, which is discussed in the following chapter.

2.4 PUBLIC LIFE IN THE SOUTH AFRICAN POST-APARTHEID CONTEXT

The primary force that controlled public life in the South African context was the practice of racial segregation, which became 'the fulcrum of the national and urban political vision of the apartheid state.

"whites and blacks were separated from one another, the white working classes separated from the black, and the labouring classes from the dangerous. The concepts of physical order, health, social stability and control which lay behind segregation brought together the discursive networks of government, urban

planning, public health and urban administration" (Bremner, 1998:49).

Until the birth of the democratic, non-racial South Africa, public life in South African cities was dominated by the Apartheid separation of people, categorising them according to race, preventing interaction between them, and, in particular, controlling all facets of life and the movement of African people through dictatorial control. "Apartheid"

"... became an instrument for the political and social exclusion of African people and their restriction to certain areas of economic life" (Bremner, 1998:32).

"Through such manipulation we have not been able, as citizens to share a common world, which is our city. We have not been able to publicly share our common concerns or our differences. With such manipulation we have not been able to learn to be tolerant of each other" (Le Grange, 1994:23).

The instruments that directed this disparate 'public' life comprised:

- a host of government administrative and professional discourses such as public administration, criminal justice and urban planning;
- township development based on modern town planning principles and scientific surgery of housing needs and modern mass-production processes;
- racially differentiated local authorities which administered urban areas;
- racially based legislation that controlled every aspect of urban life; and
- the strict control and policing of people's movement (Bremner, 1998).

In short, the practice of apartheid has done little to bring about, if not to actively prevent, the development of a sociable and democratic public life. 'Public' life in the South African context has predominantly been a situation of "us and them", *baasskap* and of the African being subservient to the white, not only in human relations and interactions, but also in resource allocation and socio-economic benefits.

With the advent of the South African democratic, non-racial nation, the prospects of developing a sociable and democratic public life, seemed positive and indeed likely. However, the transition from Apartheid to democracy, in which we are still today, is presenting a different picture:

a. Public life has

"... become a field of violent contestation between extreme wealth and extreme poverty, between luxury and subsistence, idyll and inferno, excess and need" (Bremner, 1998:132).

The previously marginalised and disadvantaged have literally claimed the streets of Johannesburg, anarchically jostling for space.

b. Urban government, although restructured, is only able to respond in a limited fashion and only reactively to tasks of maintaining and developing infrastructure, managing urbanisation, and directing the economy.

"This is as a result of new local authority politicians and officials, who were given the tasks of managing and servicing the city without any experience or role models" (Bremner, 1998:132).

Reactive responses to land invasions have resulted in forced removals reminiscent of the Apartheid years.

c. The vociferous objections to integration proposals have led to their abandonment. The transformation in local government has resulted in a vacuum of development policy and urban planning direction, as well as the absence of associated procedures that would direct and control the future development of the city. This has led to uncontrolled property speculation across the city, instigated by the entrepreneur, the property developer and the individual.

d. Bremner (1998) also highlights the emergence of 'participative governance', involving statutory joint decision-making, monitoring and implementation processes between the state, local authorities and citizens on every aspect of urban life, from safety and security to service provision, road-making and health and leisure. In these processes resources are channelled towards the voices that claim them, whilst the poor, the marginalised, the uneducated, the 'illegal' are further excluded.

e. The emergence of crime.

"Crime - petty, organised, invisible, brutal, commercial - is working on and through the surfaces of the city to produce a new landscape whose properties lie deep within and yet far beyond the spatial and social economies of the past. New urban spaces, new divisions of power, new urban cultures, whose primary properties are segregation, privatisation, militarisation and fortification, are emerging" (Bremner, 1998:132).

The transition has enabled the emergence of crime as society and its instruments of control are being reshaped. The police and law

enforcement agencies have been unable to control and underpin the democratic order, due to a lack of resources, corruption and underskilled policemen, combined with a flawed and ineffective legal and prisons system.

- Crime affects all sectors of South African society, although it specifically targets certain areas for certain types of crimes. For example the most disadvantaged areas and least protected under apartheid are not the most susceptible to murder, armed robbery, rape and violent assault, i.e. Alexandra and Orange Farm. The suburbs are prone to violent hijacking and house breakings with murder, rape and violent assault.
- Crime is militarising public life, people either get potentially caught in the cross-fire of increasingly violent crime, or are subject to constant surveillance by public and private security forces to keep areas safe.
- Crime is causing the further privatisation of public life. New legislation gives precincts of private property the right to decide about and provide their own services, over and above those of the local authority: cleansing, security, licensing of street trading, gatekeeping of urban parks lie in the hands of the private sector. This is characterised by the Business Improvement Districts in the inner city, the suburban security enclaves characterised by palisaded suburbs with closed off streets and security entrances, securitised office parks and shopping centres, and the development of sectional title suburban residential townhouse and clusterhouse developments with high security and extensive fortification.

The current reality of the South African urban context has led to a public life based on a defensive lifestyle, crime, necessity and speculation / uncertainty. The goals and values of communities within the city are divergent, essentially comprising division and self-interest, fracturing society into a

"myriad of exclusive, hostile, intersecting or conflated circles" (Bremner, 1998:132).

More and more it seems, based on the experience in other third world countries over the last decade, that South African public life is restructuring into multiple worlds within a disparate and divided city.

"A conglomeration and often (but not necessarily) hostile worlds, developing along different lines, yet held together in structural interdependence by speculative scarcity and, if not crime, at least an underground (or informal) economy" (Brenner, 1998:132).

This is in the context of a world economic system and free market approach that requires stability, security and certainty for investment and development, that underpins economic growth and prosperity. It is in this 'dichotomy' that public life is evolving, a movement channel between secure and insulated enclaves. The question then is how can the two co-exist, working in synergy to yield a sociable and democratic public life.

2.5 CONCLUSION: DIRECTIVES FOR URBAN DESIGN FROM PUBLIC LIFE

As the focus of urban design practice is at the commonality (broader) level of urban society, its concern must be directed at those aspects of society, namely the *public realm* (state, political), legal, religious, sport and business institutions) and the parochial (neighbourhood communities). This must be directed and guided by the interrelationship with the private realm of community and the overall culture of the society (comprising its communities and formal organisations). By implication, the focus of urban design on public- and parochial life directs the practice of urban design to the spatial expression of the former, namely the public areas of the physical built environment (public space). The components and characteristics of public space within the public built environment are defined in the following chapter. What is important to highlight is that all three levels of social organisation are interdependent and need to function in synergy if society is to function as a whole.

The reactions against a deteriorating and dysfunctional public realm have been varied and piecemeal. In the suburbs, public space is being privatised through gated communities and the introduction of night-time curfews. The emergence of the shopping mall, in effect an indoor, climate controlled version of the city street, is a very typical development, and in more recent years the "strip" style sub-urban shopping centre focused on commerce. In the cities sub-urbanites and tourists are attracted by the development of retail malls patterned after

the nineteenth century arcades located in "historic" settings. However, urban public life is much more complex

"... than a quick visit to a downtown mall or a promenade along a 'hot' strip of sidewalk cafés in a gentrifying area" (Kasinitz, 1995).

The decline of public life in urban society has been cause for concern, and is to be overcome through the enablement of 'sociability'. Urban design must therefore assist in the achievement and establishment of a sociable public life, through the physical configuration of a built environment that enables everyday movement and activity to develop sociable public space. Urban design thus cannot enforce sociability, but can set the physical preconditions that allow for conditions of basic trust, security, predictability, shared conventions, urban management, and the reinforcement of civility.

This requires an urban design approach that has the following underpinnings to city life:

- *Social differentiation without exclusion*: city life in urban mass society is not inconsistent with supportive social networks and subcultural communities.
- *Variety*: the multiuse differentiation of social space, such as multifunctional streets, parks and neighbourhoods.
- *"Eroticism" in the broadest sense*: the attraction to the other, the pleasure and excitement of being drawn out of one's secure routine to encounter the novel, strange, and surprising.
- *Publicity*: a being together of strangers, diverse and overlapping neighbours, where differences remain unassimilated, but each participating group acknowledges and is open to listening to others. The public is heterogeneous, plural, and playful, a place where people witness and appreciate the diverse cultural expressions that they do not share and do not fully understand.

(Young, 1990).

CHAPTER 3
PUBLIC STRUCTURE: PUBLIC- AND SEMI-PUBLIC SPACE
WITHIN THE SOUTH AFRICAN CITY CONTEXT

Having established the need for a sociable public life within the contemporary city in general, and the vital need for the development of a democratic city environment in the South African socio-economic context, the discussion now focuses on the identification of the physical domain of public life, namely public space and semi-public space – referred to as the “*public structure*”. The nature and the components of the *public structure* are identified with specific reference to the South African city spatial context, and the importance of its role in enabling the restructuring of the South African city into a democratic spatial environment to enable the achievement of sociability and “ubuntu”!

Public space is a component part of the natural and built components of the physical environment, as outlined in the established construct of the environment. Specifically, public space is defined and shaped through the interaction between the natural and built environment, and the way people and / or society have shaped and changed the physical structure of the built environment: the buildings and structures, movement and linkage space, and its interlaced natural physical environment. Thus public space is a component part of the broader city environment. It is in the context of the urban forces that direct and form the city, in which an understanding and definition of public space must be considered and established, with particular reference to its component parts and their characteristics. The latter combined form what I have termed as “*public structure*”.

3.1 PUBLIC AND SEMI-PUBLIC DEFINED

The definition of public and semi-public space and its components is undertaken in a three-step process. The first step elicits the component parts that typically comprise the city through urban morphology. The second step outlines urban design theory that identifies which of the component parts of the city morphology are considered public and semi-public space. The third step consolidates the former urban design theory as well as that of what sociologists

consider public-space to be, by means of a matrix, to elicit a concise definition of public space and its components – the *capital structure*.

3.1.1 The Physical Form of the City and its Components

Urban morphology is the systematic study of the form, shape, plan, structure and function of the built fabric of towns and cities, and of their origin and the way in which this fabric has evolved over time (Madanipour, 1996). It assists in making an objective analysis of:

- the city as a physical concrete fact, the physical and spatial characteristics of urban structure;
- the city as an organism in evolution, subject to transformation and development as society changes and adapts; and
- the city as the focus of interaction between social forces and the built environment that contains them.

(Gebauer et al., 1981)

As outlined earlier, the built environment reflects and is formed by society's values, and in turn, society, albeit to a lesser degree, responds to physical form. Both are interrelated and adapt and change over time. This is further illustrated in Figure 3-1, taken from Gebauer et al. (1981).

“The most important contribution of this understanding is that the two aspects of the definition, the physical form and the context, cannot be separated. They are aspects of the same phenomenon and relate dialectically; that is to say that the socio-cultural context should not be considered as the cause for physical changes which would then be taken as the effects, but that changes at the physical level will facilitate and maybe even promote certain social processes.

This last concept of urban morphology also explains the other more descriptive understanding. This becomes clear if taken as a continuum in which the view can be situated nearer to the physical form or nearer to the social processes. In any case, the fundamental idea is that these aspects are always part of a whole” (Etchegáray et al., 1978, in Gebauer et al., 1981:2).

Gebauer et al (1981), by using the analogy of a language, propose that the city can be analysed in two ways through morphology. The first is the physical form of the city as structured and formed by a series of components, which relate in different ways. The second is an analysis of the properties of the city as the expression of values, as the city in

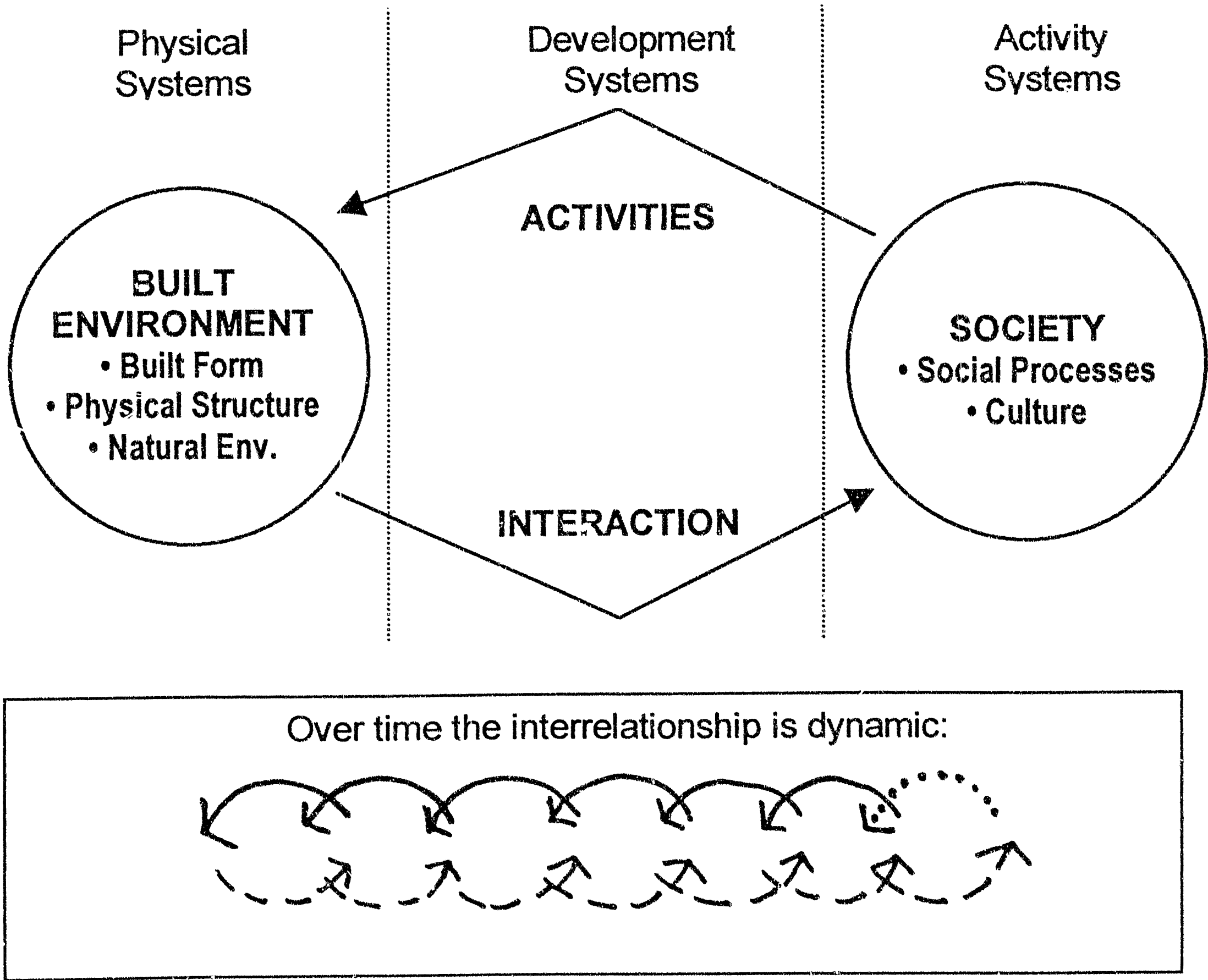


Figure 3-1 Interrelationship between Physical Form & Social Processes

“.... with the term urban morphology we mean the study (the description and classification) of the causes which contribute to forming and modifying the physical structure of the city”. (Aymonino, 1971 in Gebauer, 1981:1).

effect reflects the norms of society physically and spatially. This section utilises the first approach, although the second one is a tool inherent to urban design and the design of public and semi-public space, as discussed later.

Within the above context, urban morphology identifies the city environment as the built and natural environment within it, comprising the morphological framework of streets, buildings (and structures), and open man-made (plazas, squares, etc.) and natural spaces (parks, rivers, etc.) This encompasses building and space typologies which are representative (archetypal) of the society and contribute to meet physical and socio-economical needs of that society. This overall definition is refined as follows.

3.1.1(i) The Physical Components of the Built Environment.

In broad terms the physical components of the built environment comprise the *built form*, the various types of buildings and complexes / structures that make up the city, which are physically determined in their form and size by their functional and symbolic use, such as residential, retail, commerce, business, education, industrial, entertainment, religious, government and municipal and sporting arenas / complexes. The *movement and linkage space*, the streets, pavements, lanes, pathways, pedestrian streets, boulevards and promenades (mostly physically open spaces, but can be enclosed). And the *man-made and natural spaces*, which consist of the gardens, yards, courts, quads, the squares, plazas, markets, playgrounds, community open spaces, greenways and parkways, waterfronts and associated waterbodies.

This environment is modulated, transformed and developed through the *development systems* (processes that convert, reconvert, adapt, construct the built environment) established by society's *activity systems* (the way societies organise their affairs on a day-in and day-out basis in the pursuit of human needs and interaction with one another in time and space), and by the natural environment's *environmental systems* (the natural process relating to plant and animal life and fundamental processes relating to water, air and matter, that sustain human existence and life on earth) (Chapin et al., 1979).

Consequently there are numerous different types of built form, movement and linkage space, and open man-made and natural spaces. These differ in scale, shape, form, function and symbolic meaning, within the urban environment and between cities and societies. The type's characteristics are determined by their socio-economic, cultural and environmental function and the social, cultural, political, economic, technical and natural forces to which they are subject.

