A GEOGRAPHY OF SELF-IDENTIFYING BUSINESS PARKS IN CAPE TOWN

by

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ABSTRACT

The built environment of a city plays a significant role in the ordering of urban life. The urban environment of the City of Cape Town has been the site of deconstruction and reconstitution in recent times and it is this phenomenon that beckons the call for deeper investigation. The continual integration of Cape Town into the global economic sphere has created a development trend of service sector dominance in the built environment of the city. Self-identifying business parks have been identified as a sub-component of the concept commercial parks and have been selected to conceptualise what is happening in Cape Town's commercial spaces.

Through a mixed methods approach both quantitative and qualitative data was collected to aid in exploring and understanding the changes occurring in Cape Town's commercial built environment. The study looks to examine the temporal distribution and spatial organisation of commercial and a sub-component self-identifying business parks in Cape Town. Four objectives were outlined in the research: a review of relevant literature, the creation of a database of commercial parks in Cape Town, investigations into the physical characteristics of self-identifying business parks, and the categorising of business activities discovered in self-identifying business parks.

A spatial-temporal analysis into commercial parks revealed clear concentrations of parks in high-income developed areas, high-income suburban nodes, decentralised economic areas on the urban periphery, as well as in traditional industrial locations. In terms of the establishment of commercial parks the most growth intensive period was between 2004 and 2010 with decentralised suburban areas experiencing the highest growth in terms of location.

Investigations into the physical environments of self-identifying business parks highlighted the varying range in sizes and structure of the parks, and also solidified the presence of the private security sector in the commercial landscape of the city. In relation to the business activities within self-identifying business parks, the wholesale and retail sectors, and the finance, insurance and real-estate sectors were the most dominant activities encountered in the self-identifying business park landscape.

Recommendations for future enquiries include the impacts of private security practises on business activities within commercial parks and investigations into the property developers of these commercial spaces in the city. The spatiality of Cape Town's commercial park development provided a deeper understanding of the configurations of urban spaces, and

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uncovered where concentrations of these spaces can be found in the city today. This evidence can be linked to the changing urban environment encountered in Cape Town over time and provides an insight into contemporary commercial spaces in a developing country context.

Keywords: business park, capitalism, commercial park, deindustrialisation, globalisation, neoliberalism, world city, security.

OPSOMMING

Die beboude omgewing van 'n stad speel 'n beduidende rol in die ordening van stadslewe. Die stedelike omgewing van die Stad Kaapstad was in die onlangse verlede 'n terrein van dekonstruksie en hersamestelling, en dit is hierdie fenomeen wat verder ondersoek moet word. Die deurlopende integrasie van Kaapstad in die globale ekonomiese sfeer het 'n ontwikkelingstendens van dienssektordominansie geskep wat 'n impak het op die bouomgewing van die stad. Self-identifiserende sakeparke is gekies om te konseptualiseer wat in Kaapstad se kommersiële ruimtes gebeur.

Beide kwantitatiewe en kwalitatiewe data is in 'n gemengde metode benadering gebruik om die veranderinge in Kaapstad se beboude omgewing te ondersoek en te verstaan. Die studie is daarop gerig om die temporale en ruimtelike verspreiding van kommersiële en self-identifiserende sakeparke in Kaapstad te ondersoek. Vier doelwitte is in die navorsing gestel, naamlik 'n oorsig oor relevante literatuur, die skep van 'n databasis van sakeparke in Kaapstad, ondersoeke na die fisiese eienskappe van self-identifiserende sakeparke, en laastens die kategorisering van sakeaktiwiteite wat in self-identifiserende sakeparke gevind is.

'n Tydruimtelike analise van sakeparke het 'n duidelike konsentrasie van parke in hoëinkomste ontwikkelde gebiede, hoë-inkomste voorstedelike nodes, gedesentraliseerde ekonomiese gebiede op die stedelike periferie en ook in tradisionele industriële gebiede getoon. In terme van die vestiging van sakeparke het die tydperk tussen 2004 en 2010 die meeste groei getoon, met gedesentraliseerde voorstedelike gebiede wat die meeste groei ten opsigte van ligging getoon het.

Ondersoeke na die fisiese omgewing van self-identifiserende sakeparke het die variasie in grootte en struktuur van die parke uitgelig, en het ook die teenwoordigheid van die private veiligheidssektor in die kommersiële landskap bevestig. Ten opsigte van die sakeaktiwiteite binne self-identifiserende sakeparke was die groot- en kleinhandelsektor, en die finansiering-, versekering- en eiendomsektore die mees dominante aktiwiteite.

Aanbevelings vir toekomstige studies sluit in die impak van private sekuriteitspraktyke op die sakeaktiwiteite binne die sakeparke, en ondersoeke na die onwikkelaars van hierdie kommersiële ruimtes in die stad. Die ruimtelikheid van Kaapstad se sakeparkontwikkeling het 'n dieper begrip van die konfigurasie van stedelike ruimtes gegee, en het openbaar waar

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konsentrasies van hierdie ruimtes vandag in stede gevind kan word. Hierdie bewyse kan gekoppel word aan die veranderende stedelike omgewing in Kaapstad met die verloop van tyd en verskaf insig oor kontemporêre sakeruimtes in die konteks van 'n ontwikkelende land.

Sleutel of kernwoorde: deïndustrialisasie, globalisering, kapitalisme, kommersiële park, neoliberalisme, sakepark, sekuriteit, wêreldstad.

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ACRONYMS AND ABBREVIATIONS

ATM Automatic teller machines

CBD Central Business District

CID City Improvement District

CTSDF Cape Town Spatial Development Framework

ECAMP Economic Areas Management Programme

EIP Eco-industrial park

ETDP Economic and technological development park

GDP Gross Domestic Product

GEAR Growth, Employment and Redistribution

HTDP High-tech development park

ISIC International Standard Industrial Classification

KZN KwaZulu-Natal

MSDF Municipal Development Framework

N.E.C Not elsewhere classified

OECD Organisation for Economic Co-operation and Development

PMC Private Military Company

PSC Private Security Company

SACN South African Cities Network

SG Surveyor General

SIBP Self-identifying business parks

SIC Standard Industrial Classification

TV Television

UNIDO United Nations Industrial Development Organisation

USA United States of America

WCDoA Western Cape Department of Agriculture

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1.1 INTRODUCTION

The impact of globalisation on all aspects of life has been profound, and it is without question that one of the greatest impacts that globalisation processes have had, have occurred in the cities and urban spaces that are inhabited by billions of people around the world. One of the most telling effects of globalisation has been on the global economy and its subsequent rapid expansion and spread to both developed and developing countries (Buckley & Ghauri 2004). This expansion in the global economy can be attributed to the movement and influence of neoliberal ideologies and global economic forces which primarily originate from and between developed countries of the global North, and this has knock-on effects for the developing world who are constantly attempting to develop towards international trade, competition and recognition (Lloyd 1998). With the increased exposure of developing economies to international markets, cities and their built environments are constantly morphing to attract more international investment and increased global capital flows. The changes witnessed in the landscapes of cities of the global South warrant in-depth investigations as to what influences these new sites of development and what types of development are taking place.

Neoliberal ideologies and global capital accumulation strategies are at the root of these globalisation processes that have worked to alter the industrial development directions of cities in many developing countries (Salaff 2002), with the growth and influence of the service sector being one of the main causes. Neoliberal ideologies in the context of the study refer to the emphasis on privatisation, trade liberalisation and state deregulation witnessed in policies in South Africa (Srini 2015). The rapid and flexible nature of post-Fordist production systems highlights the shift from goods-producing industries to service producing industries, and is associated with the growth of the service sector (Salaff 2002). This is now imprinting on the built environment within cities and urban landscapes allowing the altering of older and traditional spaces that exist within city areas (Crankshaw 2012).

Traditional manufacturing industries and the spaces they inhabit are now subject to renewal and redevelopment directed towards development in line with key sectors and attracting increased global and local economic competition. In relation to self-identifying business parks in Cape Town, these imprints and changes to the built environment as a result of neoliberal ideals and economic globalisation include the establishment of industrial spaces and associated

specialised types of spaces constructed to foster economic development and encourage forward strides towards international competition (Memedovic, Alic, Alimdjanov & Jackson 2012). From the mid-1990s into the 2000s Cape Town has been experiencing fundamental changes in its economy (Borel-Saladin & Crankshaw 2009) which have impacted on the sites of economic activity and production.

1.2 THE RESEARCH PROBLEM

It is key to outline what this research will uncover and what contributions may be achieved in relation to the specific field and theory of study. The selection of the City of Cape Town as a site for the investigation will allow for a multitude of issues to be addressed in relation to global and local economic forces, commercial and urban development, evidence of private security forces, and the spatiality of economic development within a developing country context.

Neoliberalism will be a key theme throughout the study and can be identified within policy elements, development initiatives, economic structures and other elements within the Cape Town context. Stemming from neoliberalism are the issues of globalisation and the expansion of the global economy which has led to the development of the 'world city' or 'global city' discourse. This concept accompanies the rapid expansion of the global economy as increasing pressures on global competition have resulted in cities wanting to create more attractive built environments for global investment (Douglass 2000). It has been noted that national and provincial levels of government have promoted Cape Town as a world city in order to achieve desired growth patterns and allow Cape Town to be integrated into the world economy. High levels of global connectivity and building Cape Town as a leader of knowledge and innovation are all emphasised to create more global exposure to attract greater international investment (Booyens 2012, Marks & Bezzoli 2001). These above mentioned 'desires' are inherently neoliberal and have manifested themselves in the built environment as mechanisms for achieving this type of development. Amidst and buried in this narrative are the issues of continued unequal development in Cape Town along race and class lines, highlighting the perseverance of apartheid era injustices surviving into the post-apartheid era. These aforementioned issues directly affect the employment opportunities in the city and where the majority of commercial and residential development takes place. This leads to the main subject of the study being the presence of commercial parks in Cape Town, with a more comprehensive focus on the sub-component self-identifying business parks.

In terms of previous studies there have been insights into business locations and areas of property development in Cape Town but none specifically addressing the presence of self-identifying business parks and the accompanying characteristics of these parks within the urban environment. In the local context there have been studies into the growth of city improvement districts (CIDs), declining industrial estates, and research into science parks that address the configurations of these spaces and what causes the need for these spaces to be constructed. The identified research will look to discuss the proliferation of self-identifying business park spaces within the Cape Town in the context of a post-Fordist, neoliberal era of production which is resulting in the reconfiguration of the built environment. Commercial park spaces within the study are identified by the sub-components of office parks, industrial parks and self-identifying business parks, which will be analysed in the context of a constantly changing urban environment in a city of the global South.