In greater detail the various physical components that characterise the built environment include the following:

- *Built Form: Building and Physical Structures*

These encompass residential, retail, commercial / business, infrastructure networks (electricity lines, water pipes, etc.), industrial, educational, cultural / religious, government / institutional / civic (libraries, hospitals, etc.), entertainment, recreation and sport, transportation associated, communication and information technology associated, monuments and public art.

- *Movement and Linkage Space*

These encompass streets (from local roads to major freeways), railway lines, pedestrian paths and sidewalks, pedestrian streets and traffic, restricted areas, inter- or single-modal transport interchanges (bus, rail, taxi and combinations thereof e.g. bus termini, rail stations, etc.), city trails (walking, cycling, historic, nature, etc.), airports, and building entrances (atria and indoor public access spaces).

- *Man-Made Urban and Natural Space*

These encompass gardens, front yards, back yards, parks (public parks, commons or outspan areas, downtown parks, neighbourhood parks, mini- or vest pocket parks), squares, plazas and piazzas (the city's central square, market place, secondary public squares, corporate and retail plazas), memorial places, markets (farmer's markets, 'flea' markets, informal trading areas, playgrounds (play areas and school grounds) and sportsfields, community gardens and parks, greenways and natural areas (indigenous nature areas such as ridges, conservation and

environmental areas, etc.), waterfronts (ocean, river-banks, natural and man-made lakes), and un- or underdeveloped vacant space.

These elements of the city can be analysed and classified in different ways, including those which constitutes public, semi-public and private space. The city's elements can be analysed as part of three aspects.

3.1.1(ii) The Physical Structure of the Built Environment

The physical spatial attributes of the city, as discussed, comprising either a generic or unique structure:

".... the physical structure of the city has characteristics and qualities of its own that condition its origins, physical relations and functional significance, not just at present, but in historical time" (Conzen, 1968, in Gebauer et al., 1981:4)

- Generic or typical structure: the pattern produced by the recurrent elements of the built environment (component parts of the city) and their relations (e.g. street grid).
- Unique structure: those elements and relations which tend to be different from the typical (e.g. parliament complex).

Within the physical structure there is a primary structure formed by the primary elements, such as poles and tensions. Poles are concentration points of structure (e.g. activities) and tensions the linear dynamic links (not necessarily only between poles), such as boulevards. They have a dual function, namely they connect the different parts or elements of the city, as well as setting the boundaries or limits of different areas that they support (Gebauer et al., 1981). Between the primary structure of the built environment lie particular sets of city components and relations, with clearly identifiable limits and homogeneous characteristics, which are termed districts or areas, neighbourhoods, regions, etc. (Garcia et al., 1978, in Gebauer et al., 1981).

3.1.1(iii) The Functional Structure

This encompasses the activities and uses that are undertaken within the built environment, those related to land-use activities, infrastructure services, transport channels and natural open space.

3.1.1(iv) The Process

This relates physical form to its functions and is determined by society's norms, values and laws, as well as the needs that have to be met for the society to ensure its survival and functioning. This is reflected in the distribution of public facilities, reflected in the physical use of the occupation, division and use of land; and is expressed in the building types and district structures.

Within the context of this analysis, it is apparent that the above elements are not isolated from one another, as has been indicated conceptually in Figure 3-1.

"Each one influences the other as part of the dynamic processes of the city in evolution" (Gebauer et al., 1981:9).

3.1.2 Public- and Semi-Public Space defined from an Urban Design Perspective.

The term "space" refers to open spaces in (human settlements) urban environments, and further implies that there is a specific "there". The identity of places are composed of either their perceptual (usually visual), cultural or social character, or a mix thereof. The vocabulary we use to describe cities and their components based on the functions they serve, in turn, shapes the way we look at cities (Lang, 1994).

"The presence of a large number of public places is one of the most notable characteristics of cities. Physical spaces in which strangers can come together to meet, communicate, transact business or just enjoy the sight and sound of each other are at the very core of the urban experience (within a stable and civilised context). It is in public that one feels (as observer and participant) the 'pulse' of the modern city" (Kasinitz, 1995:223).

The concept of "public space" indicates that area of social- and urban life that is open to all enfranchised members of the urban population. This "public space" notion has its origins in the Athenian *agora*, which has in principle over the centuries been associated with a physical place of face-to-face communication forming the underpinnings of democracy.

In practice, however, Kasinitz (1995) reminds us, many of the world's great public spaces have been created by societies that were far from democratic:

"...rich cosmopolitan public life often comes about in places where popular participation in government is quite limited, and the political participation of the masses has, at times, been the enemy of tolerance and pluralism – compare the Vienna of the mid-nineteenth century with the Vienna of the early 1930's" (Kasinitz, 1995:224).

Although public spaces, in theory, grant unhindered access to all members of the urban community, they are not spaces that permit people to act in any way they please. There are quite distinct rules, norms and dynamics that govern human endeavour and activities within the public environment. As noted by Jukes in Kasinitz (1995:274):

"Streets are a means of communication. Like other media they have their codes and conventions...."

Hunter (1985) defines the spatial domains of each of the social community levels discussed earlier, from a sociological perspective. These are summarised in Table 3-1. As a result the definition of public space in its broadest sociological sense is

"the point (or place) where individuals from different social orders meet, where social worlds collide" (Hunter, 1985:216).

Public space is a complex environment in which the public orders of the private, the parochial / neighbourhood and public life overlap and interrelate. Walzer (1986) states that:

"Public space is space we share with strangers, people who aren't our relatives, friends or work associates (not necessarily). It is space for politics, religion, commerce, sport (and recreation); space for peaceful co-existence and impersonal encounter(and the character of public space) expresses and also conditions our public life, civic culture, everyday discourse".

Accordingly, public space cannot be considered in isolation from the private and parochial / neighbourhood orders, as they influence and direct both the shape and function of public space and vice versa. In this context public space is one of the most important parts of cities. It is (or should be) where the greatest amount of human interaction takes place.

Urban design theorists have utilised the above sociological-legal understanding in their definition of public space.

	Personal Community (Private Level)	Territorial Community and Limited Liability Community (Parochial Level)	Public 'Community' and Limited Liability Community (Public Level)
The Spatial Domain	Defined by the two extremes of the metropolitan environment and the household, and the expanded network of personal relations that link these private nodes. This has resulted in a metropolitan-wide spatial network of the private order, and is less constrained to a physical proximity, but is widely spread throughout the metropolitan field. It is especially important for the mutual interaction between the private and public orders.	The parochial social order is based on the proximity of neighbouring dwellers, cohabitants of a common area sharing a common fate. A dense network of personal knowledge and trust combined through inter-locking local institutions, define the spatial and social boundaries. These define the participants who are mutually accountable to one another, and outsiders who have limited rights. Its spatial domain begins as people move outside their dwelling, however whether they are actually entering the physical domain of the parochial social order depends on the strength of that social order and the operation of its mechanisms of control. Because it moves out of the household, the parochial social order is often defined as but another variant of the public domain, however the former is qualitatively distinct from the public order.	Cannot be simply considered the 'leftover' from the private order of households and the parochial order of neighbourhoods. It is characteristically found at the points of intersection and interpenetration of other social orders. It is found pre-eminently at those locations where people are most likely to be interacting as citizens, yet this does not necessarily exclude the simultaneous operation within other social orders, "for the public order is often the point where individuals from different social orders meet, where social worlds collide". (Hunter, 1985:216) Public places: the streets, the sidewalks (Jacobs, 1961), and the nodes, areas, and paths (Lynch, 1960), are where public, parochial and private domains are interlinked and interlaced. To the degree that public places 'belong' to no one, they therefore belong equally to everyone. Their use then is considered the legitimate right of all citizens of the state. This spatial domain of the public order is difficult to delineate without reference to the private and parochial orders.

Table 3-1: The Spatial Domain, Source: Hunter, 1985

3.1.2(i) Lang (1994)

Lang (1994) contends that public space is not necessarily coterminous with publicly owned property. In his assessment public space:

"... consists of those places and links to which everybody has access, although this access may be controlled at certain times. It is a mistake to think of public space as outdoor space only, although certainly much of it is – squares, streets, parks. It also consists of those indoor places in the public domain – the halls of railway stations and public buildings" (Lang, 1994:26).

Lang (1994) also highlights what he calls "ambiguities" about what constitutes public space; what is in effect semi-public space. The former is highlighted by the framing elements of public space, the surrounding exterior walls (their surfaces) and / or vegetation. The "ambiguities" arise from:

- privately-owned elements that define public space (particularly the walls of buildings) are often privately owned; and
- many spaces inside and outside buildings that are 'quasi-public', where the public has right of access but under strictly controlled and supervised conditions.

Lang (1994:27) concludes that

"one of the basic objectives of urban design is to specify what public space should be, how it is defined and bounded, what its enclosing elements should be, and how it interacts with private space. Increasingly, important questions are being asked in democratic societies about who has the right of access to public spaces and who controls them, particularly in places where much anti-social behaviour occurs".

3.1.2(ii) Scott-Brown (1990)

It is considered that the definition of public space should not be determined by the urban designer, but that he / she should be directed by the socio-cultural laws, norms and values to identify sociable public space.

Scott-Brown (1990) defines public space in terms of what she considers to be the *urban public sector*. This consists of governmental agencies, at all levels, that are involved in the functioning of metropolitan and urban areas. Semi-public agencies, some private institutions and private citizens in some aspect of their lives, can be considered part of the public sector as well. In this context Scott-Brown (1990) defines public space as

"...the urban public sector seen in physical terms".

Furthermore, Scott-Brown (1990) highlights the progression from public space to private space, and an important 'in-between' realm. All buildings have their public aspects: in a house, the front door and the parlour; in an office building, the entry and lobby; in a museum, the lobby and main stairway and so on. Building facades are the primary urban public in-between realm and a major interest of urban design.

Within the physical environment, a differentiation can be made between *public* and *civic*.

- Public places - Serve people's shared but still private needs, e.g. the marketplace, the shopping mall and the beach. This is where people take their private enjoyment in public.
- Civic places - Where people share places and purposes. *"We act civilly and perhaps ceremoniously"* (Lilla in Scott-Brown, 1990). Civic places are those of government, such as city hall, but also the museum and concert hall.

Most importantly, Scott-Brown (1990) emphasises the justification for applying special controls and regulations to private space that may be of particular importance to the functioning and performance of public space.

Scott-Brown (1990) highlights that the definition of public and private varies from culture to culture and over time within one culture. For example:

"... there are public ovens in the villages of some societies; for most cultures, education is a public or group undertaking; and in the United States cities public toilets have migrated to the private sector, where they are found in department stores and gasoline stations but rarely elsewhere" (Scott-Brown, 1990:22).

However, the design and development of public space should be equated and directed by the democratic ideals of society.

The design components of public space are, according to Scott-Brown (1990), the streets, public and civic buildings, and parks and open space.

3.1.2(iii) Dewar and Uytenbogaardt (1995)

Dewar and Uytenbogaardt (1995) consider the public environment (space) as the key in urban design and development.

"A characteristic of twentieth century urban management in many cities is that the emphasis historically given to public institutions and collective places has switched over time in favour of the individual: the individual house or building surrounded by large amounts of private space is now seen as the basic building block of urban systems" (Dewar and Uytenbogaardt, 1995:9).

Dewar and Uytenbogaardt (1995) emphasise that the original building blocks and main structuring elements of urban settlements were the institutions most valued to society, such as the places of temporal and spiritual power, learning, exchange, culture and meeting and the public spaces which celebrated and announced these.

"The relationship between these institutions, spatially scaled by movement on foot, created locational diversity, choice and a guiding structural order, and housing simply infilled between these" (Dewar and Uytenbogaardt, 1995:10).

In their analysis of urban settlements, Dewar and Uytenbogaardt (1995) show that in positively-performing urban environments the quality of the public spatial environment plays a critical role.

Public spaces are

"The places within which people experience the city or town and engage both formally and informally, in its collective life. They are the primary elements affecting the quality of urbanity experienced by all people" (Dewar and Uytenbogaardt, 1995:10).

When people are poor, the public environment plays a critical role, although public spaces are important for all. Due to the limited resources of a poor household, its full range of needs cannot be met through the individual dwelling. In this regard the public environment meets needs, particularly as extensions to the private dwelling unit, enabling poor people to live their lives in public space, with dignity and a sense of permanence.

"Conversely, when the public spaces are undefined, unscaled and unpleasant, the entire environment is permanently miserable, regardless of how much investment goes into individual buildings" (Dewar and Uytenbogaardt, 1995:10).

3.1.2(iv) Madanipour (1996)

Madanipour (1996) summarises the definition of public space as follows:

"It appears that the definitions of public space emphasise open access to either the space or the diversity of activities, most notably the social interaction taking place in it (or the lack thereof) as caused by this open access. ... A public space can therefore be defined as space that allows all the people to have access to it and the activities within it, which is controlled by a public agency, and which is provided and managed in the public interest."

Madanipour (1996) defines quasi-public space, or semi-public space, as being totally managed environments created for certain social groups that serve a specific function or purpose, which exclude other social groups, as caused by and causing further social and spatial segregation. The example Madanipour (1996) cites as an example is the 'public' space in a shopping mall versus that of Newcastle city centre.

In this example, Madanipour (1996) assesses the situation as follows:

"All these points lead to the conclusion that the city centre space, despite its own limitations, offers a more genuine public space. It is the space that is controlled by a public agency in the public interest and is accessible to all citizens at all times. It might be argued, however, that this is a too formal analysis of the public and private space, as these spheres are intermeshed and the three indicators of access, interest and control are not distinguishable within these two spheres. Or it might be argued, along with Harbermas, that the public and private should be separated so that the lifeworld could be protected from the political and economic systems. This may lead to urban public space being considered a part of the civil society, to be protected from state intervention, implying that a space controlled by the state is not necessarily a public space. This argument may thus equate the public space in Newcastle city with that in the Metro Centre, as both are controlled by the systems of power and money. In response, it could be argued that, as shown here, the city centre offers a wider range of possibilities to a larger part of the public and hence is a more democratic space."

He concludes that new developments by private developers - or the market - do not seek or desire the degree of publicness found in the city centre. The reasons cited are:

- the traffic problems in the city centre;
- the co-existence of a wide range of potentially conflicting interests in the public sphere, especially in an increasingly polarised social environment; and

- local authorities' reluctance, and inability, to add to the public urban space due to:
 - scarcity of financial and capital resource;
 - political and administrative limitations and capabilities; and
 - challenges to public authority control and their ability to administer.

This makes the concept of semi-public space very appealing to developers, as it gives them control over and certainty of their investment.

3.1.2(v) Vernez-Moudon (1992)

From the law literature reviewed by Vernez-Moudon (1992) a space is considered to be a public space, if ownership and right of access cannot be seen as obstacles to its public use, despite inherent restrictions for public access. Public places cannot legally prohibit interaction with other users, only the nature of those interactions - their control and direction

3.1.2(vi) Carr et al (1992)

Carr et al (1992) view public space

"... as the common ground where people carry out the functional and ritual activities that bind a community, whether in the normal routines of daily life or in periodic festivities. ... public space is also used for 'private' purposes - for buying or selling things, for gardening, for self-improvement through exercise, or for simply finding a place to exist - It can also be the setting for activities that threaten communities, such as crime and protest. As public life evolves with the culture, new types of spaces may be needed and old ones discarded or revived. We need to learn too to create and maintain places that are appropriate to their users and context and are well used over time"

3.1.2(vii) David Crane (1960)

Crane (1960) identifies public space to be what he terms, the "capital web" of the built environment, encompassing public land, streets, utility (infrastructure) services, open spaces and public buildings.

3.1.3 A Hierarchy of Collective City Space: Public Space; Semi-public Space and Private Space.

The above investigation into the definition of public space is consolidated into a holistic definition of collective city space, which is

structured in three forms: Public Space; Semi-public Space and Private Space.

3.1.3(i) Public Space

Those places, areas and elements of the city:

- to which everybody has access;
- in which daily functional and periodic ritual activities occur;
- where people experience or engage in city life collectively (formally and informally); and
- under the management and function of the urban public sector and its agencies (be these semi-public, non-government non-profit organisations, private institutions and citizens) from national level to local government level; which include civic places and buildings; that are able to be used by citizens in terms of their legitimate rights, and in terms of the culture, norms and values of society.

In essence it is that city space that is provided and managed in the collective public interest of the society, where ownership and right of access do not necessarily hinder its use; although the nature of the interactions between people is directed and controlled within their legitimate rights of society and its culture, norms, values, codes and conventions. The definition, use and design of public space varies from society to society and changes over time within society, but is underpinned by the democratic (or collectively accepted and entrenched) ideals of that society.

3.1.3(ii) Semi-Public Space

Those places, areas and elements of the city that:

- form the interface between public and private space;
- are the 'inbetween' space defined by the public space;
- define and enclose or frame public space (such as buildings);
- are totally managed environments created for certain social groups (as caused by social segregation);
- provide community / neighbourhood controlled spaces directed by parochial social orders, defined by participants who are accountable to one another, and outsiders with more limited rights; that are able to be used by citizens under more strictly controlled and supervised conditions determined and imposed often by commercial, group and institutional ownership conditions.

3.1.3(iii) Private Space

Those places, areas and elements of the city that are under the direct control and / or ownership of the individual, the household and the private corporation or company.

The level of control and freedom of action is directed by the laws and norms in terms of private rights accorded to an individual or company within the society.

3.1.4 The Physical Components of Public Structure (Public- and Semi-Public Space)

By comparing the components of the built environment with the consolidated urban design definitions of public- and semi-public space (the public structure) in a matrix format (refer Figure 3-2), the physical components that comprise public structure are assembled.

The characteristics of various public- and semi-public space components are elaborated upon in greater detail (refer Table 3-2).

3.2 THE PHYSICAL CONTEXT OF PUBLIC STRUCTURE IN THE SOUTH AFRICAN URBAN ENVIRONMENT: FRAGMENTATION AND URBANISATION

3.2.1 The Physical Urban Structure of the Contemporary Western City

The contemporary Western city is a collage of districts, a mosaic of communities held together by a web of highways, roads, and transit systems. The environmental quality within these districts varies considerably, depending on the resources the public and private sectors have invested in them and on the way in which the natural environment has been incorporated (Lang, 1996). Balbo (1993) contends that these different parts in general form a single whole, forming part of and constituting an essential homogeneous spatial structure. The component parts are interconnected and linked through the service infrastructure and social facilities such as schools, clinics

and parks that are in greater quantity and of better quality in wealthier areas, but not absent from the poorer ones (Balbo, 1993).

The essential physical characteristics of the contemporary Western city are:

- The historic city centre, the inner city and the central business area (formerly known as downtown or the central business district). This is characterised by the high-rise and dense concentration of buildings, which accommodate office, financial, institutional, retail and cultural functions. It also includes higher density residential areas, predominantly occupied by low income people and increasingly becoming the preserve of the poor. The area is also characterised by industrial and warehousing areas, which developed during the city's initial growth period through the economic forces of the industrial revolution, comprising multi-storey factory buildings and warehousing complexes. To some degree the areas within the inner city zone have to contend with abandoned, derelict and unused precincts, as well as an overall decline in activity and function. Other parts have been rejuvenated through urban renewal schemes and kept competitive and active through concerted efforts of urban management, such as business improvement districts. The latter provide maintenance, security, cleanliness and environmental improvements, which protect existing investments and attract new customers and activity, generating additional investment. Overall the urban built form of the inner city is of a compact and denser nature as it evolved from the point of origin of the urban system and thus having the highest degree of transportation and communication links that characteristically developed within and from the origin. The location of industries, business and commerce in close proximity to the infrastructure facilities and services of the centre, in order to benefit from the economies of agglomeration, have consolidated the compact urban form. The latter was further enhanced by the need for higher density housing which accommodated the labour force of the industries.
- The first generation of sprawling low density residential suburban development, which is interspersed with activity nodes of suburban shopping malls and business centres, office and industrial parks, as

DEFINITION OF PUBLIC SPACE				
	Private Space	Semi-Public Space	Public Space	Comments
BUILT ENVIRONMENT COMPONENTS				
Built Form: Buildings & Physical Structures				
Residential	○	⊗		Transition Space between Private & Public
Retail	○	⊗	●	In certain instances may be truly Public
Commercial / Business	○	⊗		Transition Space between Private & Public
Industrial	○	⊗		Transition Space between Private & Public
Educational	○		●	
Cultural / Religious	○		●	
Government / Institutional / Civic			●	
Entertainment	○	⊗	●	
Recreation and Sport	○		●	Depending on Type (eg. Private or Public Club)
Transportation			●	
Communications	○		●	
Monuments / Public Art			●	
Infrastructure Networks			●	
Movement and Linkage Space				
Streets	○	⊗	●	Depending on Control & Access
Railway Lines			●	
Pedestrian Paths (including sidewalks)	○	⊗	●	Depending on Control & Access
Pedestrian Streets and Traffic Restricted Areas		⊗	●	
City Trails (walking, cycling, historic etc.)			●	
Inter- or Single Modal Transport Interchanges			●	
Building Entrances	○	⊗	●	Depending on Control & Access
Man-Made Urban and Natural Space				
Gardens	○			
Back-yards	○			
Front-yards	○	⊗		
Parks		⊗	●	
Squares, Plazas and Piazzas		⊗	●	
Memorial Places		⊗	●	
Markets		⊗	●	
Playgrounds		⊗	●	
Sportsfields	○		●	Depending on control / ownership
Community Gardens and Community Parks		⊗	●	
Greenways and Natural Areas		⊗	●	
Waterfronts		⊗	●	
Un- or Underdeveloped Vacant Space	○	⊗	●	Depending on control / ownership

Figure 3-2: Matrix assembling the Components of Public- and Semi-Public Space

well as mixed use activity strips along major arterial routes. The urban form is characterised by rows of individual houses set in landscaped gardens that are grouped in districts through an extensive road network.

- An extensive freeway, road and rail transportation system. The dominant being the circumferential freeway system that encompasses the inner city and first generation suburban development. From the former, a vast radial freeway and road system emanates to the suburban expanse. This transport network is augmented by a rail system and bus routes, however the major mode of transportation is the motor vehicle (Lang, 1994)
- The emergence of what Garreau (1991) refers to as “edge cities”, linked to the continued suburbanisation and physical expansion of the city by a second generation of suburban development. These are suburban business and mixed-use activity centres with approximately half-a-million square metres of leasable office space and at least 60 000m² of leasable retail space. Essentially these comprise the construction of built form at accessible points well away from the historic city centres. They include the construction of large prestige office complexes and up-market shopping centres that provide the focal points of new cycles of investment and building.
- Meltzer (1984) already pre-empted Garreau's (1991) 'discovery' indicating that already then the suburban enclave was developing from a semi-autonomous political jurisdiction, with limited abilities to the provision of facilities and responsibilities of municipal housekeeping and maintenance, into relatively self-contained and self-sufficient decentralised regional units. This is as a result of the outward movement of people and activities from the historic centre.
"Each of these regional units approximates a modified city; all linked together in a galaxy of interdependent relationships and are inexorably dependent one upon the other. Although each such 'subcity' has no fixed and definable boundary or outer limit, since one bleeds into another, they are generally organised around a major regional shopping centre and increasingly include the entire spectrum of uses conventionally associated with a city" (Meltzer, 1984:17).

These are turning into independent centres, with their own mini central business districts, characterised by newly created job opportunities, industrial development areas and although the predominant residential form is single-family houses, the range of

Table 3-2: Characteristics of Public- & Semi-Public Space Components

Type	Characteristic
<i>Public Parks</i>	
Public / central park	Publicly developed and managed open space as part of zoned open space system of city; open space of city-wide importance; often located near centre of city; often larger than neighbourhood park.
Downtown parks	Green parks with grass and trees located in downtown area; can be traditional, historic parks or newly developed open spaces.
Commons or Outspan (SA)	A large green area developed in older New England cities and towns; once pasture area for common use; now used for leisure activities.
Neighbourhood park	Open space developed in residential environments; or publicly developed and managed as part of the zoned open spaces of cities, or as part of new private residential development; may include playgrounds, sport facilities, etc.
Mini / vest-pocket park	Small urban park bounded by buildings; may include fountain or water features.
<i>Squares & Plazas</i>	
Central square	Square or plaza; often part of historic development of city centre; may be formally planned or exist as a meeting place of streets; frequently publicly developed and managed
Corporate plaza	Plaza developed as part of new office or commercial building(s), often in downtown area but increasingly part of suburban office park development; built and managed by building owners or managers; some publicly developed examples but primarily privately developed and funded
<i>Memorial</i>	Public place that memorialises people or events of local and / or national importance
<i>Markets</i>	
Farmers' markets	Open space or streets used for farmers' markets or flea markets; often temporary or occur only during certain times in existing space such as parks, downtown streets or parking lots
<i>Streets</i>	
Pedestrian sidewalks	Part of cities where people move on foot; most commonly along sidewalks and paths, planned or found, that connect one destination with another
Pedestrian mall	Street closed to auto traffic; pedestrian amenities provided such as benches, planting; often located along main street in downtown area
Transit mall	Development of improved transit access to downtown areas; replacement of traditional pedestrian malls with bus and "light rail" malls
Traffic restricted streets	Streets used as public open space; traffic and vehicle restriction can include pedestrian improvements and sidewalk widening, street tree planting
Town trails	Connect parts of cities through integrated urban trails; use of streets and open spaces planned as setting for environmental learning; some are designed and marked trails

<i>Playgrounds</i>	
Playgrounds	Play area located in neighbourhood; frequently includes traditional play equipment such as slides and swings; sometimes include amenities for adults such as benches; can also include components such as Adventure Playgrounds
Schoolyard	Schoolyard as play area; some developed as place for environmental learning or as community use spaces
<i>Community Open Spaces</i>	
Community garden / park	Neighbourhood spaces designed, developed, or managed by local residents on vacant land; may include viewing gardens, play areas, and community gardens; often developed on private land; not officially viewed as part of open space system of cities; often vulnerable to displacement by other uses such as housing and commercial development
<i>Greenways and parkways</i>	
Interconnected recreational and natural areas	Natural areas and recreational spaces connected by pedestrian and bicycle paths
<i>Indoor Marketplace / Atria</i>	
Atrium	Interior private space developed as indoor atrium space; an indoor, lockable plaza or pedestrian street; counted by many cities as part of open space system; privately developed and managed as part of new office or commercial development
Marketplace / downtown shopping centre	Interior, private shopping areas, usually free-standing or rehabilitation of older building(s); may include both interior and exterior spaces; sometimes called "Festival marketplaces"; privately developed and managed as part of new office or commercial Development
<i>Found / Neighbourhood Spaces</i>	
Found spaces / everyday open spaces	Publicly accessible open space such as street corners; steps to buildings, etc., which people claim and use; can also be vacant or undeveloped space located in neighbourhood including vacant lots and future building sites; often used by children and teenagers, and local residents
<i>Waterfronts</i>	
Waterfronts, harbours, beaches, riverfronts, piers, lakefronts	Open space along waterways in cities; increased public access to waterfront areas; development of waterfront parks

Source: Carr at al. (1992)

housing types is diversifying to include denser, multi-storey typologies.

"... the areas include hotels, office buildings, hospitals, and colleges. They provide commercial and community theatres, orchestras, newspapers, and nearly all of the activities and characteristics customarily associated with a city" (Meltzer, 1984:17)

Meltzer (1984) concludes that the contemporary western city is developing into a 'metroplex', which views all of the above as component parts of a greater whole. The historic centre is becoming a subcentre in its own right, much as the outlying subcities. In this regard the inner city is undergoing change and adapting, it is

"not disintegrating, but rather being reshaped by the forces of urban change" (Meltzer, 1984:18).

Adams (1970) developed a model of the building cycles and transport eras of a typical city from the 1890's to the 1960's (refer to Figure 3-3). In principle evolving transportation systems enabled successive building cycles to be at increasing distances from the city centre. The net effect is a stretching out of the city along the predominant transport corridors as indicated in Figure 3-3. This correlates with the evolution of the city from its pre-industrial urban nucleus, through the industrial city to the post-industrial city region and expansive urban system (refer Figure 3-4).

The forces that have shaped the formation of the metropolitan structure of the contemporary city are encompassed under the notions of concentration and decentralisation.

3.2.1(i) Concentration

- The process of urbanisation, the migration of population from the rural areas to the city, to form an urban society.

"This is the process of urbanisation: a centripetal movement taking place at a national scale. Urbanisation occurred in the developed world with the advent of industrialisation during the eighteenth century and in the developing world over the last four decades. In the Third World, the issue is more recent, more urgent and more dramatic" (Correa, 1989, in Silverman, 1996).

- The outcome of industrialisation bringing about agglomeration and synergies, enabling people to be locationally concentrated in one area.

- The establishment of major technological advances and new methods of production.
- Technological innovations in general, and in food production and processing in particular, enabled fewer and fewer people to provide food for the ever increasing population.
- A dramatic increase in population growth due to a decrease in the death-rate. A much more efficient agriculture, an enormous extension of food-producing regions, and a more varied diet, together with more trade and better distribution, contributed to a significant decrease in famine and epidemics. This was combined with improved hygiene and advances in medical care.
- Improved means of transportation and communications technology.

The resulting urban form was relatively compact around a core in tentacular shape. Low status housing consolidated around industrial employment areas because of the need to locate close to work to avoid cost and time of transportation, brought about by a combination of low wages and long working hours. New industrial areas and higher status residential suburbs tended to develop along the public transport routes of the major arterial routes radiating outward from the city centre, creating the tentacular urban form.

3.2.1(ii) Decentralisation

In reaction to the problems of the concentrated and centralised city form of the 19th century, people, functions and activities began the process of dispersal toward the urban periphery, which initiated the transformation of the initial compact city form.

The process of dispersal and urban expansion was enabled by developments in technology in general, and specifically within transportation and construction technology, as well as the ready availability of space on the urban periphery. The decentralisation occurred in a selective way and was limited to some extent in certain cities; and

"to the space preferences of the owners and managers in the new urban society" (Herbert et al., 1991).

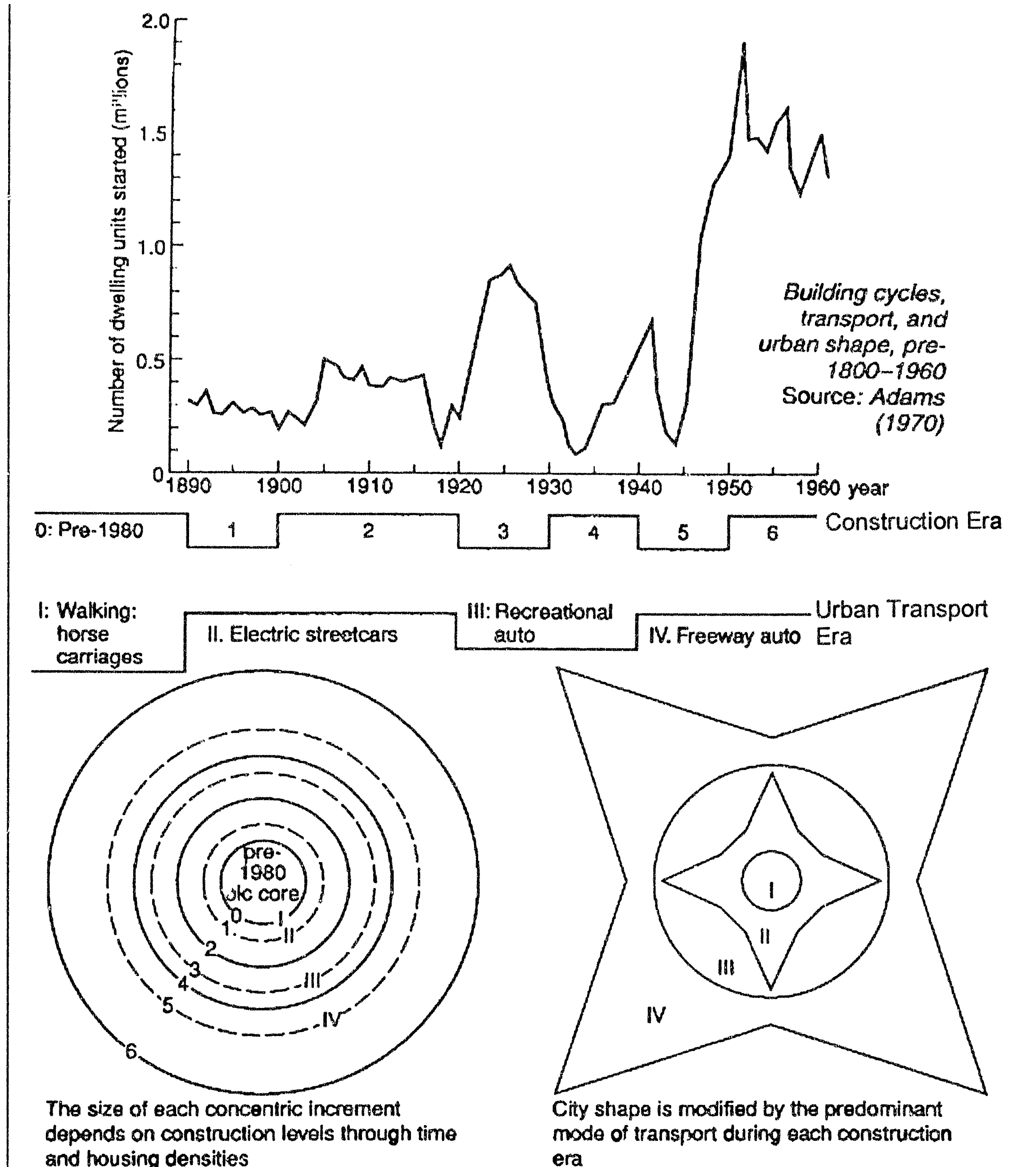


Figure 3-3: Model of City shaped by buildings and transport cycles, Source: Adams, 1971:383.