1.3 RESEARCH AIM

The aim is to explore and understand the changes in the built environment of Cape Town's commercial park spaces with a focus on the locations and characteristics of self-identifying business parks.

1.4 RESEARCH OBJECTIVES

The objectives of this research are to identify the locations, temporal distribution and spatial organisation of commercial parks and self-identifying business parks in the City of Cape Town. Objectives include:

- 1. Review of relevant literature
- 2. Locate and create a database of commercial parks in the City of Cape Town in order to examine the locations of the parks and to fulfil objective 3
- 3. Investigate the physical characteristics of the self-identifying business parks
- 4. Investigate self-identifying business parks in order to categorise the businesses and types of business operations that take place within the parks

1.5 STUDY AREA

The study area will be Cape Town with a focus on commercial parks and self-identifying business parks that fall within its boundaries. For analysis and visualisation purposes the metropolitan area was divided into 11 major districts as to best display the location specifics of the industrial, business and office parks and are indicated by light-red ellipses (Figure 1.1). Sinclair-Smith and Turok (2012) examined the changing spatial economics of Cape Town through relations between patterns in employment and locations of economic activity, and in doing this divided Cape Town into 11 major areas allowing for uniform and complete coverage of the city when conducting spatial research. The 11 districts are; Athlone/Ottery/Retreat, Central City, Kuils River/Brackenfell, Northern Suburbs, Parow/Epping/Airport, Salt River/Pinelands, Somerset West, South, South East, Southern Suburbs, and the West Coast. The scope of analysis will not be limited to these major districts thus throughout the chapter suburb specific references will be made to provide a deeper spatial understanding of the distribution of the parks.

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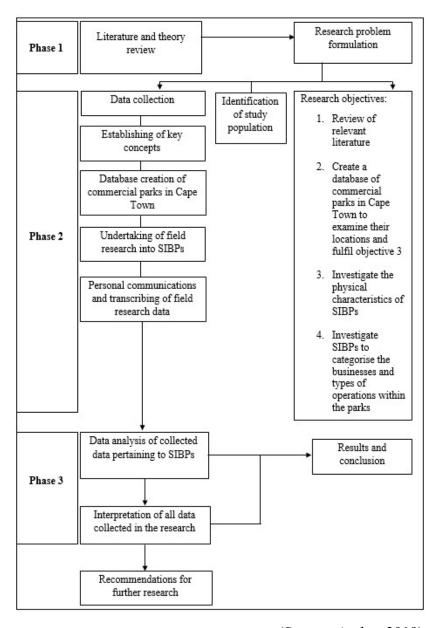
(Source: Author 2019)

Figure 1.1 Study area

1.6 RESEARCH METHODOLOGY

For the purpose of this research a mixed methodological approach was undertaken to collect both qualitative and quantitative data, however with more quantitative analyses used to achieve the above research aim and objectives. By using a mixed-methods approach a comprehensive dataset of both qualitative and quantitative information was collected and provided additional evidence to support the research findings (Johnson, Onwuegbuzie & Turner 2007). The mixed

methods approach involved both primary and secondary sources of information collected throughout the research process. Figure 1.2 illustrates the research design.



(Source: Author 2019)

Figure 1.2 Research design

Methodologies used in the study included an extensive desktop analysis on the commercial park landscape of Cape Town analysed together with the spatial development trajectories the city has been experiencing over the last two decades. Published literature helped to inform deeper and wider understandings of the urban landscape in Cape Town and other locations with similar contexts. To address objective three, the focus into self-identifying business parks, a

1.6.1 Unit of analysis

The study population consisted of a dataset of all identified commercial park spaces in Cape Town. In fulfilment of objective two this includes the creation of databases of industrial parks, office parks and self-identifying business parks found in Cape Town. At the end of the data collection process the overall dataset comprised of 148 commercial parks spread throughout Cape Town with 59 office parks, 44 industrial parks and 45 self-identifying business parks.

In line with objectives three and four analyses was conducted into self-identifying business parks to further an understanding into the configurations of Cape Town's commercial park spaces and looks at a focus study population of 45 self-identifying business parks. From the 45 self-identifying business parks, a random sample number was calculated from the total list using a confidence level of 95% and a margin of error of 6%, leaving 39 random self-identifying business parks selected for further analysis. The random selection of self-identifying business parks was conducted through Microsoft Excel functions. The focus study into self-identifying business parks analyses not only the locations of the parks but also the physical characteristics and the varying business operations that take place within these park spaces.

1.6.2 Data collection

Quantitative data included the creation of a database of all commercial parks in Cape Town. The database includes; the identification of different types of commercial parks namely industrial parks, office parks and self-identifying business parks in Cape Town. Information regarding the parks includes the names of the parks, land parcel information, the physical characteristics of the parks, presence of green spaces, the date of establishment, the types of business activity in the parks, and whether the park spaces are newly-built spaces or older reconfigured spaces. Secondary data used in this study includes a review of policy and strategic documents relating to the spatial development trajectories of the city and property location with

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publications such as the Cape Town Spatial Development Framework (CTSDF) and the most recent City of Cape Town Municipal Spatial Development Framework (MSDF) providing guidance on the development directions the city was taking (CTSDF 2012, MSDF 2018). Previous studies were consulted when investigating the proliferation of different kinds of commercial park spaces existing in cities and built up areas.

To identify the study population of commercial parks extensive Internet searches were carried out with business and company databases providing a total study population of 148 commercial parks. Further clarification on the identified sites was provided by company and park websites, and detailed databases hosted by the City of Cape Town and Western Cape Department of Agriculture (WCDoA) such as the Open Spatial Data Portal, and statistical and spatial data from the Economic Areas Management Programme (ECAMP), Citymapper and Cape Farm Mapper (City of Cape Town 2019, WCDoA 2019). Primary spatial data looks at the coordinates and physical locations of the parks and was collected through Internet searches including the use of business databases, Cape Town government valuation roles and publications, Google Earth, Google Maps and the Street View tool included in the Google operations (Google 2019). Data collected includes; the names, coordinates, addresses, erf number, erf size and date of Surveyor General (SG)-approval, for all the parks included in the study. The temporal data was provided by the dates of SG-approval on the respective erven the parks occupy, and these dates will be placed alongside temporal information regarding the locations of economic activity in Cape Town over time.

For the focus into self-identifying business parks a randomly selected sample population of 39 parks was taken from the total collection of 45 parks found in the study. Further data included total units and parking information, physical characteristics found within the parks, and the types of business operations inhabiting these commercial spaces. Additional primary qualitative research methods included a 'walk-through audit' (Rasila, Rothe & Nenonen 2009) of the parks if access was permitted, in order to assess different kinds of characteristics and features of these types of commercial landscapes. If access was denied at the entrances to the parks then impromptu interviews were conducted with park management if the individuals were available on site and had agreed to have a conversation. Interviews consisted of openended questions relating to; the origin of the park, the number of units and parking spaces in the premises, the kinds of businesses that occupy the spaces, issues of urban insecurity, previous land uses and if there are any ecological considerations being adopted in terms of operations of the park. Commuting to and from the various park locations using private

(including Uber services) and public transport using the MyCiti bus system also contributed to the aim and objectives of the study by allowing for the surrounding urban areas to also be assessed in relation to the parks. Ethical approval was obtained for the research from the Research Ethics Committee for Human Research (see Appendix A). Fieldwork was carried out over the duration of 24 days from the 1 August to 23 August 2019.

1.7 THESIS STRUCTURE

This research consists of seven chapters. In Chapter 2 theoretical perspectives on the various locational theories of economic activity, new economic geographies, cluster theory and neoliberal capital will be analysed to help inform the nature of the clustering of business operations and the changes to Cape Town's built environment. Chapter 3 will explore key literature themes and will guide the conceptual formations of the study and situate it within identified bodies of research. Neoliberalism and neoliberal economic structuring and associated processes are a recurring theme in the research and also form a key aspect in the dialogue of urban studies in the global South. Security and the prevalence of mostly private security services will also play a role in the research in furthering understandings of secured estates and in this case commercial properties in the Cape Town context. Key to this study is viewing commercial park spaces as an integral part of the economic urban processes taking place in Cape Town, and seeing it as a product of the previous political and historical landscape.

Chapter 4 will look at a macro-analysis of commercial parks spaces in Cape Town and address the spread of three variations of commercial parks throughout the city, with an added temporal element to provide context to growth of these commercial spaces. Chapters 5 and 6 detail a micro-analysis into self-identifying business parks with an in-depth view at what constitutes these commercial parks and the types of business operations that inhabit these spaces. Chapter 7 is the concluding chapter which combines the findings and conclusions of the research as a whole, describes the limitations to the research, and provides recommendations for future investigations. This study will look to explore the commercial park landscape in Cape Town in order to help understand the changes being experienced in the urban sphere and also to investigate which sectors of the economy are inhabiting these shared commercial landscapes found throughout Cape Town.

CHAPTER 2 THEORY REVIEW

2.1 INTRODUCTION

In order to understand the underlying forces involved in the proliferation of commercial parks and specifically self-identifying business parks in Cape Town, there is a need to locate the study within specific theory in order to help conceptualise what factors drive these developments. Through the following sections a number of theories will be examined with the aim of the section being, to identify theories that can effectively conceptualise and explain the changes that have occurred to the built environment of Cape Town's industrial spaces. The theories which will be discussed include; selected locational theories, the behavioural approach, new economic geographies, clustering and new industrial spaces, and neoliberal capital and the political economy approach.

In the context of this study into self-identifying business parks in Cape Town, with regards to location specifically, it is important to outline classical and more recent industrial locational theories to help explain the deeper patterns and meanings underlying business park locations. Aspects of economic geography will be covered in this section and will demonstrate the direction in which the theory and knowledge on spatial economics and urban and economic studies have led to the present-day conceptions and perspectives of the spatiality of the economy. The following section will discuss the origins and evolution of classical locational theories.

2.2 LOCATIONAL THEORIES

This section introduces locational theories to explain how and why industries and businesses choose to locate where they do. It is noted that even though the study is dealing with the evidence of SIBPs in Cape Town there is still a need to examine older theories on industrial location and develop forward to the most applicable theories in the context of the study. Firstly, traditional theorisations of industrial locations will be examined with reference to pioneering authors and how theories progressed towards more modern theoretical perceptions of locations of organised economic activities.