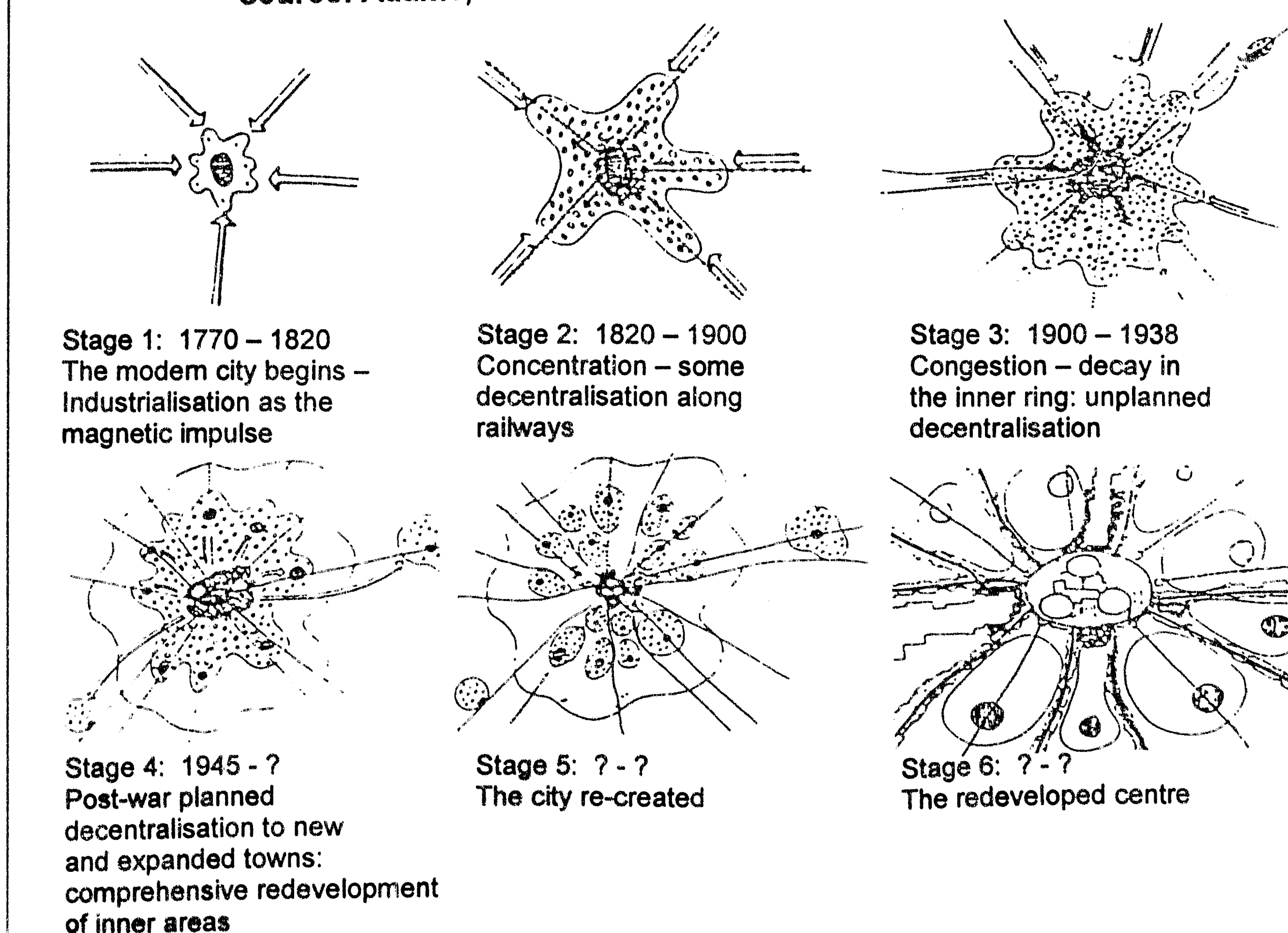


Figure 3-4: Evolutionary Stages of City Development, Source: Johnson-Marshall, 1966

The dispersal process was caused by:

- Technological advances in transportation and communications reduced the constraint of distance on the development of social and economic linkages, both within and between cities.
- As communicative efficiency increased the distinction between urban and rural, and the functional separateness between cities decreased.
- Amenity considerations also influenced the location of people within the city, enabled through the ease of communications.
- Characterised by considerable increase in the speed and efficiency of communications:
 - the telephone improving electronic communications; and
 - the motor vehicle (combustion engine) since 1945, having huge implications on interurban transport and private mobility from public transport to the private car.

The dispersal process caused the restructuring of retailing, manufacturing, office functions and population; and, in many instances, has resulted in a development vacuum and underutilised core within the inner city of the modern metropolis (Herbert et al., 1991).

The profile for residential densities in western cities reflects high central densities with a decreasing gradient and gradual change to lower densities on the expanded urban periphery. Cities in the developing world are characterised by higher densities overall, the highest being in the inner city and lower (but still relatively high) densities in the 'suburban' areas.

The relatively compact urban form of the city evolved into a dispersed nature characterised by spatial expansion through trends such as suburbanisation, decentralisation, counter-urbanisation, and de-urbanisation. The suburbanisation of major tracts of land around most major cities was brought about by the relocation of the mobile labour force beyond the then city limits. Industries requiring high inputs of skill and labour of raw materials have been able to gravitate to formerly smaller urban concentrations in the more attractive regions

The dawn of the industrial city was brought about by the introduction of a new mode of production, the creation of machine technology and the

development of the market economy based and driven by the concept of profit.

"Calculations of profitability and rentability entered into every transaction.... The final result of capitalism was to introduce the modes of the marketplace, in a universal form, into every quarter of the city: no part of it was immune from change, if this could be brought about at a profit" (Mumford, 1961:470).

These altered the spatial relationship between town and country and within the town itself. Mumford describes the processes:

"In order to have a free field for its typical interests, capitalism adopted two methods in relation to the existing urban structures: either it sought to escape to the suburbs beyond, free from all municipal restrictions, or alternatively it sought either to demolish the old structures and occupy them at a far higher density than that for which they had – in a supposedly poorer age – been designed. Urban demolition and replacement became one of the chief marks of the new economy" (Mumford, 1961:472).

The physical manifestation of these concentration and dispersion forces has yielded a contemporary western city structure as described earlier, and represented diagrammatically in Figure 3-5.

An assessment of the physical urban structure of the contemporary western city has highlighted various aspects regarding the consideration of public space:

- There are distinct districts of public space environments related to the overall urban structure of the city, namely the inner city environment, the areas of first- and second generation suburban development, and the evolving 'edge city' environments.
- Numerous forces have contributed to the shaping of the public space environment, encompassing economic, demographic, social, technological and political.
- Public space is a component part of the services and facilities infrastructure that permeates the various segments of the city (the "public structure".)

In this regard an understanding of the overall physical structure of the urban environment establishes the metropolitan context and the role which each part plays within that context. This informs and directs not only the understanding of public space within a particular district or zone, but also directs the future role and the physical design of that public space.

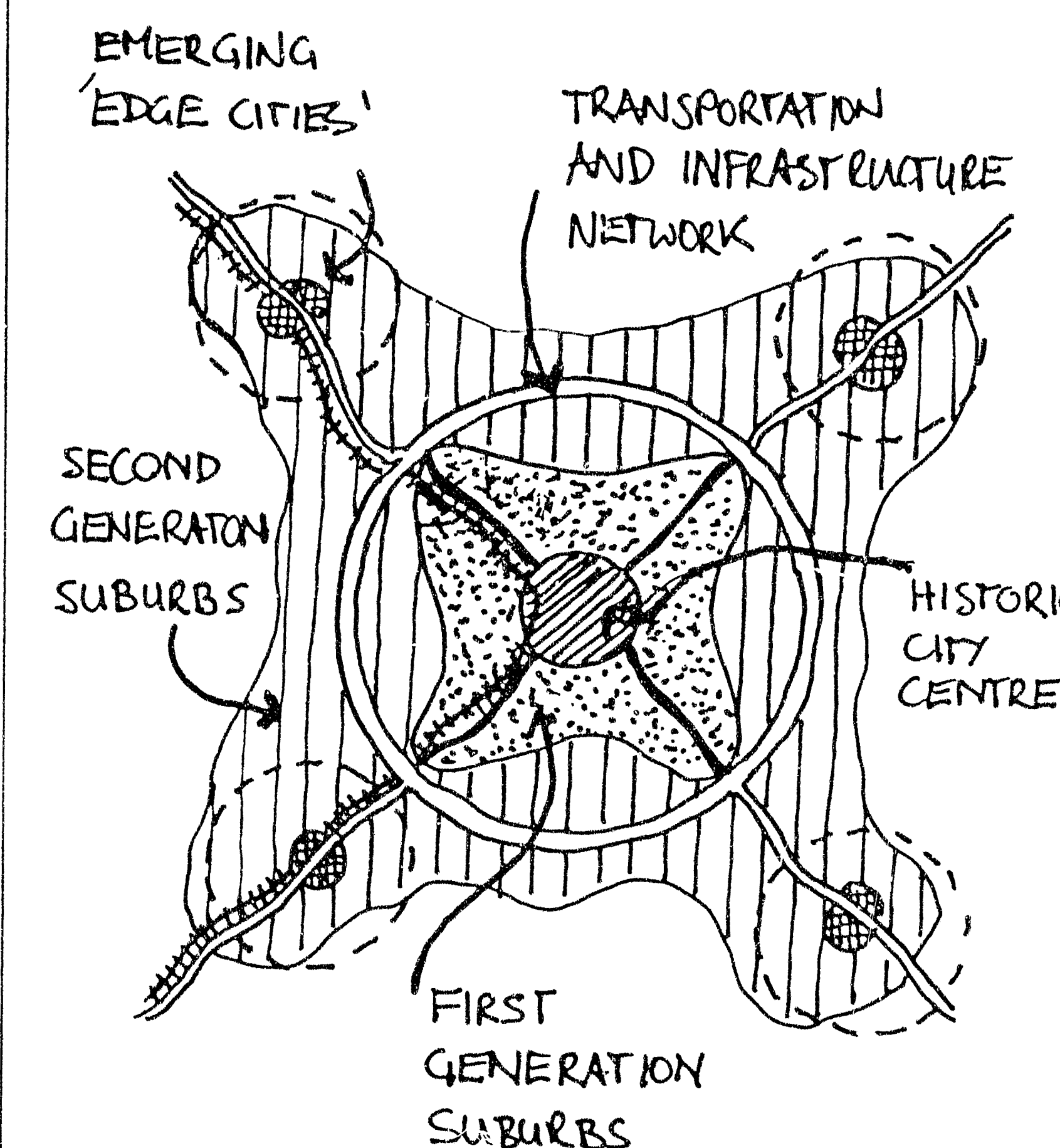


Figure 3-5: Model of Contemporary Western City Structure

3.2.2 The Fragmented South African Post-Apartheid City

3.2.2(i) The Third World Fragmented City

Balbo (1993) terms the city of the Third World or developing world, of which South Africa is a part, the *fragmented city*. This city is made up of separate parts that do not make a homogeneous whole or single 'organism' as in overall terms the contemporary western city does. In fact, the major metropolis in almost every industrialising third world country comprises a dual city: two quite different cities, physically juxtaposed but architecturally and socially distinct.

"The truth is even more extreme: the city of the Third World is a city of fragments, where urbanisation takes place in leaps and bounds, creating a continuously discontinuous pattern. In the fragmented city, physical environment, services, income, cultural values and institutional systems can vary markedly from neighbourhood to neighbourhood, often from street to street" (Balbo, 1993:24).

Essentially the fragmented city comprises the juxtaposition of a western city form and that of the traditional city form, which co-exist in a spatially separated and weak way. The urban morphology of such cities is characterised by:

- *the centre* (or inner city) which corresponds to the 'colonial city' core;
- *the planned districts* of both the pre- and post independence periods;
- the illegal settlements built on illegally subdivided land;
- *the squatter settlements* (or *bidonvilles* or *favelas*) or *informal settlements*, the illegal housing of the poor;
- *the slums*;
- *the historic city* in those areas with an urban tradition predating the colonial period; and
- *Site and service projects*

The reasons for this fragmentation were:

- sanitary;
- social;
- cultural; and
- ideological and political.

Balbo (1993:25) states that

"The large avenues of the European city, its modern services and infrastructures were to show very clearly on which side progress, wealth and power were situated."

The deep mark of colonialism on the organisation of space in the third world environment, has led to the distinction of the colonial city as a specific type of city form to that of the industrial city. Although colonialism ended a number of decades ago, there is little transformation that indicates that integration is taking place. In fact Balbo (1993) contends

".... that the post-independence city is not all heading towards greater homogeneity; instead it seems to be accepting and reinforcing its spatial fragmentation".

The fragmentation is considered from three points of view

- a. The built environment, as outlined above, each one with distinctive features. Within every fragment the 'urban landscapes' vary. The urban structure within which private, collective and public spaces have different meanings, give rise to a variable planned or fortuitous mix of built-up and empty plots, areas of concentration and areas of dispersal, connecting and dividing elements.
- b. The differences in services and infrastructure levels, and their accessibility, dependent on resource allocation and investment.
- c. The wide variety of tenure options and the degree of security these guarantee or prevent. These vary from 'modern' land ownership, to those owned by religious organisations (Islamic cities), and 'intermediate' such as rental or lease. The tenure condition determines the spatial outcome and physical quality of the city fragment.

3.2.2(ii) Causes of Fragmentation

Balbo (1993) identifies four causes of fragmentation:

- a. *Rapid urban population growth*, encompassing both natural increase and migration, as well as foreign refugees and entrepreneurs, which result in overcrowded conditions through house-sharing and the development of extensive informal settlements. This rapid population growth makes it impossible to manage city growth, as the public and private 'supply' of the city cannot meet the demand of housing, infrastructure and services.

The only means available for people to meet their needs is to resort to substitute mechanisms, which are very local in nature, are outside the ambit of the legally recognised and financially accessible means of production of urban goods and services, and therefore considered 'illegal', thereby contributing to the segmentation of urban space.

- b. The *urban economy*, which is largely based on the informal sector, forming a significant part of the gross domestic product of the city as well as in the provision of employment.

"...very little attention has been paid to the ways informal activities affect the spatial structure of the city, its growth pattern, the uses of land, the provision (or lack) of infrastructure and services. This is rather strange considering that in most cities informal activities are not simply the most dynamic part of the economy, but also the only ones offering some potential for the absorption of the large and expanding urban labour supply" (Balbo, 1993:28).

The informal market works at a more local and neighbourhood level and particular features of it have an important say in shaping urban space. The organisational needs of the informal market cause fragmentation and contestation over physical space. The main features of this market are the minimal or even total absence of capital, the use of local resources, poor technologies and a significant participation of women and children in the 'labour force'.

"The community organisations existing at the neighbourhood or even building level in many countries are the clearest evidence of such a locally centred functioning of the urban society. Similarly, water street vendors, scavengers reclaiming plastic bottles or coke cans for shoe- or pan-making, women selling food prepared inside the house or beer brewed in the courtyard, the boss recognised for his power to talk to the people at City Hall, all survive, work and rely on an urban society which is strictly local in orientation" (Balbo, 1993:28).

Balbo (1993) thus concludes that informal space is primarily local space at the physical, economic and social level. Thus localism is an essential feature of the informal economy and the organisation and 'control' of local space is a primary condition for its survival.

- c. *The ideology of urban planning*, which has been fundamentally flawed as it always looked at the city as a homogeneous object, establishing uniform services for the entire area, of equal standards and similar amount of facilities. This is exacerbated by the

application of 'modern' building standards, inappropriate for the context.

- d. *The Role of the State*, which aims to produce and control everything, with little economic, capital and human resources to do either. However, with its investments and laws, the state has the power of determining inclusion or exclusion, and thus can cause or avoid fragmentation.

"The state defines what is legal and what is not, dictates the rules governing access to the 'official' city. It also sets standards and establishes permits and licences while exercising its power to deliver or refuse them" (Balbo, 1993:29).

3.2.2(iii) Fragmentation Revisited

Balbo (1993) concludes that in real terms fragmentation of the city:

- Raises the cost of urbanisation to supply infrastructure and services, the spatial discontinuity not only entails higher investment and operating costs (for obvious technical reasons), but also makes it easier to pirate water, electricity and telephone communications through illegal connections.
- Causes an inefficient land-use pattern because of its urban expanse creating large distances for transportation. Through this people have to spend significant cost and time on transport, reducing cost-efficiency and productivity.
- The 'illegal' residents have limited access to basic services such as water, energy and medical services, creating potentially life-threatening situations.
- Lack of tenure and security discourages upgrading and investment.
- Loss of rates income and taxes by the government, as people in informal settlements do not pay for the limited (albeit insufficient) services they benefit from.