Secondly, when discussing locational theories of industries, it cannot be looked at in isolation from other similar disciplines. Location theories are very closely tied to economics, and in this case the geography of economics, with commercial parks as sites of economic activity forming

a key part of the study which assesses the prevalence of commercial parks in Cape Town, and the business activities that take place within. The focus on economics mainly comes from the pioneering studies that investigated different aspects of the economic world at that specific time in history. Industries changed over time and so there came a time where agricultural location theories and industrial location theories became outdated thus newer theories needed to be established. The classical approach to location theory was developed in the Germanic tradition and was an attempt to match scientific methodologies of research to the natural science of economics (Coe, Kelly & Yeung 2007). According to Krugman (1995) the domination of German theorists in the field of classic location theory was due to the lack of translated works reaching places such as England. This also resulted in subjects of interest within the field focusing more on economic theory which was being pursued in Germany at the time.

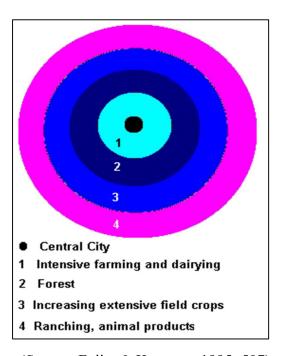
Theorists such as von Thünen, Weber, Isard and others all investigated the economic life surrounding them and saw the need to examine where these industrial and economic activities were taking place and why those specific locations were chosen when taking into account many other internal and external factors (Wood & Roberts 2011). In the sections to follow a number of classical approaches to location theories according to author will be discussed while also illustrating the progression of the various theories over time, the rise and fall of the behavioural approach in location theory will then be mentioned, building up to the establishment of the topic of the new economic geography and cluster theories, and to conclude the chapter neoliberal capital and the political economy approach.

2.2.1 Von Thünen's theory of "The isolated state"

The first investigations into the theory behind locations of economic activity came from the 19th century where a German agricultural economist Johann Heinrich von Thünen looked to make sense of the economic world around him by pioneering the Germanic locational school. Von Thünen published his most famous works in 1826, but it was only in the mid-1960s as a result of praise from more contemporary writers that his work on the internal structure of the urban system and economy became truly acknowledged by the academic world (Puscaciu & Puscaciu 2011).

Von Thünen developed two main positions in his writing, one concerning the economic productivity of agriculture, and the other on the appropriate calculation of wages (Wood &

Roberts 2011). It is mentioned that von Thünen's work illustrates some of the key concepts encountered in classical approaches to economics such as equilibrium forces, how value is created from market processes, and the roles efficiency, prices and land play in the spectrum of spatial economies. Aside from the recognitions for his work on wage calculation, it is the development of his models and understanding of the forces that drive economic activity that have placed von Thünen as one of the most influential theorists in the field of spatial economics and economic geography. It has been noted that von Thünen's analyses are outdated but it is important to acknowledge the strides made in the field of location theories since the foundations were laid by von Thünen in the 1820s. Von Thünen developed a spatial economic model with references to the market, production and distance emphasising the economic interactions between the urban marketplace and the surrounding areas providing resources (see Figure 2.1).



(Source: Fujita & Krugman 1995: 507)

Figure 2.1 Von Thünen's model of agricultural land use

The importance of the von Thünen model was that it illustrates the relationship between transportation costs and the value of land and according to the model showing the price of land increasing towards the city centre. According to Krugman (1995) von Thünen's contribution to the field of spatial economics outweighs any other theorist or tradition's contribution, but

fails in one aspect, it does not deal at all with the issue of spatial economics. Krugman mentions that von Thünen's model illustrates the presence of a central urban marketplace where the purpose of the model was to understand what forces drive the spatial distribution of economic activity away from an urban centre (Krugman 1995), but with no reference in the model to what forces may bring economic activity together in urban centres. The inability to highlight what draws economic activity together was seen as a powerful limitation in the model, and a limitation that caught the attention of future theorists developing theory within the body of knowledge. Nonetheless, von Thünen's model helped economists especially understand why economic activity spreads outwards, which was as a result of competition between firms over land that drives economic activity away from the urban centre.

2.2.2 Alfred Weber's theory of industrial location

Known as the father of industrial location theory, Alfred Weber was mainly concerned with the uneven spatial development together with the growth of urban centres of the developing capitalist industry (Wood & Roberts 2011) and published his most famous work in 1909. Weber sought for the rules that govern the various economic forces that were the cause of the uneven spatial development happening around him, with the goal of describing and explaining the locational patterns of the manufacturing industry in Germany. It is important to mention that during the time of Weber and other classical location theorists the subject of their writings was a reflection of the developing "spatiality of capitalism" within the economic system, manifesting itself in the way cities and people were organising themselves and their economic activities (Woods & Roberts 2011: 33).

Germany as well as the rest of the European continent during the time of Weber was undergoing fundamental changes as the Industrial Revolution in England spread to the rest of the continent resulting in widespread changes in economic and organisational activity. As a reflection of the stage of development at the time Weber paid specific attention to the manufacturing industries. He reported that industries tended to develop close to the source of their raw materials, and due to the development of the railway system throughout Europe it was seen that factories were given more flexibility to locate closer to markets as rail infrastructure became more efficient (Bale 1981). As a result of these factors Weber wanted to develop a theory for the optimum location for a factory.

Like von Thünen, Weber developed a simplified model of the economy which showed three main factors influencing the location of industries. Smith (1981: 70) mentions that there are "two general regional factors of transport and labour costs, and the local factor of agglomerative or deglomerative forces" that influence industrial location with transport costs as the main determinant of factory location but with the overall rationale for location of factories being the location that incurs the least cost in terms of transport and labour. After analysing the transport and labour costs Weber then turned to what causes industrial activities to locate and cluster together and noticed that if clustering together results in factories achieving external economies within the industry (reduction in costs for factories) then that will be the optimum location. Weber's theory much like von Thünen's also underwent criticisms stating the over-simplifying nature of the locations of industrial activity, with an over-emphasis on the supply factors and not enough emphasis on the demand factors. It was also mentioned that Weber inserts too many assumptions to the model and also disregards the non-economic considerations of industrial locations that will influence where manufacturing operations will be established (Isard 1949). In terms of the contributions made by Weber it was the topic of agglomeration and clustering that was a defining characteristic of industrialisation in Weber's time and Weber summarised that it was agglomeration and the rise of urban centres that were the cause of the uneven spatial development happening around him.

2.2.3 Isard and regional science

The last of the locational theorists to be mentioned is Walter Isard who was an American economist and, according to Krugman (1995), Isard attacked economic analysis for not giving the spatial dimensions of economic activity the recognition it needs and made it his mission to incorporate the concept of space into economic studies. Isard's major contribution to location theory was in 1956 and included developments on the previous works by von Thünen, Weber, Christaller and Lösch to try and establish a general location theory (Isard 1949).

Although Isard did not succeed in creating a general location theory he was responsible for creating a new applied field known as regional science that can be described as attempting to combine geography with economics, political science, sociology and regional planning and develop a general theory of location and space-economy (Parr 1973). The goal of this regional science was to place all factors that influence the choices of industrial location such as demand, supply, price, and distance all as variables and as a function of location. For Isard, regional

science was closely related to the field of spatial science which was firmly based in the mathematical and statistical fields of investigation, with the goal of modelling spatial systems and conceptualising the spatial structures of economic activity (Barnes 2004). Regional science was a prospering field in the period of the late 1950s into the mid-1970s that focussed on modelling patterns and flows and employed models derived from physics to analyse distance and geographical proximity between firms. Regional science always relied heavily on its scientific foundation and when links were attempted to be made between regional science and more theoretical geographies a conflict was created between the two. According to Barnes (2004) one of the main reasons for the decline in regional science during the 1980s was due to attempts to quantify more social and physical factors and include them within the rigid scientific models known to regional science. From here it was difficult for regional science to recover and become more involved in the economic geography debates associated with the more human centred approaches that began to appear within geography in the 1980s onwards into the 2000s.

2.3 THE BEHAVIOURAL APPROACH

Following the work of Isard in the 1950s and 1960s, the behavioural approach in the field of economic geography truly took flight in the 1970s where the short-comings of the more traditional classical approaches to the spatial distribution of economic activity were being realised within the discipline. The behavioural approach sought to highlight that when making economic decisions firms and people do not solely base their decisions on economic rationality, and recognises the importance of the roles of cognition, and social, cultural and institutional factors that characterise the environment firms and individuals operate within (Strauss 2008). The work of Herbert Simon in the 1950s on 'bounded rationality' allowed for questioning of more traditional approaches to industrial location and looked specifically at "the role of cognitive information and human choices in determining decision-making and locational outcomes" within firms (Coe, Kelly & Yeung 2007: 12). The theory of bounded rationality rejects the 'deterministic framework derived from economic theory', and makes reference to the imperfections and elements of reality that were usually ignored in classical approaches and makes an increased effort to incorporate realistic situations in terms of locational decision making that may arise within firms or corporations (Pellenbarg, van Wissen & van Dijk 2002: 112).

The key behind the behavioural approach is that it recognises the opportunity to replace the obsession with optimising to one that allows the considering of other factors that cannot be quantified or incorporated into more economic models and frameworks (Pellenbarg, van Wissen & van Dijk 2002). This behavioural approach also recognises that in some regional economic conditions the optimal locations given by studies sometimes show little variation of choices of location (Simon 1955). This is where behavioural enquiries into what is then considered by a firm to choose to locate in one area over another can be added, and thus contribute a more human and rational aspect to economic and geographical analyses. This is not to say that the behavioural approach in the field of location theory and economic geography was completely different from the previous theories, as a framework was also provided by theorists to demonstrate clearly what the approach was meant to achieve when applied to a real life situation (Smith 1981).

There can be links drawn to traditional approaches such as Weber in his search for what determines the most prime location, but similarities end here as it is the extra-economic forces that are considered explicitly in the behavioural approach (Lloyd & Mason 1984). Scott (2000) talks about how the behavioural approach adds to the classical approaches by looking at economic and other motives behind the decision taken by a firm to locate in a specific location. Although discussions surrounding the behavioural approach ceased with the growth of more human geographical trends towards the 1990s, the theory that arose "succeeded in problematising the assumptions used by geographers in modelling and analysing economic decision making" as well the "difficulties of defining, specifying and applying context in analytically useful ways" (Strauss 2008: 141). The drawbacks of this approach mentioned in the literature speak about the lack of adherence to an explanatory model when conducting surveys, and the over-analysis of non-economic factors and lack of inclusion of more classical economic factors in the approach (Scott 2000). Even though these are listed as drawbacks it is noted in the context of this study that these non-economic factors and the emphasis on context may be the key behind understanding the movement and changes occurring in Cape Town's industrial built environment.

2.4 THE RISE OF KRUGMAN'S NEW ECONOMIC GEOGRAPHY

When looking at the progression of locational theories up until the 1960s it is evident that theorists and their work looked to explain and describe the way the economic activity was distributed or spread across space. In terms of the methodology used it was clearly more scientific involving both geometry and mathematical enquiries together with the majority of the work conveyed through models and frameworks to describe spatial particulars of economic activities.