In contrast to the unsustainable nature of the fragmented city, Balbo (1990) contends that

"... it is the fragmentation by which people have been able to gain a foothold in the urban system. Through the fragmentation, people

are able to avoid, manipulate and 'bend' the rules in a manner that they gain access to the city's opportunities and resources, albeit at the minimum and lowest levels. The fragmentation resulting from the 'legal' city and its rules could be the only currently feasible solution to the seemingly unmanageable situation where the state has few or no resources to satisfy the needs of a rapidly growing urban population" (Balbo, 1993:32).

Consequently Balbo (1993) questions whether fragmentation is not only a mechanism of exclusion, but also and foremost a means of resource redistribution and political dynamisation, although unintentional.

"If spatial fragmentation is one way of achieving greater equity, we need to be very careful in fostering solutions which aim at making the city more integrated, homogeneous, legal" (Balbo, 1993:33).

In his discussion on the fragmented city, Balbo (1993) avoids the next logical step in proposing an alternative approach, which still allows for the advantages of 'fragmentation' but simultaneously enables the restructuring of the urban system such that it does become efficient and egalitarian to all who partake in urban life. What is also apparent in the literature is that continued fragmentation sustains the inefficiencies and diminishes the resources and functions of the urban environment to a level that the system could potentially be entirely disabled, affording an urban living environment that is totally unsustainable. In this regard the spatial structure of the city and its uses play an important part in not only supporting or weakening the survival strategies of its poorest inhabitants, but also in meeting the needs of all its inhabitants.

3.2.2(iv) Post-Apartheid Johannesburg: Fragmented and Disparate

The fragmented city, as established through colonialism, also had its impact on the South African urban landscape. Its typical form was modelled by Davies (1981) who termed it the Segregation City (refer Figure 3-6).

The model describes the structural elements of the mono-centered commercial-industrial Segregation City as follows:

- a dominant White Central Business District;
- sub-ordinate and peripheral Indian and / or Chinese Central Business districts;
- industrial sectors in White ownership but constituting a common employment space;

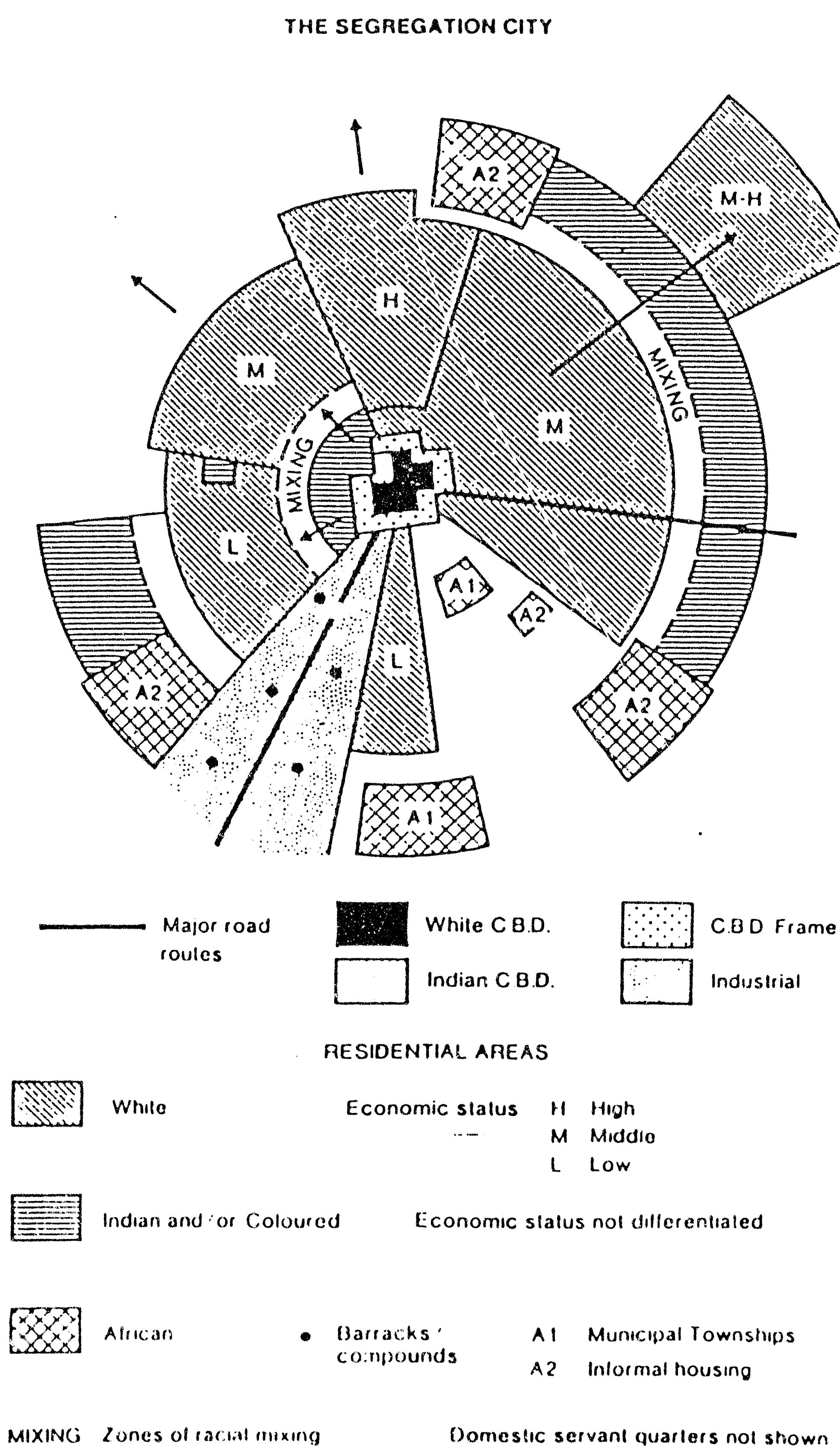


Figure 3-6: The Segregated City, Source: Davis, 1981

- a White residential core with sub-urban extensions in sectors of desirable environments, strongly differentiated by socio-economic status;
- centrally located Indian, Coloured and Chinese residential enclaves in older inner residential areas;
- African working zone single quarters in barracks and compounds;
- African, Indian and Coloured peripheral settlements in small townships, small locations and larger concentrations or zones of informal housing and privately developed housing of highly mixed quality;
- African domestic quarters, widely distributed; and
- mixing zones that represented Black diffusion into White residential areas.

The Segregated City evolved in the South African context primarily due to rapid urban population growth and the role of the state, which chose racial segregation as a means of managing urban growth and development. The increasing African urbanisation at the turn of the century and the outbreak of the plague led to the deliberate racial segregation policy.

Until then Africans had lived either in compounds, in their employers' backyards or in "locations" which had been laid out by the local town councils. However the introduction of various legislative measures reduced African rights and justified their relocation to peripheral townships. In particular

- The Native (Urban Areas) Act in 1923, which formalised the relocation of African people living close to the city centre, justified by notions of unsanitary conditions, overcrowding and immorality.
- The 1937 Native laws Amendment Act, prohibiting free-hold and land-ownership by African people in urban areas.

When the Nationalist Party came to power in 1948, a firm segregated spatial city mosaic had been established. The former introduced 'Grand Apartheid' and together with a host of other legislation, introduced the Group Areas Act in 1950. It was the primary policy through which the state instituted the structural transformation of the South African city. This Act, together with a supporting host of other socio-economic policies, legally enforced racial urban segregation

requiring that South Africans must live in separate residential areas designated for the use of members of different groups defined in terms of race (Urban Foundation, 1990). The impact of this spatial restructuring of the segregated city yielded the 'Apartheid' City, modelled by Davies (1981) (refer Figure 3-7). McCarthy and Smit (1984:58) describe it as

"...a sectoral model in which members of designated race groups are located in different residential sectors, and where each commutes to centrally located production and exchange facilities".

The characteristics of the Apartheid City are summarised as follows:

- Consolidated residential areas for each race group with access to a growth hinterland for future development.
- The consolidated areas were separated from each other either by strong physical barriers (e.g. a river valley, mining land, strongman-made barriers (e.g. railway, highway, etc.) or by 'buffer zones' of open space.
- Each group had access to and from the work zone where interaction is permissible (and indeed, obligatory). In the process of movement to and from the work zone, no ethnic group crossed another's residential area.

The Apartheid City structure, considered in overall terms as a particular type of the fragmented city, forms the spatial context of a post-Apartheid democratic and non-racial South Africa.

The practices of Apartheid and racial segregation outlined above have fundamentally shaped the physical structure of Johannesburg. The city was founded upon the discovery of gold in 1886. It grew, in just over 100 years, from the origins of a gold mining camp into a thriving metropolis of approximately 4 million people. Besides the practices of segregation and Apartheid, three other forces have shaped the city's physical structure:

- rapid economic growth and physical expansion, moving rapidly from gold-mining, to industrialisation, to commercial, financial and tertiary service centre;
- extensive population growth through urbanisation and natural growth; and

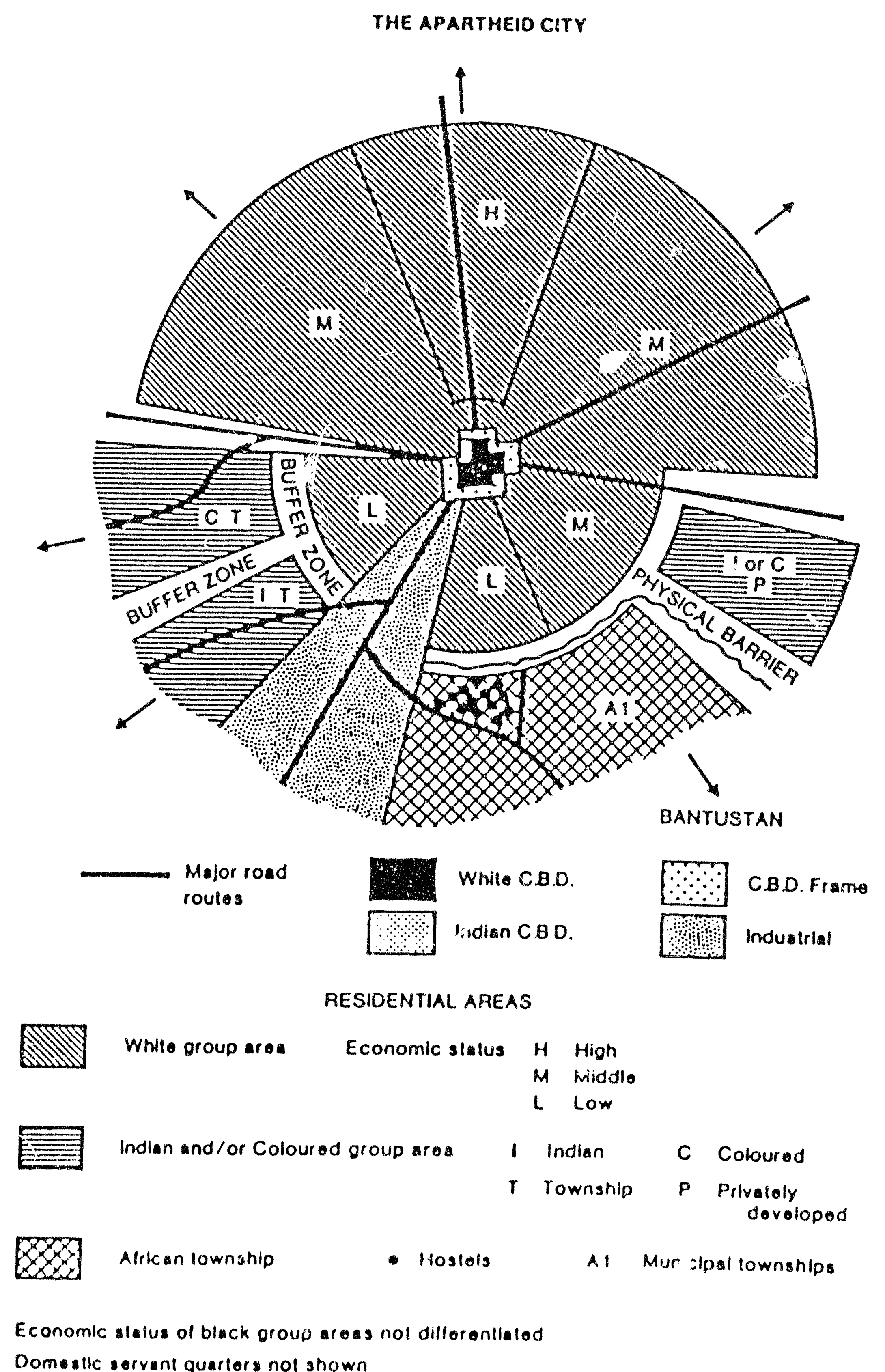


Figure 3-7: The Apartheid City, Source: Davis, 1981:69.

- the natural geography and geology of the region, comprising the Witwatersrand east-west parallel ridge system, the east-west mining belt, and an arc of unstable dolomitic land.

The combination of strategies of racial control and the natural physical structure of the area have resulted in a fragmented and spatially disparate city (refer Figure 3-8). The characteristics of this structure are:

- The Inner City – which has been greying since the early 1980's, enabling African people to gain a foothold for easy access to the central business district, work, significantly reduced transport costs and services and facilities is reflecting the political, social and economic liberalisation most visibly. Two constituencies dominate the inner city scene, private property owners such as the pension funds, mining houses, banks, financial institutions and government administrations; and the streets and public places that are in the hands of the people, such as hawkers (street vendors), taxi drivers, the unemployed, black consumers (Bremner, 1998). As a result parts of the Inner City have been turned into Business Improvement Districts, in order to preserve existing investments according to acceptable investment norms. Other parts of the Inner City are cluttered, intensely overcrowded with makeshift structures and unkempt, buildings which are dilapidated and deserted or taken over by people, pavements are crowded with hawkers, tailors, hairdressers, shoe repair people, etc., urban parks (previously pristine and uncluttered) are now used for overnight storage, commerce and residential purposes.
- Health and safety standards are widely infringed, and taxis line pavements and occupy space. Two worlds in one place; a place of increasing socio-economic diversity, a certain amount of decay and the absence of law and order.
- The townships – fragmented, disjointed, demeaning places, monotonous, lacking services and facilities to support their populations (Bremner, 1998).
- The suburbs, with their spacious homes, sprawling lawns, thick shrubberies, high walls, desolate suburban streets, long driveways and anonymous freeways, are turning into gated neighbourhoods. Here, crime has made fortification and *laager* mentalities the order of the day. Citizens close streets and wall off suburbs, install

security gates and employ the services of private security companies. For their residents, a new sense of communality and security is achieved, with decreased crime levels, children playing in the streets and moving freely between houses, and gates are left open. This is leading to the establishment of self-defined, homogeneous groups, much as it was in the apartheid city, where public interaction is limited within these groups. The result is reduced interaction between the groups and freedom of movement restricted, reducing any possible sense of shared space and entrenching separation.

The new political dispensation has not managed (yet) to overcome the characteristics of the apartheid city:

- people living great distances from their work;
- unequal distribution of infrastructure services and facilities; and
- the physical separation of citizens.

Crime has affected all parts of the public environment, particularly dominant is a security aesthetic; high walls, barbed wire, locks, gates, intercoms, fortifications, guard houses and booms, etc. On the other hand poverty, squalor and degrading living environments persist.

Public interaction is marked by caution, suspicion and mistrust. Social divisions are deepening, social circles are narrowing.

"A new city is emerging, in which certain of apartheid's social and spatial divisions are being deepened, at the same time as other, largely illicit ways of controlling, managing and using urban space challenge the rules" (Bremner, 1998:132).

The physical gaps between the world of the township, the inner city and the suburb are widening. They are still very much disparate and unequal worlds.

"The chances that people of this city will develop a sense of shared space, of shared destiny grow slimmer by the day" (Bremner, 1998:132).