According to Coe, Kelly and Yeung (2007) this mathematical approach was adopted by economists in the 1990s with the term given the 'new economic geography' that looked to apply mathematical and more sophisticated economic models to economic activities with key theorists in the field of the new economic geography including Paul Krugman, who began the discussion on the new economic geography in 1991 (Ottaviano & Puga 2003). It must be noted that there are two bodies of knowledge referred to as the 'new economic geography' in this study and which will be differentiated in the upcoming sections. Firstly, the new economic geography founded on rigid statistical and mathematical methodologies, and secondly, new economic geographies focussed on viewing economies as socially and politically bonded aspects of societies. Woods and Roberts (2011) also note Paul Krugman's contribution to the new economic geography and make the connections between this supposedly new field and the work of the traditional classical locational theorists.

This new economic geography is said to model urban and regional growth and in particular look at why manufacturing industries and other economic activities tend to cluster together (Krugman 1991). While stating these aims the new economic geography uses a strict and rigid mathematical methodology which excludes any and all factors that cannot be quantified into the study and for this reason this new economic geography will not be a theory heavily considered in this investigation into self-identifying business parks in Cape Town. However, dismissing all aspects of this body of knowledge would be a mistake as theory into clustering and economic agglomerations applies to the context of self-identifying business parks in Cape Town. Fujita and Krugman (2004) made mention of the new economic geography that looked to explain how concentrations or agglomerations of economic activity arise within a specific geographic space. An envisaged goal of this new economic geography is explaining the characteristics of these place-specific business activities within a wider and more complex economic system.

Krugman's conception of the new economic geography and the body of literature that followed marked a turn in the nature of investigations into economic geography. Studies and theorists from the late 1980s into the 1990s and onwards looked for other ways to conceptualise the economic system functioning on the local scale but also on a global scale where economic activity was seen as more than a function of market influences. The development of economies and in turn industrial and economic locations was seen as a part of a wider discourse on explaining the causes of certain development trajectories witnessed in economies in capitalist run parts of the world. This section serves to illustrate one of the many directions the field of economic geography followed over the years as theory developed, and introduces the next section discussing the more human-centred direction (instead of purely economic) economic geography took in the years to follow.

2.5 NEW ECONOMIC GEOGRAPHIES AND EVOLUTIONARY ECONOMIC GEOGRAPHY

There is a need to mention a more contemporary conception of 'new economic geography', one that is highly contrasted from the previously developed literature provided by Krugman in the late 1980s into the 1990s. Krugman's mathematical methodologies and analyses were purely economic in nature and contributed to both economic and cluster theory but did not consider any extra-economic factors when analysing the locations of business and cluster activity.

The 'new economic geographies' that are now being discussed have migrated away from pure economic and mathematical roots and have worked to incorporate social, cultural, political and institutional factors when investigating and understanding economic dynamics (Coe, Kelly & Yeung 2007). Characteristics of these new economic geographies is the focus of the field featuring "an eclectic collection of philosophical standpoints and social theories" that move beyond traditional geographical conceptions of economic activity (Coe, Kelly & Yeung 2007: 13). These new economic geographies see the economy as a socially and politically fused aspect of society that sees nature, culture and social issues infiltrating more and more into discourses commenting on the characteristics of an economy (Woods & Roberts 2011).

Amin and Thrift (2000) speak about the blurred lines within economic geography and the different paths the discipline has taken over time, with the most recent manifestation of economic geography incorporating elements of the political economy, sociology,

environmental economics and other social science interests. In mentioning this newer take on economic geography with the incorporation of concepts and areas of study from the social sciences, there is a developing field known as 'evolutionary economic geography' that looks at the economy and its functions through an alternative lens, one that sees economies and urban development patterns as a result of social, cultural and institutional processes (Barnes 2001). Evolutionary economic geography is concerned with the transformation of economies and economic landscapes over time and through development (Martin & Sunley 2014). In this case economic development is seen as a result of exposure "to previous contingencies and choices made within systemic configurations" of the economy (Fløysand & Jakobsen 2016: 137). Fløysand and Jakobsen (2016) discuss the issue of scale in the context of evolutionary economic geography and mention two main approaches, firstly 'generalised Darwinism' which focusses on the micro-scale and the firm and the internal decisions taken by firms, and on a larger scale the 'path dependency theory' which focusses on the ways industries, clusters and innovation evolves. For evolutionary economic geography, economic development takes place at different scales and can occur in places within larger regions. The idea here is that development paths vary depending on the scale and spatial configurations of that specific area.

The reason for mentioning this more contemporary take on economic geography is to illustrate the importance of incorporating non-economic factors into the analyses of the changes in Cape Town's industrial built environment and self-identifying business park spaces. The traditional economic geographies and the associated theories work well when accounting for the economic backings of industrial location, but there are other factors with deeper underlying patterns that must also be considered when discussing the location of industrial or economic activity. It has been noted that many of the theories have their roots in the more traditional approaches and thus it is key to mention where the theory originated and how it expanded and changed directions on its journey to where it is today. This study will look to incorporate elements of both the classical traditions and more human-centred approaches to analysing the spread and features of commercial park and self-identifying business park spaces in Cape Town. The following section will look at the influence of clustering on the built environment in relation to location of industries as well as the different cluster theories that have developed over time.

2.6 CLUSTERING AND NEW INDUSTRIAL SPACES

In relation to the locational theories mentioned above, it is evident that the goal behind industrial location theory was to discover the optimum location for economic activity, where ultimately the costs at that location would be the lowest compared to alternative locations. Closely related to this aspect of industrial location theory was evidence that in regions where manufacturing operations located in the same area as other manufacturing plants then these operations would benefit from clustering together through agglomeration economies (Henrickson 2012). The issue of clustering is of relevance to this study as business and industrial park spaces alike involve a collective of different firms and operations, and examining the theory behind the clustering of economic activity can help shed light on what causes clustering and what makes it desirable to manufacturing or service providing companies. In this section the theoretical underpinnings of clustering will be examined through key theorists of both classical traditions and more contemporary writings, with later reference to the concept of new industrial spaces.

2.6.1 Alfred Marshall's cluster theory

The issue of the clustering of economic activities is not a new phenomenon to the world of geography, economics or regional studies and its conception is very much rooted in the same timeframe of traditional locational theories of the Germanic traditions. Following the works of locational theory pioneer von Thünen, British economist Alfred Marshall was one of the first to truly question the instances of economic advantages gained from locating in operational clusters. From an economics point of view clustering is directly related to local external economies (alternatively external economies of scale) which is referenced in Marshall's work published in the 1890s. Local external economies are derived "from the common location of independent firms in the same industry" and includes the reduction in average costs of industrial operations within the industry as operations tend to cluster together more and more (Parr 2002: 158).

Krugman (1995) also speaks about local external economies with reference to Marshall being a key contributor to mainstream economic analysis throughout his lifeworks. For Marshall the causes of agglomerations in the form of clusters is according to three features; "the availability of specialized input providers, the access to a large pool of similar and specialized workers, and the production of new ideas based on the exchange of information and face-to face

communications" and are referred to as economies of scale external to the firm (Fujita & Thisse 2013: 13). The topic of external economies has been thoroughly covered throughout economic and regional sciences but what makes Marshall's distinction unique is that the external economies are limited to the agents or operations taking place within a specific geographical area with the externalities not extending outwards to the rest of the region.

According to Belussi and Caldari (2009) Marshall also laid the foundations for the concept of the 'industrial district' during his time as Chair of Political Economy and founder of the Cambridge School of Economics during the late 19th century into the 1920s. Marshall paid specific attention to the industrial district, simply illustrated as "an area where a concentration of firms has settled down", but containing within it a much more complex set of relations and processes of agglomeration and perceived advantages that further form the industrial district concept (Belussi & Caldari 2009: 336). Marshall's work on the industrial district incorporates the three features mentioned in the section above that work to create a 'local industrial atmosphere' where knowledge within the industry and innovative industrial tasks undertaken by firms within the district are easy to access for those within that geographical area (Woods & Roberts 2011). Potter and Watts (2012) with reference to Marshall (1920) state that an industrial district begins with a localised industry, which refers to an industry being concentrated in a particular area. The reason for geographical concentration of activities points to the need to be close to resources industry rely on (in the case of manufacturing), from here a demand for the goods being produced by the manufacturing sector begins to grow in that specific location. As with most industrial districts found today there is the presence of large towns or cities representing the market that services the towns and receives the goods from the manufacturing sector. As manufacturing operations of the industry tend to expand there is a need for more space for plant operations which sees the industry relocate to smaller urban centres on the outskirts of the large metropolitan areas. If these manufacturing operations of the same industry choose to locate together to benefit from expansions in the industry as a whole, then an industrial district will form on the outskirts of the large town or city.

According to Potter and Watts (2012) who revisited Marshall's initial investigations also make note of how influential his work was in the field of regional development with Marshallian theories being incorporated into a variety of disciplines reaching into the 1990s. With regards to this study it is the revival of Marshall's investigations in the field of industrial cluster theory that make it a concern for this investigation into self-identifying business parks in Cape Town. With a revival of Marshall's work, there became a renewed interest in the proliferation of

industrial clusters and clustering activity of firms in general within economies (Steiner 2002). In the following section an overview of some of the key trends in cluster theory will be discussed before concluding with the topic of new industrial spaces and how they have developed in the context of developed economies and what these new industrial spaces mean for cities and regional economies.

2.6.2 Trends in cluster theories

Marshall's understanding of clustering as previously mentioned has gained wide attention from the academic world with new associations and theories being drawn up within the various bodies of knowledge focussing on clustering. McCann (2008) discusses the various studies and contributions made by academics to the study of agglomeration economies and asks key questions such as why do economic activities cluster together, how does clustering affect economies in small and large urban areas, and what role does clustering play in the context of local or regional economic growth. All of these questions are posed to scholars in a multitude of fields and has resulted in a number of different interpretations on the occurrence of industrial clustering and its relation to economic growth.

With reference to this, industrial clustering has become the focus of research on economic growth with three major contributions to the field by Scott (1988a), Porter (1990) and Krugman (1991) and other bodies of literature such as the Italian industrial district school in the 1980s resulting in an increasingly analytical take on the instances of clustering (Steiner 2002). In the sections to follow an overview of the work of the Italian school, Porter and Scott will be mentioned, with the work of Krugman having been discussed previously. The Italian school will be analysed followed by Porter's industrial cluster theory. Although Scott published his most famous work before Porter, in this analysis Porter will be discussed before the work of Scott as Scott's work ties in with the concern of new industrial spaces which will follow later in the section.

2.6.3 Italian industrial districts

In the 1950s and 1960s, after the Second World War the Italian economy was said to be undergoing a miracle with a "growing spatial concentration of production, with flows of capital and labour towards the most developed areas" (Garofoli 1991: 86) and within this trend was the pattern of manufacturing corporations enlarging their plants in the most developed cities

(instead of relocating or opening another plant) while keeping the labour pool in the countryside, increasingly flexible and subject to differing levels of demand. In the 1970s however this pattern of economic growth was essentially reversed with trends in spatial distribution of economic activity displaying instances of decentralisation and the movement of economic activities away from established locations such as large cities to other locations that offered more in terms of social and, productive flexibility and lower labour costs of production. As a result of nationwide strategies of decentralisation, the spatial economy of Italy underwent great structural changes that would have lasting effects, with the two main trends being a switch from spatial concentration to spatial diffusion into areas of more intermediate levels of development, and a rise in the entrepreneurial, small scale, highly flexible and productive organisation (Garofoli 1991).

In light of this, movement of economic activity towards less developed and more flexible regions together with an emphasis on the small – and medium-sized innovative firms, there became an increasing need to explain and account for the ways in which the Italian economy was developing. In the 1970s and 1980s Marshall's work on industrial districts was applied to Italy's then – current trends of socio-economic development. This resulted in the industrial district in the Italian context being described as a spatial agglomeration of small firms specialised in one phase or product of production, all held together and functioning off the cultural and social inter-relations of workers, entrepreneurs and politicians within and surrounding industrial district locations (Cainelli 2008). The defining aspects of the industrial district in the Italian context show that; firms are small and specialised in traditional industries such as food or textiles, these firms compete as well as cooperate with other firms within that bounded geographical space, spatial proximity to other firms that indicates an environment that encourages diffusion of information and the movement of skilled workers between firms within industrial districts, and lastly these districts involve both regional and local institutions that play a servicing role to the firms within the industrial district (Paniccia 1998).

The importance of the industrial district literature coming from the Italian school is that it shows an "alternate form of industrial organisation to Fordism" (Cainelli 2008: 189). According to scholars a new form of capitalism was created based on the strong spatial relations between these; small- and medium-sized enterprises, the social community within the district, and the collection of institutional services also helping to serve the industrial district model and socioeconomic development at the local level (Amin 2000). The investigations into the Italian industrial districts was extremely helpful in helping to analyse the ways these competitive

spaces foster local economic growth and also gave an indication of the way production methods and forms of organisation were taking shape in the period of recessionary times of the 1970s and 1980s. The following section will look at the work of Porter from the 1990s onwards and the development of an industrial cluster theory that has resonated within the literature since then.

2.6.4 Michael Porter's cluster theory

According to Porter (2000: 16) a cluster can be defined as a "geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities". The initial work of Porter looked to explain the conditions in which competitive economic advantages were gained by business activities and through his work concluded that firms that operate in close proximity to one another tend to be more effective and in some cases more successful (Swords 2013). Porter also developed a model known as the "competitive diamond" and mentioned that the clustering of firms can allow for increased competitive advantages through higher productivity levels, higher levels of innovation and increased business activity (Porter 1998). For Porter a cluster must contain certain elements which include; suppliers, sources of specialised infrastructure, a customer base, companies related by common inputs (can be skills or technology), and lastly government and other institutions that support the cluster (Motoyama 2008). What makes Porter's cluster theory so useful in the context of commercial parks is the inclusion of linkages and interrelatedness that exists within cluster contexts. Porter mentions that collaboration as well as intense competition can foster growth, innovation and the formation of new businesses.

The reason for mentioning both the Italian industrial district school and Porter in this study is due to the applicability of these theories to local economic development and economic growth. In the 1970s and 1980s where the developed economies were encountering the brunt of the economic recession, policies to mitigate effects of this trend were failing and it was theories such as the Italian school that provided ideas for economic growth and development away from traditional practises. Clusters are linked especially in policy to economic growth and activities and this is part of the reason why the cluster model became so successful. Through the work of Porter it was seen that the cluster models were more flexible and could apply to different sectors and industries at a range of different scales and social and economic conditions (Woods & Roberts 2011). The Italian industrial district literature was formulated in the late 1970s and

1980s and Porter's cluster theory in the 1980s and 1990s with both these theories gaining weight within the discussion of clusters and economic growth. But, one more theory formulated by Scott in the late 1980s can also be applied to the importance of clusters in the context of economic development and growth from the 1980s onwards.

2.6.5 New industrial spaces theory

Scott published his work on new industrial spaces in 1988 paying specific attention to the flexible forms of organisation and regional development taking place in North America and parts of Western Europe. Scott developed his work around the same time-period as Krugman and Porter with all three theorists having differing perspectives on the clustering of economic activity (Steiner 2002; McCann 2008, Woods & Roberts 2011). The 1970s and 1980s was a period of recession for the more developed economies and as previously mentioned cluster theory and instances of the success of the clustering of firms made the development of clusters synonymous with local economic development and growth. According to Woods and Roberts (2011), with reference to Scott (1988a), these cluster spaces are founded on the concept of the industrial district and have been termed 'new industrial spaces'. Linking to this phenomenon are flexible post-Fordist methods of production, and deindustrialisation further contributing to the growth of these spaces in economies. New forms of flexible accumulation are cohabiting these spaces and may involve a diverse range of economic activities (Keeble & Nachum 2002). The key for this study is not limiting new industrial spaces to the presence of high-tech industries and service sector services, but also other economic sectors that thrived as a result of the post-Fordist capitalist system characterised since the late 1960s.

According to Scott (1988a) studies into new industrial spaces can further an understanding of the relations between clusters, cities and towns, and innovation. New industrial spaces can also be related to the decline in manufacturing industries and associated impacts of deindustrialisation which has seen the creation of clusters whether in service or manufacturing sectors to locate in these new industrial spaces (Knox & Pinch 2010). The issue of innovation is of key importance to Scott as references to the successes of Silicon Valley, California and the Italian industrial districts illustrate that it is the spatial concentration of specialised small and medium sized firms that are conducive to high levels of innovation and local economic development.

For Castells and Hall (1994) with reference to Scott (1988b), one way to reduce transaction costs is for industries and firms to cluster together with the urbanisation of these clusters depending on the industries involved. The development of such spaces can be attributed to the clustering of specific factors of production, namely; capital, labour, raw materials, and presence of entrepreneurialism and innovation. These new industrial spaces are landscapes of high-speed connectivity, innovation and economic development and even though these are mainly associated with high-technology parks, science cities or technopoles, these spaces also include industrial parks and business parks that emphasise the colocation of economic activities that produce competitive and innovative advantages for firms and the wider economic region (Scott 1988b McCann 2008; Pacione 2009).

2.7 NEOLIBERAL CAPITAL AND THE POLITICAL ECONOMY APPROACH

The purpose of referring to neoliberal-capital and in turn, capitalism, is to illustrate that cities are now becoming the sites through which neoliberalism and its pursuit for capital accumulation are being actualised. Massey (2007) speaks about how cities are central to neoliberal globalisation, and how the population within it, market dynamics and internal competition are all as a result of the neoliberal agenda. Cities are now sites through which neoliberalism and its ideals are evolving and it is the pursuit for capital accumulation in the post-Fordist era that is driving this neoliberal agenda. The underlying processes of capitalist development is what governs and orders the global economy and the world we live in today, and the spread of neoliberal ideologies and globalisation has helped to make the capitalist system inherent in developments in cities in both developed and developing country contexts. Capital accumulation is the backbone behind neoliberalism and the pursuit of profits is what is keeping this capitalist system thriving around the world (McDonald 2008).

In this study the focus will be on the locations and reasons for the locations of self-identifying business parks, but there is a need to expand on the theory behind such spaces, what forms of consumption cause these types of spaces and what market system has given rise to this. This section will provide insights into the capitalist system that is inherent in global economic operations today, and the geographies of capital accumulation. Both of these issues have been incorporated into the political economy discourse of economic geography and have impacted on the study of spatial development patterns and the reasons for the locations of economic activity.

The progression of major theoretical perspectives in economic geography has been dominated by different strands of investigations; beginning with the traditional location theories of the German economists in the late 19th century into the 20th century, the evolvement of this into highly mathematical and analytical trends in research of the 1950s and 1960s and revived again in the 1990s. Away from the more mathematical and economic trends are other approaches to studying spatial patterns of economic activity, more related to other non-economic factors. The behavioural approach between the late 1960s and early 1980s, and the inclusion of Marxist political economy in looking at the geographies of capital accumulation in the 1970s took a different stance at looking at the order of economic operations. It has been mentioned in literature that the influence of Marxist political economy was essential in leading economic geography on a new path of analysis, away from the spatial patterns and location decisions to one that looks at economic development, and wealth and the social structures that underpin the capitalist system that drives development (Coe, Kelly & Yeung 2007). The rise of Marxist political economy in the 1970s was seen as a response to the failure of previous locational analysis, and looked to provide a newer, and less empirical perspective on the locations of economic activity.

For economic geographers the emergence of concepts from political economy into geographical discourse opened up new horizons for research into the spatial organisation of economic activity seen in urban regions. From the 1970s the infiltration of political economy allowed for more comprehensive analyses for economic geographers and was directed towards explaining the uneven and unequal nature of development in the era of capitalism. The political economy approach looked to explain why cities are structured the way they are, and why certain locations are favoured for economic growth over others (Wood & Roberts 2011). Political economy is said to have arisen in the 18th century, with a focus mainly on the economic management of the state.

The work of Adam Smith (1776) laid the foundations for future political economy investigations with his attempt being the first at describing the relationship between politics and economics, in an industrial, capitalist-controlled market (Barma & Vogel 2008). According to Clarke (2005) who provides an overview for the foundations of capitalism as well as neoliberalism discusses the work of Adam Smith in the USA in 1776, stating that Smith's work was both a critique and response to a corrupt and "mercantilist state, which drew its revenues from taxing trade and licensing monopolies, which it sought to protect by maintaining an expensive military apparatus and waging costly wars" (Clarke 2005: 2). The initial thought

behind capitalism for Smith was not the pursuit for profit but rather seeing consumption as the end and purpose of production which would lead to an equilibrium in processes and commodities. In the era of Smith, theories and concepts behind political economy were all related to the economic affairs of the state and how the economic performance of the state could be improved and made more profitable. But, over time the understanding behind the political economy has changed and can now be viewed as investigations into the uneven development trends associated with the capitalist system and how this translates into the spatial and social environment (Barma & Vogel 2008).