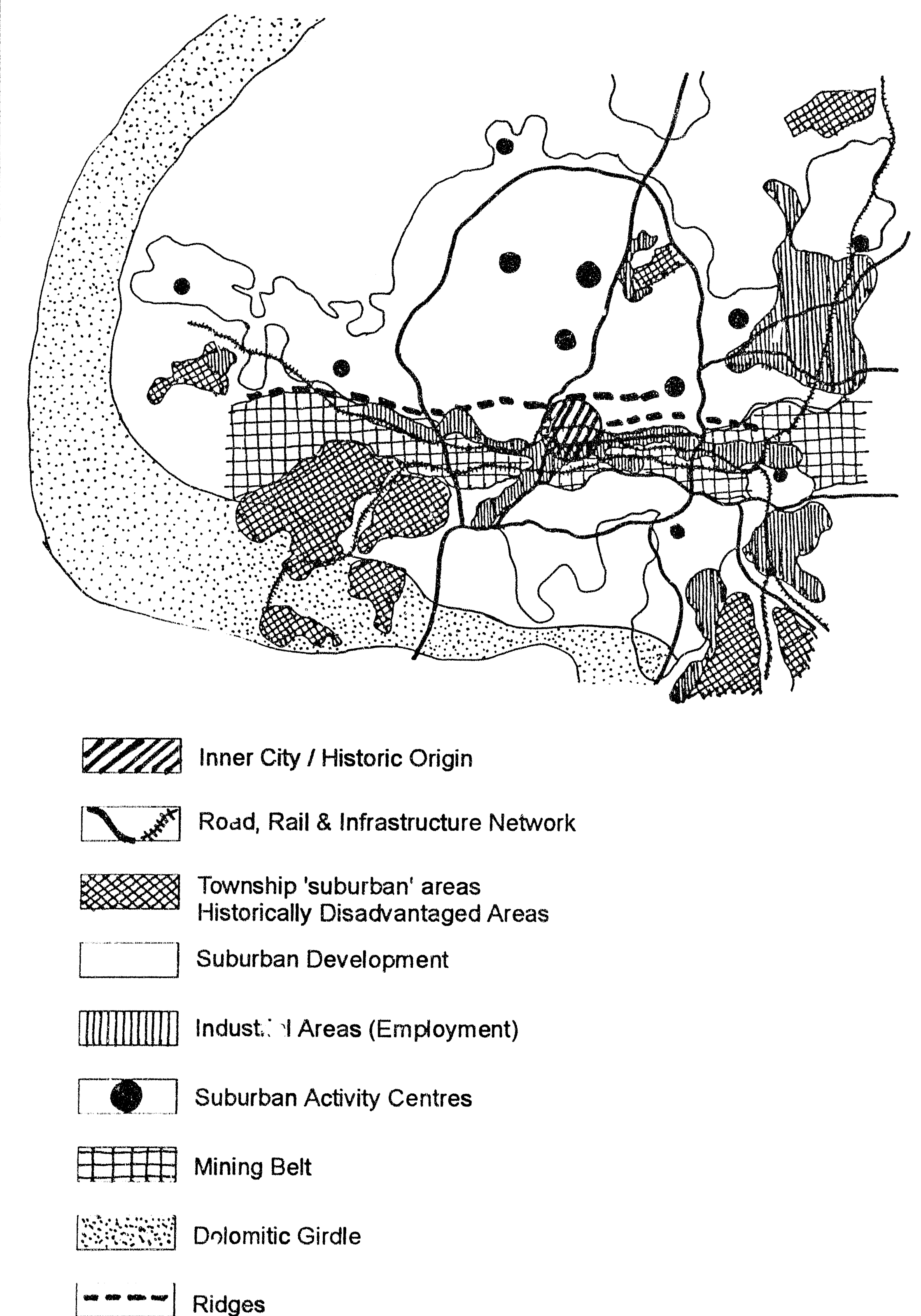


Figure 3-8: The Fragmented City Structure of Johannesburg

3.3 SUMMARY CONCLUSIONS

The city is a complex and dynamic physical system comprising numerous components of built form, structured in a particular way. This physical urban system has emerged as a result of the human activity systems that characterise urban life, as outlined in the previous chapter.

The dictionary definition of a system is

"a structural set of objects / or attributes together with the relationship between them" (Wilson, 1984:20)

The set of objects in the case of the urban environment are the physical form elements. These encompass built form / buildings and physical structures, movement and linkage space, and the man-made and urban natural space. These objects are interrelated, forming the basis or 'stage' of urban human socio-cultural, economic, institutional and community (private, parochial or group, and public) activity systems. The way in which the urban physical form elements interrelate form an inherent logic, reflecting the structure of the urban system.

"Structure not only informs how the settlement grows but also how well it performs; how well it accommodates human activity and life" (Dewar and Uytendogaardt, 1995:15).

3.3.1 The City: An Urban System of Semi-Lattice Structure

The nature of the urban system structure is crucial to its functioning, growth and development. In this regard the work of Alexander (1967) assists in identifying the structure of the city. He identifies two types of systems, a 'tree' structure based on separated but linked elements, and a 'semi-lattice' structure based on overlapping and interwoven elements

3.3.1(i) The 'Tree'-Structure System

Alexander gives the example:

"... in Berkeley at the corner of Hearst and Euclid, there is a drug store, and outside the drug store a traffic light. In the entrance to the drug store there is a newsrack where the days' papers are displayed. When the light is red, people who are waiting to cross the street stand idly by the light; and since they have nothing to do, they look at the papers displayed on the newsrack which they can see from where they stand. Some of them just read the headlines, others actually buy a paper while they wait. ..."

All this, for Alexander, is a system because:

This effect makes the newsrack and the traffic light interdependent; the newsrack, the newspapers on it, the money going from the people's pockets to the dime slot, the people who stop at the lights and read the paper, the traffic light, the electric impulses which make the lights change, and the sidewalk which the people stand on form a system – they all work together."

The system described above forms a 'tree'-structure shown in plan and in section in Figure 3-9, because

"...for any two sets that belong to the collection, either one is wholly contained in the other, or else they are wholly disjoint" (Alexander, 1967).

3.3.1(ii) The 'Semi-Lattice'-Structure System

This system is formed in the complex interactions and relations between human beings, shown in plan and section in Figure 3-10, because the

"Two overlapping sets belong to the collection, then the set of elements common to both also belongs to the collection" (Alexander, 1967).

Human interactions and relationships are extremely complex and free-forming, they are not of a clearly defined and predictable pattern, but are characteristic of a complex semi-lattice of interwoven and overlapping relationships.

Tree-like structures lead to rigid separations, whilst semi-lattices contain very complex overlappings, mergings and fusing together.

Alexander applied the technique in analysing a number of city plans. The outcome showed that planned cities, such as Le Corbusier's Chandigarh, Abercrombie's Greater London, etc., yielded a 'tree' system, whilst cities that grew naturally over time showed a more 'semi-lattice' structure. The latter city types are the most appropriate environments for the complex, semi-lattice forms of the complex and intricate human social relationships.

In this regard the structure of the urban system should enable a complex mélange of uses, activities and physical form that are able to meet the needs and complexities of human social interactions and relationships.

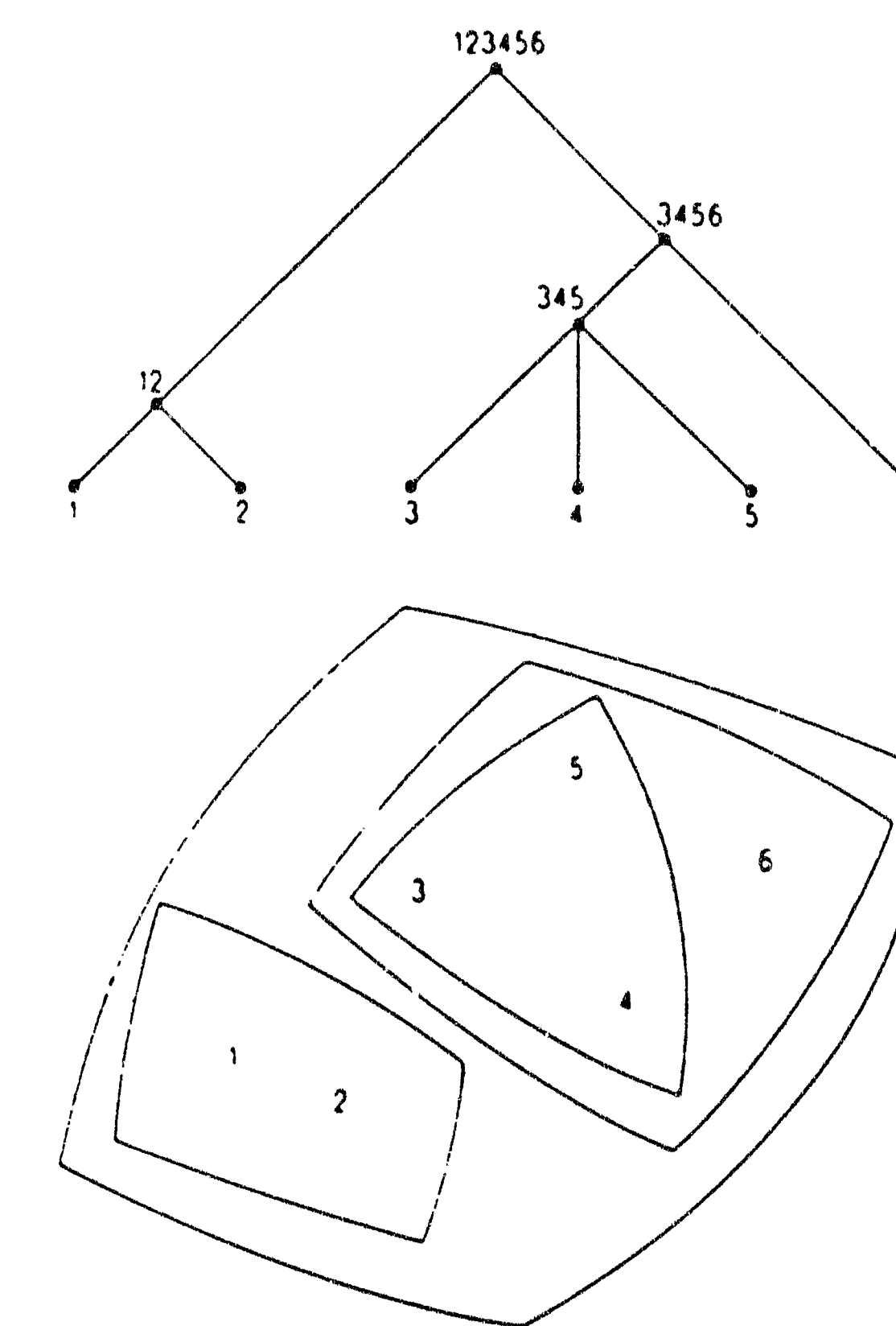


Figure 3-9: The 'Tree' System showing separated elements, Source: Alexander, 1965

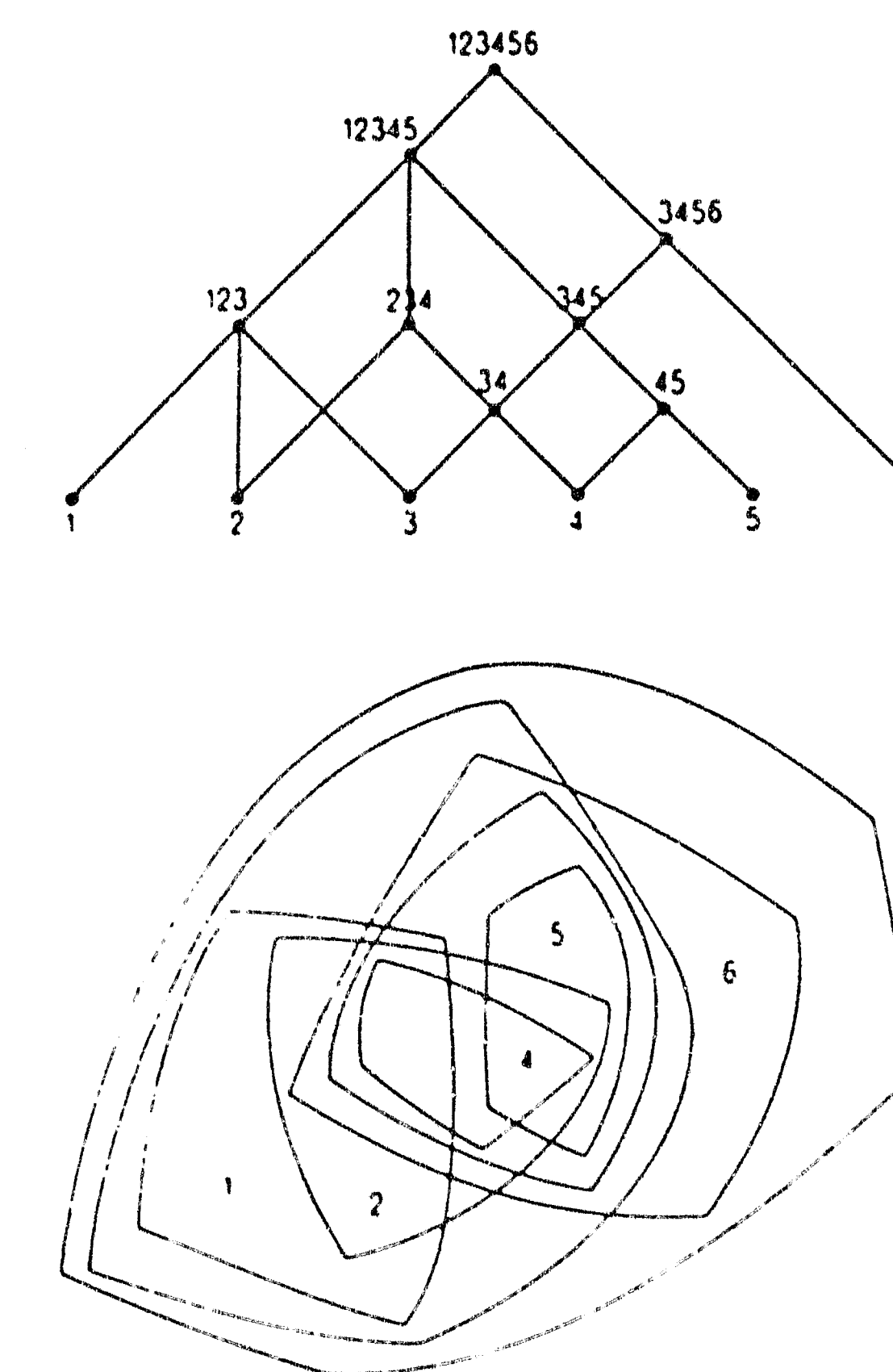


Figure 3-10: The 'Semi-Lattice' showing overlapping elements, Source: Alexander, 1965

3.3.2 Public Structure: An Enabling Framework facilitating Public Life in a Salubrious Physical Milieu

As indicated at the beginning of this chapter, the physical semi-lattice structure of the urban environment is caused by the complex interaction between physical / spatial systems and societal activity systems (encompassing all facets of public life). This complexity is reflected in the semi-lattice structure of the urban system. The public structure of the city and public life enable the interrelationship of these systems (refer **Figure 3-11**), in some urban environments more successfully and in others less successfully, as outlined in the South African context.

Accordingly the role of public structure (public- and semi-public space) is firstly to direct the configuration of the urban built environment in such a manner that it facilitates public life – the functional interaction of societal activity systems. Secondly, the public structure requires to be of a physical and spatial nature such that it supports and facilitates the urban environments physical / spatial systems (refer **Figure 3-11**).

The societal activity systems, which encompass public life, are:

- Socio-Cultural (cultural, religions, civil and political).
- Institutions (human development, basic public services, welfare and interest groups).
- Economic / Business (goods-producing, service activities, construction / physical development).
- Household / Individual (household sustaining, socialisation, social interaction, recreation, relaxation).

The physical / spatial systems that determine the physical nature of public structure are:

- Built form (buildings and structures).
- Physical networks (movement, communication, infrastructure / utility services).
- Urban settlement structure (macro / city-wide, district, neighbourhood and local).
- Natural environment (greenways, ecological environments).

The role of public structure, and its components - to order and configure the physical / spatial system and enable public life by

accommodating societal activity systems - is directed by four aspects that shape these systems:

- Culture and its agents: values, norms, technology and economic systems.
- Nature and its agents: eco-, hydrological-, aerological- and geological systems, and gravity.
- Human needs and how these are met: physiological, safety and security, affiliation, esteem, self-actualisation, cognitive and aesthetic needs.
- Biogenic environment needs that have to be met, achieving a functional and sustainable natural environment which continues to support and work in synergy with urban life, and vice versa.

3.3.3 The Role of Public Structure in the South African Urban Context

The specific role of public structure in the South African urban context, beyond the fundamental role outlined above, is to enable the resolution of the following issues:

- The restructuring of the urban environment such that past disparities can be overcome, and to promote the redevelopment of the city structure into an efficient, equitable and sustainable system.
- Meeting the demands of rapid population growth in terms of housing, infrastructure and services.
- Enabling the growth of the urban economy, with particular focus on the informal sector, to create employment and economic vitality.
- Overcoming physical fragmentation in a manner that promotes the development of an efficient and effective urban system, that meets the needs of all its inhabitants.

The aim is to meet both the human and biogenic needs of South African urban inhabitants, informed and directed by the socio-cultural needs and the forces of the natural environment. Specifically this is needed to overcome apartheid's social and spatial divisions and assist in developing a sense of shared space and "shared destiny".