In the years succeeding Smith's theorisation of capitalism and his thoughts behind how economies should be structured, Karl Marx provided a critique of political economy and moreso a critique on the capitalist system first published in German in 1867 and later translated to English in 1887. Marxist theories applied to the context of everyday economic processes can be related to thinking structurally and looking abstractly at the way in which economic processes take place. This view partly removes the economic science behind looking at the economy and looks deeper than functions of competitive advantages within the market. Political economy in this sense dealt with the uncertainties created by the capitalist system and saw them as being inevitable within the functions of capitalism and was also the cause of the uneven geographic development (Sheppard 2011). According to Sheppard when analysing an economy through a political economy lens it is important to view the economy and its geographies as being co-produced alongside each other helping to shape each other's trajectories. All economic processes in this case must therefore be seen in relation to the "biophysical, cultural and social processes with which they co-evolve" which adds a broader and more in-depth dimension to the geography of economics (Sheppard 2011: 321). Marxist theories together with vital contributions by David Harvey along with other authors allowed the political economy aspect of economic geography to become embedded in investigations into economic change and more importantly the issues of uneven capitalist developments.

In any discussion on the spread of neoliberal capital accumulation strategies and its resultant uneven spatial distribution, there is a need to mention the impact of globalisation and its importance to global corporate functions. As a result of globalisation, capitalism and neoliberal ideals have infiltrated economic development discourses creating an uneven form of geographical development pointing towards increasing the value of capital, and the concentration of wealth amongst the smaller proportion of the population who control it (Harvey 2007). In Harvey's theorisations on the geographies of capital accumulation he

mentions the effects of the expanding demands for capital goods and notes that as capital infiltrates new spaces it allows the capitalist ideology to take over and concentrates operations mainly on maximising accumulation strategies. Due to the increased mobility of capital associated with the post-Fordist period of economic activity, capital is allowed to take over spaces and reconstructs them in line with the desires of those who have control over the capital. This results in the creation and destruction of places previously unexposed to the capitalist system and allows for developments to expand into new geographical regions and spaces (Harvey 1975). This element of construction, destruction and reconstitution can be related to the global capitalist economy being in a constant state of flux always searching for new or old places to develop or redevelop (Walker 2001). The capitalist system has the ability to create an enabling environment to suit its needs at any particular time-period and as the system is allowed to grow and prosper, landscapes of accumulation become outdated and no longer-profitable which see the built environment devalued to make space for newer forms of economic growth and capital accumulation to be introduced (MacKinnon et al. 2009).

The key to the success of capitalism has been its obsession with profit and the accumulation of capital regardless of the social, political and environmental consequences it causes (Harvey 1982). The ability for capitalism to remain the central governing system in the world illustrates the flexibility of its ideals to manipulate development in such a way that allows for the system to carry on thriving. There are four ways in which the capitalist system is said to restore profits even in times of crisis and these include firstly, the devaluation and the recreating of value within the system which can refer to the devaluing of money through inflation or devaluing of labour through unemployment and then recreating this value once it is needed again. Secondly, macro-economic management by which the demand within the economy and labour markets is maintained even during times of recession to allow for capital to continue to be accumulated. Thirdly, the displacement of capital and avoidance of crises though a changing reliance on resources to meet future needs than current ones. Lastly, is the spatial displacement of capital which is of importance to more geographically concerned investigations. Here capital is seen to open, destroy and reconfigure new spaces for production, and at the same time creates new markets for exploitation (Coe, Kelly & Yeung 2007).

The last factor of the spatial displacement of capital translates to a direct impact on the built environment with urban landscapes becoming the sites of the expansion of the capitalist system which sees new sites of production being established in different parts of the world or the rejuvenating or renewal of older spaces of economic activity found within cities. In order for the capitalist system to carry on thriving there needs to be spaces created or redeveloped in line with the functions of the system which emphasises the geographical importance of space in the context of capitalist developments and changing accumulation strategies. It is clear that the capitalist system of governance and economic activity have a clear imprint on the built environment with the altering of urban spaces to fulfil the needs of the different stages of the capitalist system. Cape Town has been identified in the capitalist and neoliberal debates and through this study will be viewed through this perspective to further an understanding as to how the capitalist system has manifested spatially in Cape Town's industrial and built environments.

2.8 CONCLUSION

This chapter looked to outline key theoretical perspectives in the context of self-identifying business parks in Cape Town. Important theories covered included classical locational theories originating from the Germanic tradition and the transforming of the theories into what is seen today as economic geography. Industrial cluster theory was also mentioned in order to show the origins of industrial clusters as well as illustrating over time how the spaces co-habited by businesses arise, and the reasons for corporations and firms to locate in economic clusters in cities and urban areas. The revival of Marshall's industrial district theory is what gave rise to the many new theories that were born during the second half of the 20th century, all of which contains different analytical points to help explain the proliferation of business and industrial clusters that tend to occur in and around large city regions. Although the elements described in the above sections emanate from the global North and are context specific to that region, elements of the theories are still applicable to economies of the global South and the study will look to utilise elements of the various theories to make sense of the clustering in Cape Town's business activities.

The last theoretical perspective mentioned was neoliberal capital which aimed at showing how the capitalist system inherent in economies and institutions world-wide has the ability to create and re-make spaces to suit the economies need at that specific time, regardless of the social, cultural or environmental impacts induced. Commercial park spaces can be seen as spatial manifestations of capitalism with the end goal of the movement and accumulation of capital always being present. The key behind mentioning these theories is to situate this study of self-identifying business parks in Cape Town within an identifiable theoretical context and together

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with the literature review, to fulfil objective one of the study and lead onto objective two of the study.

CHAPTER 3 LITERATURE SURVEY

3.1 INTRODUCTION

Following the theory review key concepts and themes identified in the literature will be analysed. It is important to clarify important terms and concepts to avoid any misconception or misunderstanding throughout the research process. After a review of relevant literature a multitude of terms and definitions were used when speaking about commercial parks and related park spaces. Although this study focusses on self-identifying business parks specifically, it is necessary to outline where the concept of the business park stems from, and to outline the other types of commercial park spaces found in cities and urban built up areas. In this chapter key terms and concepts to be used in the study will be outlined, followed by an in-depth look at literature relating to the proliferation of commercial and business park spaces in the context of neoliberal economic restructuring, the world city discourse, deindustrialisation and security in a neoliberal city.

3.2 DEFINING COMMERCIAL PARKS

A goal for this part of the research is to derive appropriate terminology to use when referring to these spaces which leads to the introduction of the first key term, *industrial parks*. Industrial parks are not the main focus but the idea of a clustering or grouping together of economic activities arose out of manufacturing industries co-locating in a space or occupying a certain area. According to UNIDO (United Nations Industrial Development Organisation) (1997: 10) an industrial park is defined as "a tract of land developed and subdivided into plots according to a comprehensive plan with provision for roads, transport and public utilities with or without built-up (advance) factories, sometimes with common facilities and sometimes without them". This is the broad definition cited in literature relating to industrial parks and can be adapted when discussing the different kinds of commercial park spaces found in urban areas.

According to Peddle (1993), the industrial park concept began in Chicago at the beginning of the 20th century where industrial districts were developed around railroad networks. It was only in the mid-1960s after developments in transport systems did industrial parks become an integral part of the economic landscape of the United States of America (USA). It is worth mentioning while investigating the proliferation of industrial parks globally, a notable amount of literature originates from Slovakia, Romania, Hungary and other central and eastern

European nations. In these contexts, industrial parks only started appearing at the beginning of the 1990s when these post-socialist nations started adopting development methods already existing in central European countries and the USA (Ablonczy-Mihályka & Kecskés 2015). Vidova (2010) states that an industrial park is the integration of different functions ranging from health services, education services, manufacturing, and service sector activities into an industrial area with the services provided in the park independent of the type of industrial park. One of the key points Vidova (2010: 41) mentions is that an industrial park space is "characterized by a united conception, unique and highly particular configuration" of activities within a particular industrial location with the goal of creating employment and high economic turnover. Industrial parks are classified according to different characteristics which includes; park specialisation (science/technology park, research park, and an eco-industrial park, or free trade zone), ownership (public, private or public-private partnerships) and land ('brownfield' if the park is on already existing facilities and 'greenfield' if the park is developed in a new area) (Memedovic, Alic, Alimdjanov & Jackson 2012). Industrial parks are said to be effective instruments for fostering investment, technological learning, innovation, competition and employment creation (Memedovic, Alic, Alimdjanov & Jackson 2012). In relation to this study all of these characteristics are important with park specialisation being a defining component. In the following section a brief definition of identified types of parks will be examined.

The different types of parks identified in the literature include; industrial park, office park, business park, science and technology park, and an eco-industrial park. As previously mentioned, an industrial park is a tract of land purposefully sub-divided into fully serviced plots with or without built factories (UNIDO 1997). A study conducted in Slovakia mentions the terms office park and business park are used interchangeably in the literature and can be defined as a 'light' version of an industrial park in that the space is taken up by the offices of light industrial operations and other financial or administrative functions (Vidova 2010). A study conducted in Finland speaks about the interchangeable terms associated with the business park concept and includes "commercial centre, office park, technology and science parks" in the definition of business parks (Ojala 2012: 242). Ojala (2012) mentions that business parks spaces can be seen as a concentration of office buildings of a similar design and architecture that are usually found outside of central city areas where cheaper land is more accessible, with the ownership, structure and running of the park varying from context to context. In the context of Finland, business parks provide benefits to multiple stakeholders including; the government in the form of concentrating urban development and limiting urban sprawl, business park

tenants in the convenience of sharing multiple services and infrastructure, and the smaller businesses who benefit from locating in close proximity to other businesses presenting the image of an established organisation (Ojala 2012). In some business parks additional services may be provided to tenants such as day-care facilities, a kiosk, automatic teller machines (ATM), conference rooms, sporting facilities, and shared private security. According to Hogg and Nilon (2015) when conducting a study on business parks in Missouri, USA, a business park is defined as an area controlled by one or more businesses which are involved in; administrative or information functions (offices), production of goods (light industry), storage of goods for distribution (warehouses) and research and development (techno-parks/science parks). Alternatively, a study conducted in Singapore uncovered that a business park may also be described as an integrated area for retailers, offices and industrial activities that also offer extended services such as child-care centres, gyms and outdoor areas (Hwang, Zhu & Tan 2016). Business parks have a multitude of definitions and characteristics, and this study will look to unearth the characteristics and organisations of these types of spaces in the context of Cape Town. The term to be used in the study when looking at business parks will be 'selfidentifying business parks' (SIBPs), referring to business parks that explicitly include the term 'business park' in the name of the park.

According to Luger and Goldstein (1991: 5) who comment on research parks and regional development in the USA, there is no concrete definition of a research park otherwise known as science and technology parks, but it can be defined as "organisational entities that sell or lease spatially contiguous land and/or buildings to businesses or other organisations whose principal activities are basic or applied research or development of new products or processes". It was also mentioned that excluded in the definition of research parks are industrial parks due to their primary interests in manufacturing and office parks who focus mainly on administrative and sales functions (Luger & Goldstein 1991). While discussing science parks in Canada, Bell and Sadlak (1992) acknowledge that there is no universal definition for science parks and that interchangeable terms include research park, 'technopole' and 'technopolis' (Castells & Hall 1994), but it is accepted that a defining factor amongst these parks is the ability to attract and house high-technology producers and services as well as allowing for cooperation and technology transfer between research institutions and the industry. Investigations into ecoindustrial parks in Brazil define parks as a community of manufacturing and business services sharing the same property, that look to enhance environmental and socio-economic performance through managing environmental and resource issues (Veiga & Magrini 2009). In an analysis of key industrial parks in the Yangtze River Delta in China, there is mention of three main types of industrial park present in the area; 'economic and technological development park' (ETDP), 'high-tech development park' (HTDP) and 'eco-industrial park' (EIP) (Mortenson China Limited 2011). With ETDPs it is found to be the most intensive area for attracting foreign investment and are situated in the most developed areas of China with dominant enterprises being capital and technological enterprises. These parks are also usually located close to economic centres and transport hubs. In HTDPs technology, science and technological advancements for research and development are carried out with parks being located close to universities and research institutions as well as locations being close to transport links. Lastly, in the EIPs the main principle is the connections that different enterprises have in relation to resource and energy management as well environmental management. Of all the parks mentioned in this review there are commonalities that can be drawn between them all, they are all zoned tracts of land structured and maintained in way to house specific production, services and/or research operations within the park or zoned area boundaries.

There is a need to clarify what term will be used to encapsulate the different kinds of parks that will be encountered in the study, the term selected will be 'commercial park spaces'. The definitions of industrial, office and business parks all mention the diversity of business activities that can be housed within these spaces and leads into the term 'commercial park' due to these spaces housing a multiplicity of commercial economic activities. All of the park spaces reviewed indicate a shared space (including park services provided) among businesses or companies with these parks consisting of various physical characteristics depending on the context. Commercial parks and then more specifically SIBPs will be analysed in the Cape Town context with reference to previous studies conducted from various international sources. In light of this, the following section overviews key themes identified in literature pertaining to the developmental and ideological origins of commercial and business park spaces, with references to broader global trends and context-specific analyses into the prevalence of commercial park spaces in Cape Town.

3.3 NEOLIBERAL ECONOMIC RESTRUCTURING

In order to effectively introduce the theme of neoliberal economic restructuring and its relevance to the study, this review will include examples taken from both the developed and developing country contexts, and how they have manifested in urban built-up areas around the world. When discussing the notion of 'restructuring' of the global urban system, Soja (1987: 178) details how restructuring refers "to a shift in trends towards a different social, economic and political order evoking a transition of deconstruction and reconstitution" within society. Brenner and Theodore (2005) with reference to Soja's works on the global urban system mention how in the decades leading up to the turn of the 21st century categories were derived by scholars in order to properly convey what has been occurring in urban areas all around the world. Terms such as; deindustrialisation, reindustrialisation, post-Fordism, globalisation, capital flight, global city formation, informalisation, gentrification, and socio-spatial polarisation amongst others, have been used to describe the deconstruction and reconstitution of urban spaces inhabited globally (Brenner & Theodore 2005).

The concept of neoliberalism has been used widely since the 1970s to describe instances of market-orientated institutional and policy shifts across the world economy (Fourcade-Gourinchas & Babb 2002), and have been of key concern in terms of its impact on urban functions. Neoliberal economic restructuring involves the; "deregulation of state control over major industries, reduction of corporate tax, assaults on organised labour, privatisation of public services, enhancement of international capital mobility, intensification of competition, dismantling of welfare programs, and criminalisation of the urban poor" (Brenner & Theodore 2002a: 350). According to Siddiqui (2012) neoliberalism was essentially launched in the 1970s in the global North through key proponents such as Milton Friedmann, but prior to this neoliberal thinking dates back to the 1920s and 1930s as the capitalist system began to dominate and infiltrate not only economies but also political systems (Spocter 2017).

According to Kotz (2003) in the late 1970s it was the USA and Britain that led the way in terms of abandoning the previous Keynesian regulationist system to the more neoliberal 'free market economy' approach placing an emphasis on rapid economic growth, reduced welfare, and greater innovation and prosperity to those that have the opportunity to do so. In the context of the USA and Britain (as two developed capitalist led economies) between 1973 and the early 1990s, was a period of financial instability and slow economic growth which worked in contrast to what was expected of restructured neoliberal market economies, and in fact it was countries that adopted models far-removed from neoliberalism that prospered economically in this

period. From 1995 to 1999 and mainly in the USA, neoliberalism was said to have found its feet and saw the growth rate of gross domestic product (GDP) increase to 4% per year while inflation remained controlled and unemployment rates fell. During this period it was the wealthier echelons of society and some portions of the middle class that prospered greatly, but the example of the USA also showed that this type of economic expansion was unstable and worked to create great imbalances and uncertainty within the growing economy (Kotz 2003). Neoliberal economic restructuring is also associated with the post-Fordist regime of production, which was first illustrated in the global North with marked shifts away from agriculture and manufacturing and traditional industries towards high-income, flexible consumer service activities resulting in a steady decline in manufacturing and producer sectors and industries (Knox and Pinch 2010).

Neoliberalism as a development ideology and an approach to all aspects of development has resulted in the restructuring of the urban environment with implications for both developed and developing country contexts (Morton 2003) and has since become a dominant ideology in the world today. As neoliberal ideologies infiltrate development discourse we see urban governance and policies becoming increasingly defined by market-led neoliberal ideals along the lines "of 'appropriate' policy choices, by constraining democratic participation in political life, by diffusing dissent and oppositional mobilisation, and/or by disseminating new ideological visions of social and moral order in the city" (Brenner & Theodore 2005: 103). According to Peck and Tickell (2002) neoliberalism has become an expression of political-economic power that sees governance in both developed and developing country contexts that; favour a growth-first approach to urban development with objectives centred on economic expansion over social welfare, prioritising of policies for privatisation and deregulation, political pressure for competitive economic development, competition between public and private labour resources, encouraging place promotion and city renewal, and local boosterism to increase intra-urban and inter-city competition.

This spread of neoliberal ideologies into development discourse has had an effect on the development trajectory of many developing countries, with Chile being one of the main international examples of a developing country that underwent neoliberal economic restructuring. In the wake of widespread political upheavals in South America during the mid-1970s, Chile saw their democratically elected government overthrown by military forces under the authoritative rule of General Augusto Pinochet who replaced their policies of import substitute industrialisation (where governments foster local economic development through

protecting domestic industries from international competition) and welfare state with neoliberal economic and social policies. This authoritative regime supressed organised labour, opened up heavily protected domestic markets to free trade, liberalised foreign exchange and regulated financial markets, and saw the privatisation of state enterprises mark the downfall of the once welfare state (Silva 1993). In an analysis of the development trajectory of Chile during the 1970s and 1980s, Fourcade-Gourinchas and Babb (2002) mention how it was both international and national forces that were at play when countries decided to restructure their economies along neoliberal ideals. Not only was the political and economic context within a country considered in the analysis but it was also the outside global market forces that greatly influenced the decision making process to divert and reconstitute modes of governance to one that placed preference on opening up financial markets and liberalising trade to the international market place. The more globalised financial markets became increasingly "heightened countries" vulnerability to international capital movements which represented an especially critical change, which worked in favour of a general realignment of policies and economic representations along free market lines" (Fourcade-Gourinchas & Babb 2002: 534).

When discussing neoliberal economic restructuring there is a need to mention the advent and growth of globalisation as one of the main manifestations of neoliberalism. Passas (2000) speaks about the connection between the spread of neoliberal ideologies and the rise of globalisation with reference to how state deregulation, and promotion of market forces and free trade have acted as a motor for globalisation around the world. Globalisation can be defined as a process through which increased levels of contacts are being made in economic, social and cultural areas between different countries. Yeates (2001:71) also mentions that globalisation refers to "a range of economic, technological, cultural, social, and political forces and processes that are said to have collectively produced the characteristic conditions of contemporary life". Throughout various studies it is acknowledged that the growth of multi-national and transnational companies is as a result of globalisation (Brenner & Theodore 2002b), and consequently these companies have become primary agents for promoting and enacting globalisation and the financial liberalisation of markets in the developing world.

Globalisation according to Fougner (2006) can be seen as a product of increased international competitiveness in two ways; firstly, as a strategy prompted by businesses and state authorities where national firms could increase their competitiveness and; secondly, a search for an equal or 'level playing field' where national firms can compete with other firms on a more global scale. By looking at globalisation in this way the integration of local economies into the global

economy is the main objective which is realised mainly through trade, multi-national and transnational corporations, foreign investment and highly mobile international finance (Siddiqui
2008). In relation to neoliberal forms of governance and increased international
competitiveness, the role of state in terms of regulation is reduced, but this gives no indication
that that the state has no role to play at all in the matter. Government rationality in this context
is centred on the market being the main deal behind governance itself as markets can only
effectively exist if they are under "specific political legal and institutional conditions that must
be actively established by authorities" (Fougner 2006: 176). This is how neoliberal ideals are
seen to influence the ways in which governance is acted out in countries, the need to compete
at an international level and to constantly remain attractive to investment means markets are
engineered in a way to always be flexible and susceptible to manipulation to accommodate for
increased involvement in the global economic arena.

In the South African context, the infiltration of neoliberal development ideologies can be seen for the first time in the Growth, Employment and Redistribution policy (GEAR) introduced in 1996. According to Miraftab (2007: 3) "GEAR prescribes growth by liberalising international trade, and relying on market mechanisms for state restructuring and integration into the global economy", and it is this policy that has since led South Africa on a neoliberal development trajectory in the post-apartheid era. The enactment of GEAR is said to have fully incorporated neoliberalism into South Africa's policies with the goal of attracting foreign direct investment being the main rationale. The period of GEAR saw; the reduction of tariff barriers which impacted heavily on labour-intensive industries and increased levels of unemployment, the relaxing of capital and exchange regulations allowing large companies to move to international financial capitals, the deregulation of financial markets, a lack of domestic investment and increased outflow of domestic capital, high interest rates and the expansion of credit that worked in favour of corporate investment businesses in terms of increasing shares of investment (Ashman, Fine & Newman 2011). The impacts felt by GEAR can be aligned to other global trends involving the integration of neoliberalism into policymaking. The financial elites of societies became more powerful and in turn began to infiltrate politics as well as governance (Ashman, Fine & Newman 2011) to further economic growth interests in the name of expansion, but only for a small portion of the population of a country.