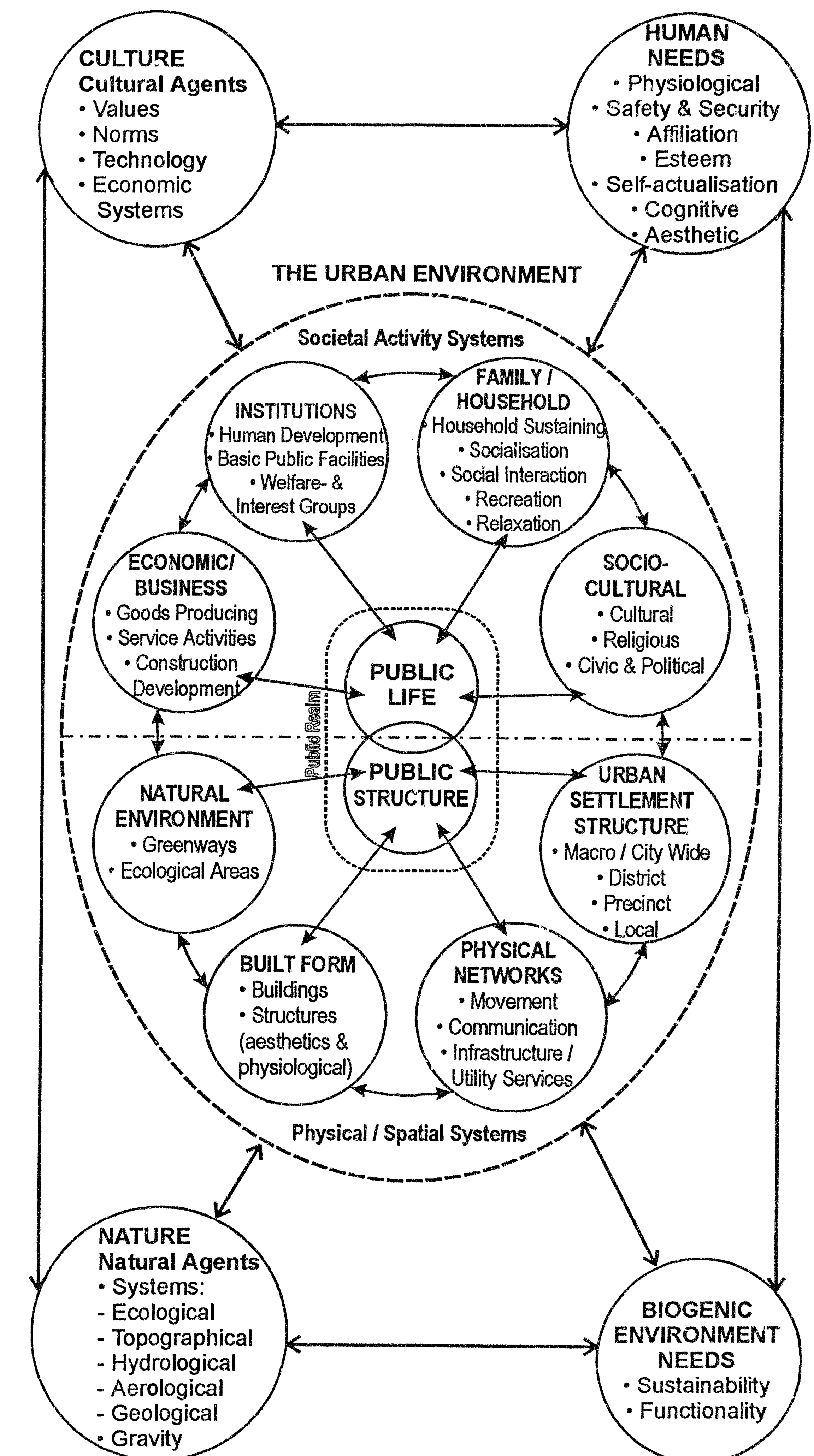


Figure 3-11: The Interrelationship between Public Structure and the Urban Environment

CHAPTER 4

THE ROLE OF PUBLIC SPACE IN ENABLING LIVEABLE URBAN ENVIRONMENTS

The historic overview of the evolution of public space undertaken in Appendix B highlights the following aspects:

- Good functional public space has overall been supportive of human activities and needs, it is democratic in its nature (i.e. affording people equal access in terms of the laws and norms of society), and meaningful both in terms of cultural meaning and symbolism.
- The evolution of public space has been directly the consequence of the evolution of society, reflecting changes in its nature and enabling life in urban settlements. As a result urban life has produced the many types of public spaces characteristic of the contemporary city.
- It has also highlighted the fact that the city is never a static and completed entity; that it is always in the process of becoming.

Public space, prior to the emergence of the industrial city and its subsequent development into the contemporary city, evidently played a much more functional and supportive role in enabling a liveable urban life. The character of the industrial city showed that the decline in the role of public space in the city led to intolerable and life-threatening conditions. Reactions to this have been varied and are discussed in the following sections. However, the importance of public space in enabling a liveable urban life cannot be denied. Public space is a critical component in the creation of total urban settlements which are qualitative, that support and enrich human needs and activities and the associated socio-economic opportunities of urban living. The focus of the debate is how this is best to be achieved, in terms of the numerous physical development options and associated variety of technological means that are available.

"If we start out from the idea that the city is the physical domain for the modern development of the commonality, we have to accept that in physical terms the city is the conjunction of its public spaces. Public space is the city" (Bohigas, 1999, MBM Arquitectes)"

Without public space there would be no city. A functional and liveable public space is critical to the public life of society, enabling the development of urban settlements and urban life.

4.1 PUBLIC SPACE IN THE CONTEMPORARY 20th CENTURY WESTERN CITY

The emergence of the industrial city led to a distinct dichotomy in the view of city life. On the one hand there was the 'fear', the diabolical living and working condition of "coketown", characterised by overcrowding, a poor and under-performing housing stock lacking in water and sanitation infrastructure, the brutal degradation of the natural environment, poverty, crime, disease, unsanitary conditions and potential revolt.

On the other there was 'admiration' and 'excitement', characterised by the development of technology. The latter's inventions brought progress and advancement during the course of the 19th Century. They included amongst others the steam engine, the train (railway), photography, the electric telegraph, the elevator, the combustion engine, asphalt, concrete, steel and iron, aerial flight, the rotary printing press, the telephone, electricity, the automobile (motor vehicle), the diesel engine, movies, and radio. This urban optimism is summarised by a politician and newspaper proprietor, J.Cowen, who wrote in 1877:

"... When people declaim in doleful number against the noise and dirt of the busy centres of population, they should remember the liberty we enjoy as a consequence of the mental activity and enterprise which has been generated by the contact of mind with mind brought together in great towns" (in Madanipour, 1996).

The reaction to the growth of cities, creating centres of new economic vitality and political power on the one hand, and centres of congestion, disease and misery on the other, fall within three categories: urbanism, anti-urbanism and micro urbanism.

- Urbanism of a metropolitan paradigm - the approaches focus on the city by either trying to change it, as in modernist design, or to preserve or celebrate it, as in the conservation movement and post-modern designs.
- Anti-urbanism - the anti-city approach seeking to abandon the city, exemplified in the main feature of twentieth century Anglo-American urban 'development', the suburbs.
- Micro-urbanism - refocuses on the small town paradigm, and offers an alternative that is more manageable than metropolitanism, and more collective than anti-urbanism, in effect an 'inbetween'.

(Madanipour, 1996).

These main paradigmatic approaches towards cities have had a wide influence on the development and shaping of the contemporary city, and have extensively contributed to the city's transformation.

"Within the dense press of the built fabric the greatest luxury of all is empty space. Whether it is used for the spectacle of pomp or for play, the open frame is politically charged; the activities encompassed, freighted with consequence. Only here can a representative portion of the populace mass to make its mood known at a glance. Public space as it is successively reshaped is an artefact of the collective passions that bind society: from civic protest or regimented ceremonies of consensus, to leisure pursued in an arcadian idyll, or through the ritualised consumption of products and aestheticized environments. Even at its most trivial, the mere presence of a public realm is testimony to the insistence of our need periodically to rediscover the physical fact of community."
(Kostoff, 1992:172)

Public places continue to be used. The historic squares of cities have been 'refurbished' to suit the modern city and the needs of its inhabitants - Simultaneously a wide variety of new squares and public places have been developed in cities throughout the world.

4.1.1 The Contemporary City "Square": Public Places of Today

Kostoff (1992) notes that the slow demise of the public square came with the beginning and development of progress and the changes it brought throughout the 19th and early part of the 20th Century. The public role of the square was reduced in its function as the disseminator, and maker, of news, through newspapers, then radio and finally television. The role of computers and the impact of the internet have yet to be assessed in this regard. Modern water systems replaced the public fountain, which removed a further socialising and gathering force from the market-square. The revolution in mass marketing and consumption further reduced the pivotal role of the public square (or piazza) in economic life, and brought about new built form typologies specifically suited to retail shopping and associated activities. The public display of dealing with crime was removed and its consequences to the conclusion of jail (Kostoff, 1992). The power-display of rulers and kings through grand city development, where this contributed to establishing liveable urban environments, was neutralised by the rise of democracy. Simultaneously, the growth and

domination of laissez faire economics and capitalism (in the Western World), over religion and culture, has resulted in the rise of a city form based on production and consumption. Land and public space is treated as a commodity by the former, causing the standardisation of design and the privatisation of space.

Efforts to 'resuscitate' the public square have been undertaken in a number of ways:

4.1.1(i) New 'Squares' Development

New towns that have been developed, in suburban extensions, or large-scale urban renewal projects, have included new squares in their design. These occur in two ways:

- Aesthetic and Physical Design* - focused on a physical design that seeks to encompass the volumetrics, the visual incident and aesthetic principles of the historic square (refer Figure 4-1).
- Direct Historic Imitations* - the replication in exact physical detail of various historic squares in new urban centres.

4.1.1(ii) Naming of Public Places

This encompasses the use of names such as "agora" and "town square", whereby it is hoped that the places become used as such.

4.1.1(iii) Corporate Plazas and Atria

The precursor to the 'designer square' and based on the philosophy of enhancing a building economically and aesthetically by the provision of an open space plaza with greenery. Kostoff (1992) recalls a statement made by C Mulford Robinson, spokesman for the American City Beautiful Movement. Although the recent number of grand urban plazas failed to realise their social potential, they still had aesthetic and economic benefit, by adding variety, beauty and stateliness to cities, and increasing the value of adjacent buildings by assuring light and conspicuousness of vantage point.

Post-war developments resulted in the practice of elevating the plaza around offices and corporate buildings on a podium, up to three storeys above the street, separating the open plaza places from the public street. These developments resulted in a disparate public realm. In response to this "incentive" zoning was implemented in New York from

1961, enabling office developments to add significant height or bulk to their buildings in exchange for ground floor plazas. The zoning did not specify design guidelines, and as a result this 'bonus' public space became inhospitable, comprising areas of hard paving or unnegotiable pools of water, with perhaps a sculpture or some visual emphasis, but predominantly devoid of amenities that would enable the enjoyment and inhabitation of the space. The end-result was an impressive visual foreground to an office building, disconnected from the public realm.

This situation was counteracted by the introduction of design guidelines and building codes based on the research and work of Whyte. It required the developer / owner to make the office plaza inhabitable and a functional part of the public environment by furnishing various amenities and facilities, such as greenery and trees, moveable seating, kiosks etc. and guarantee its maintenance (refer Figure 4-2).

Although the design guidelines resulted in the plazas becoming more integrated and active, new developments chose rather to design indoor atria and concourses. These were in essence privatised public places with the benefit of security and climatic control. Some of these atria served as lively, well-used public places, however many failed to attract public activity, becoming unused and dull spaces.

4.1.1(iv) Designer Squares

The design of squares by artists, architects or landscape architects, each comprising a unique and idiosyncratic creative vision, for the purpose of aesthetic pleasure and consumption. As opposed to the town squares' original social purpose of enabling the free interaction of strangers and citizens (Kostoff, 1992), they rejected the role of public space for the display of architecture and civic monuments, and the interaction of people, instead

"the space itself demands to be interpreted, admired, enjoyed as a theme park might be enjoyed" (Kostoff, 1992:181).

Kostoff (1992) concludes that 'designer squares' devoted to aesthetic introspection are mostly private development initiatives, providing a focal accent for office and corporate development (refer Figure 4-3).

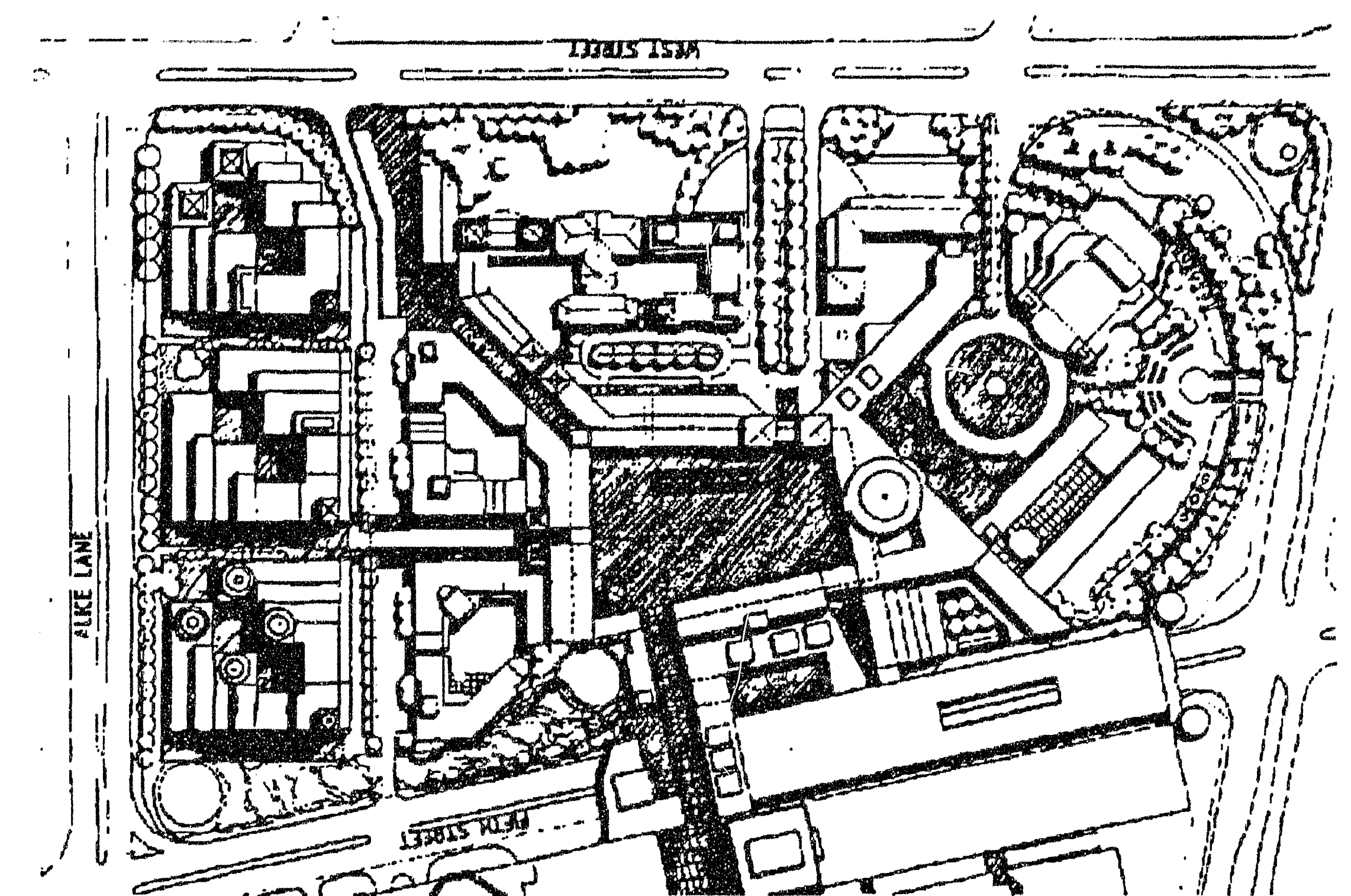


Figure 4-1: Sandton Square Development, Johannesburg, Source: GAPP, 1987

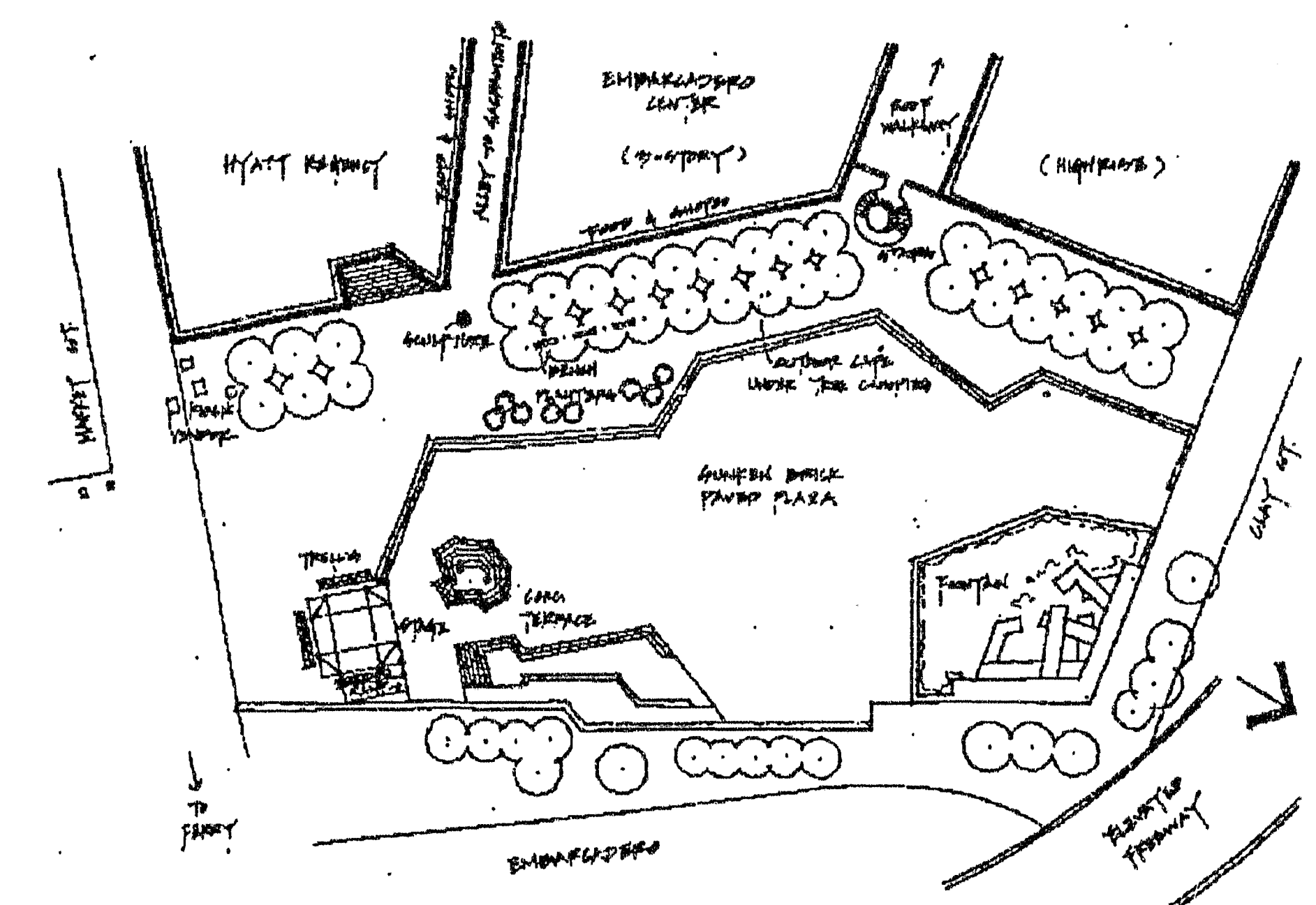


Figure 4-2 : Justin Herman Plaza, San Francisco, Source: Marcus et al, 1990

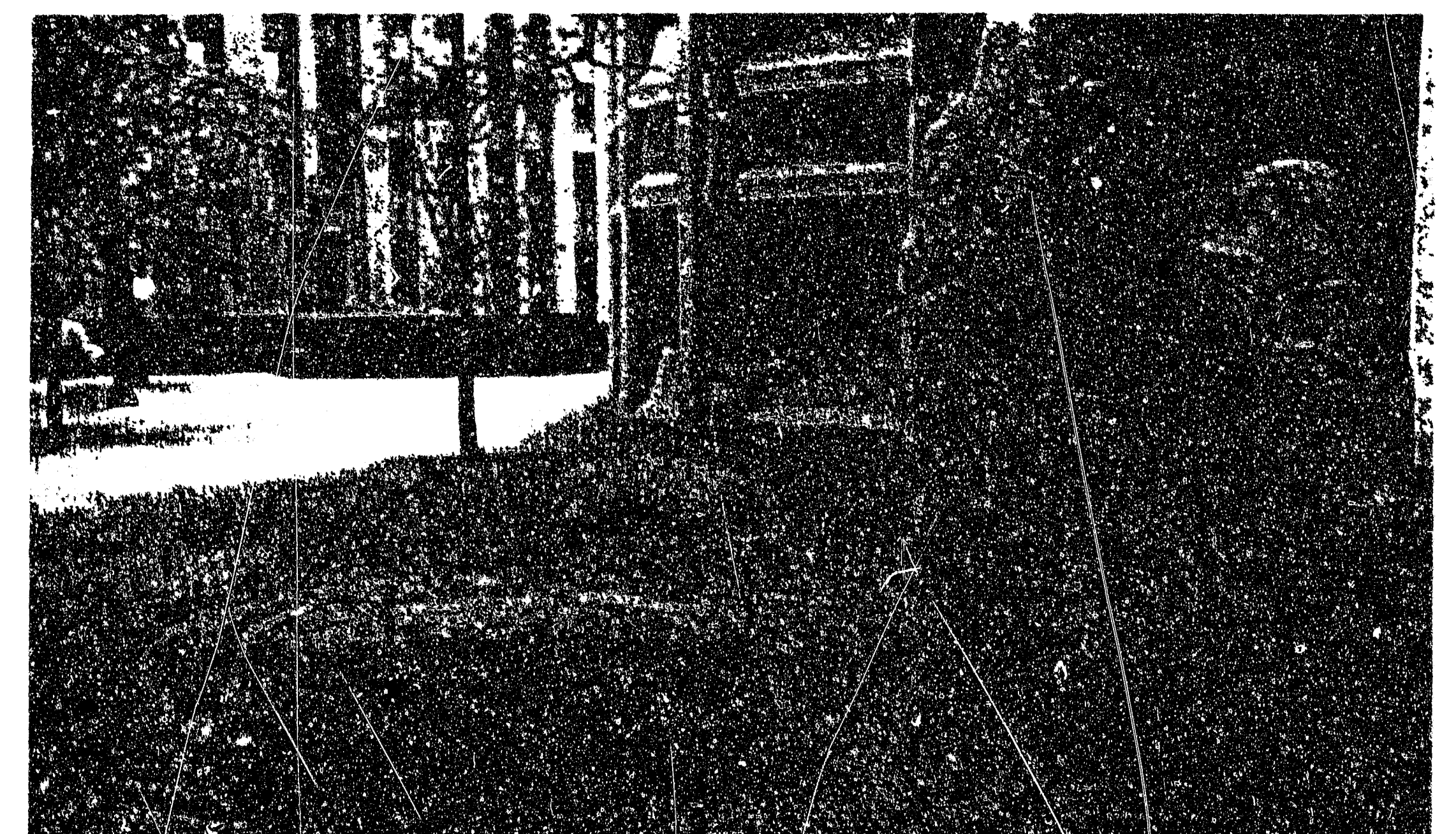


Figure 4-3 : Rank Plaza, Seattle, "Sculpture for different moods", Source: Marcus et al. 1990

4.1.1(v) A New Set of Public Spaces

One of the peculiar developments of 20th century public space is its partial 'evolution' into a set of privatised semi-public spaces, which include the atrium (discussed above), shopping malls and "festival marketplaces".

4.1.1(v)a. The Shopping Mall

This privatised public space type emerged with the development of the suburban settlement pattern that characterises many cities. Kostoff (1992:185) describes this as a

"spatially discontinuous landscape of detached houses and office parks is woven into a seamless succession of private realms by the automobile's cocoon of seclusion. Encounters with traditional public places - and with the traditional city centre itself - are increasingly superfluous to the daily rounds of suburbanites".

In this environment, shopping and retail is provided within a building, comprising an enclosed 'pedestrian' retail space fronted on both sides by lines of shops, formed in a sequence of courts and 'passages' linked between major department stores. The shopping environment is a climatically controlled and monitored by security, and has extensive areas of parking surrounding it to serve its motorised clientele (refer **Figure 4-4**).

The suburban shopping mall (or shopping centre) has since been replicated throughout the world (including the Far East, South America and Southern Africa), in combination with the evolution of super highways and the explosion of suburbia. During the second half of the 20th century shopping malls came to truly dominate the public life in suburbia. Kostoff (1992:186) states that the shopping mall

"is now a fact of life. It is extremely important to whole classes of people, especially teenagers and the elderly".

By 1980, California and several other States had identified shopping malls as new public places in the American social landscape, entrenching these places with rights associated with freedom of speech and other public rights in terms of the American constitution.

Today, shopping malls are more than mere shopping centres, they include a variety of activities: Entertainment, restaurants, exhibitions and special events, which are provided throughout the year. Latest trends are the development of megamalls (or shoppertainment centres)

and 'themeparks'. The ultimate development to date is Canada's West Edmonton Mall (1986) which has:

- 386 stores;
- a copy of the Versailles fountains;
- a recreation of New Orleans 'Bourbon Street' and a Parisian street
- a miniature golf course modelled on Pebble Beach;
- an indoor amusement park;
- a 20 000m² wave pool with rubber beach and water slides, and that is used for surfing championships; and
- a reproduction of a galleon floating in a tropical lagoon with live fish and four submarines.

4.1.1(v)b. The Festival Market Place

In parallel to the development of the suburban shopping mall, a different type of shopping mall emerged within the city, the 'festival marketplace'. This is a shopping and entertainment development focused within a historic place and emphasises historical associations and themes, usually in a waterfront or warehouse district. The development is characterised by the reuse of historic structures and buildings, it encompasses offbeat, speciality stores with numerous eating establishments and places of entertainment. These developments have been most successful in cities that attract tourists and business visitors, as well as in close proximity to large populations of office workers (Carr et al, 1992).

Some festival marketplaces have rehabilitated their original city market, retaining a strong and genuine connection to the historical tradition of the marketplace. In Seattle's Pike Place Market the original buildings and the form of the marketplace have been retained. Daily operations such as delivery, unpacking and hosing down fish stands are out in the open, whilst shopping malls and festival markets conceal these. In addition policy support was given to favour local produce and other foods; independent merchants; and speciality - but moderately priced - stores (Carr et al, 1992).

4.1.1(vi) Residential Public Space

The *woonerf* (refer **Figure 4-5**) was purposefully developed to enhance the quality of life of residents of dense inner city neighbourhoods of European cities. This form of public space affords communal control, and accommodates the needs of pedestrians,

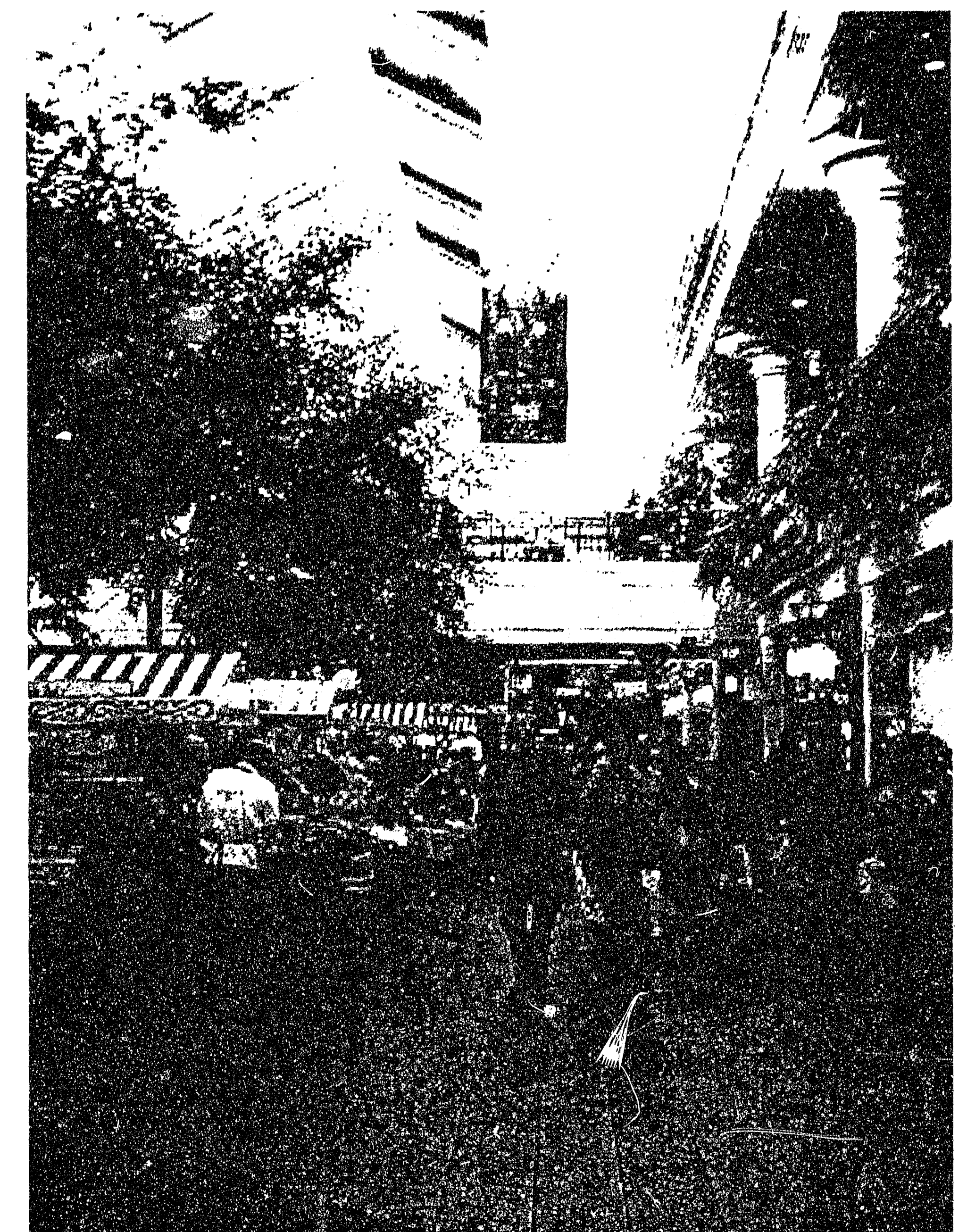


Figure 4-4 : Metro Centre Mall, Gateshead UK, Source: Madanipour, 1996

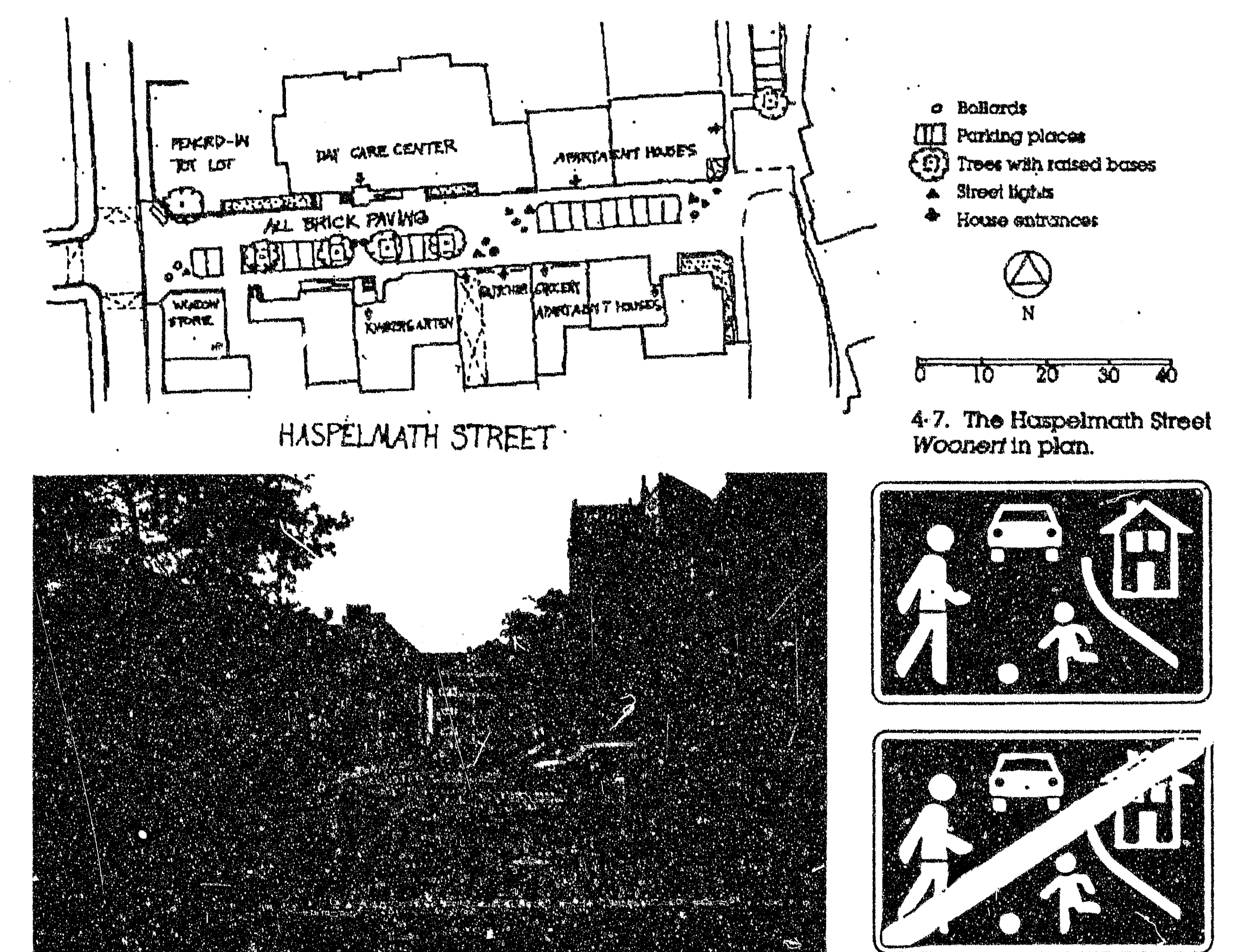


Figure 4-5: Haspelmath Woonerf, Source: Moudon ed., 1987

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