One of the consequences of neoliberal development ideologies and increased involvement in the global economy is the intensification of competition on a planetary scale that takes place between cities and places in the world today (Siddiqui 2012). This competition is driven by the extent of global neoliberal market forces and has resulted in cities, especially in the developing world, wanting to compete with cities in more developed countries (Booyens 2012), and this has resulted in shifts in traditional industrial and urban practices as well as the ways cities organise themselves in order to attract more global attention. One of the key questions posed to the study is how these neoliberal forces are manifesting within the urban environment and what changes are taking place within built up city areas.

According to Weber (2002) the built environment of any city or urban area revolves around capital and the circulation of capital in and out of cities and urban areas. This translates to the built environment becoming susceptible to abandonment, destruction, redesign and reconstruction according to the direction of capital flows within or out of a city. Cases of traditional industrial areas being demolished and replaced by high-technology service industries, or areas within the central business district (CBD) being remodelled as luxury highrise apartments are instances of states and cities developing "mechanisms to make the built environment more flexible and responsive to the investment criteria of real-estate capital" (Weber 2002: 520). In relation to this Visser and Kotze (2008) discuss the concept of gentrification and speak about the ways in which the conceptions of the word have changed since its introduction in 1964. Gentrification as a concept was first understood as inner-city working-class neighbourhoods being renewed and rehabilitated by a wealthier middle-class population, however, more contemporary debates on gentrification have shifted focus and are now paying attention to new forms of urban renewal. In the context of South Africa, these new forms of urban renewal are taking the form of urban policy and urban regeneration programmes working to create globally attractive, connected and prosperous inner-city environments in the largest cities (Visser & Kotze 2008). Important to this debate is the relationship between these new forms of urban renewal and the macroeconomic systems of capital accumulation which are directly affecting gentrification processes. In reference to this are the influences of globalisation and neoliberal processes that are manipulating the direction in which central city regions are developing towards, with the goal being to create landscapes that attract and can handle local and international capital investments (Visser & Kotze 2008).

Keeble and Nachum (2002) with reference to Scott (1988) mention how the flexible accumulation strategies associated with the post-Fordist capitalist system have seen three industrial sectors gain strength and in turn have an effect on the built environment of cities; design-intensive industries producing goods for final consumption, high-technology industries, and business service functions. It was identified that the rise of these types of services has

resulted in new flexible forms of production that are seeing firms clustering together in 'new industrial spaces' and similar agglomerations that are in turn impacting greatly on the composition of built environments. The following section will introduce Cape Town as the site for this investigation into the changing compositions of urban environments as a result of neoliberal and globalisation processes.

3.4 CAPE TOWN AS A 'WORLD CITY'

The spread of neoliberalism and globalisation has resulted in cities explicitly and implicitly needing to be involved in competition on a planetary scale. This together, with a constantly expanding and fluctuating globally connected economy, has led to the terms 'world city', 'global city' or 'successful city' to be used interchangeably when referring to these types of places. For convenience purposes in this investigation the term 'world city' will be used as the sole defining term. World city research enquiries were initiated in the mid-1960s where investigations into global business flows and conduct revealed that a largely disproportionate amount of the world's business was conducted in a few large capital and political centres around the world. Hall (1966) also mentioned that that these cities were also financial and banking, communications and transport centres that exerted a global and international force. Following Hall's interrogation, it was only in the 1980s that world city research began to gain momentum and since then has been a growing body of knowledge on the nature of urbanisation and global connectivity in the world today. A review of literature revealed three interrelated perceptions of the world city phenomenon all marked with respective authors which will be covered in the sections to follow.

John Friedmann (1986), a pioneer in the discourse, mentioned that a world city has a defining feature of fulfilling the role as basing points for "global capital from which command and control is exercised over capital accumulation" (Bassens & van Meeteren 2015: 754). These cities are distinguished not by their population size but by their status as capital centres of large countries (Pacione 2009), and function as major centres of political, institutional, business and cultural operations. Friedmann's principle works on the subject were published in the early 1980s with research questioning global, social and spatial relations seen through a network of globally connected cities. Friedmann and Wolff (1982: 310) headed world city research with some of the first enquiries into "what specific ways these urban regions are becoming integrated with the global system of economic relations" and with it provided two key

viewpoints; the extent of the city's global integration and capital strength as a world marketplace, and the city's spatial dominance in terms of whether its market or financial controls are global or multiregional in scale. In the research it was outlined that this "criteria of world system integration must be viewed in a dynamic, historical perspective" as the roles of cities and urban areas in the global arena are not fixed and are always changing (Friedmann & Wolff 1982: 311). This view allowed world cities to be seen as a global network in an emerging world of production and markets within the world economy. Friedmann and Wolff use a broadly defined group of functions including political, communications and transport but deliberately view the economic functions as the dominant and most influential functions with the greatest impacts on urban life (Surborg 2011). For Friedmann and Wolff the constantly growing and changing world economy was being spatially articulated in the form of world cities, and thus investigations into the ways in which world cities function on a national scale and how they are linked globally will uncover greater detail as to how this wider world economy functions. The work by Friedmann and Wolff laid the foundations for world city research and it was in the early 1990s where further contributions helped broaden the views of the world city phenomenon.

In the early 1990s Saskia Sassen, a well-cited author in the field began to expand the concept of the world city by questioning the term itself, stating that the characteristic world city has been encountered historically many times before and suggests that "most of today's major global cities are also world cities, but that there may well be some global cities today that are not world cities in the full, rich sense of that term" (Sassen 2005: 28). Sassen is a proponent of the alternative term 'global city' but for the purpose of this review and to prevent any misunderstanding the term 'world city' will be used. According to Sassen (2001) globalisation has been concentrating resources, key infrastructure and intellectual assets in world cities around the world which work to attract both populations and skills to these specific places. Both Friedmann and Sassen are widely cited when discussing the world city concept both with their own criteria as to what constitutes a world city. Sassen provides a narrower point of view compared to Friedmann and mentions that specialised producer services namely "banking, accounting, insurance and law, as being dominant in articulating global flows due to their capital commanding functions" (Surborg 2011: 317). Sassen (2005: 28) identifies "seven global hypotheses" which include the following; dispersion of production activities caused by globalisation creating the need for spatial concentration of central corporate functions, the rise of an outsourced specialised producer service economy, agglomeration economies of a wide

range of specialised fields and firms, the number of headquarters and in turn specialised services present in the city is what indicates a world city. The specialised firms found in world cities must display a global network of connections and increased cross-border collaboration, local disconnection and an increase in spatial, social and economic inequalities within the city, and lastly the informalisation of world cities. Additionally, Sassen and Friedmann both make reference to the increased social polarisation that is brought about by the features of the urban environment and both acknowledge that within world cities exists a large divide between a highly specialised labour force and a low-skilled workforce (that services the specialised service sector) which primarily consists of regional and international migrants (Friedmann & Wolff 1982, Friedmann 1986, Sassen 2000, 2001, 2005)

In the late 1990s a differing viewpoint which looks at world cities as a network of processes surfaced in the world city discourse and gained momentum into the 2000s (Castells 1996). As Sassen and Friedmann's work gained momentum some scholars noticed missing aspects within the world city theory, mainly the interrelations and links between the respective world cities. Manuel Castells was one author who looked to build the knowledge on the network of world cities and what links these global centres together (Beaverstock, Smith & Taylor 2000). Castells saw world cities not as static places within the global economy but rather as processes of networks containing complex flows of cultures, goods, ideas and interactions between specialised producer services industries scattered spatially across the world. According to Beaverstock, Smith and Taylor (2000: 126), "cities accumulate and retain wealth, control, and power because of what flows through them" with reference to Castells who sees world cities as processes "by which centres of production and consumption of advanced services, and their ancillary local societies, are connected in a global network" (Castell 1996: 380). With reference to Castells view of the world cities network Taylor et al. (2002) also contribute to the discourse by highlighting the diversity and power relations that are found within world city networks. Taylor (2001) mentions that the approach is to view world cities as a network of interlocking global capital and service centres with the cities being linked together "by the communications of information, ideas, knowledge and instruction through virtual and material flows within service office networks" (Taylor et al. 2002: 6). Taylor et al. (2002: 4) also mentions that it is only the economic functions of these world cities that is focussed on in terms of research and empirical studies, and in doing so investigations are missing the "undoubted cultural power of religious centres such as Jerusalem. Mecca and Rome" and the important differences between these cities and their industrial or retailing centres within them.

When looking at the world city body of literature it is the known capital centres and world cities of the global North that were initially investigated, but as the body of knowledge grew and spread, more calls were made for world cities of the South to be investigated. Taylor et al. (2002) speak about the connectivity of these world cities and brings African countries to the fore as Cairo, Nairobi, Casablanca, Lagos, Johannesburg and Cape Town were all mentioned to be an integral part of the world city network and global reach that world cities are linked with. In line with Cape Town being identified as one of these world cities, an analysis into its classification and what makes it a world city will be covered below.

Pirie (2010) provides a Southern perspective in the world city discourses and mentions that academic study has primarily focussed on the ways in which cities cling to the term 'world city' based on connections and activities across borders. Research has however excluded much of the patterns that exist between these cities and what initiates these patterns, along with the fact that focus is still centred on the oldest and largest world cities of the global North. The issue with only using economic connections and activities as a benchmark is that it only realistically applies to the developed economies of the world cities that exist in the global North. Developing countries in Africa are urbanising faster than anywhere else in the world with people migrating in large number into cities that function, look and feel different to the large developed capital cities found in developed countries. Robinson (2005) also mentions that only looking at formal economies excludes the global informalised economy that is growing in size as the divide between the high skilled specialised labour force and the low skilled workforce continues to rise. Through an investigation into regional and international airline flows and linkages of Johannesburg and Cape Town, Pirie (2010) provides a fresh perspective on the world city debate and emphasises that world cities in developing countries are not disconnected from other world cities and therefore should not be ignored in academic research and further debate.

Cape Town is of key interest in the world city debate and has been identified as such in previous literature (McDonald 2008, Marks & Bezzoli 2001, Miraftab 2007, Pirie 2010), along with mentions of the city wanting to become more internationally competitive and recognised (Borel-Saladin & Crankshaw 2009). During the apartheid era South Africa's global connectivity was of little concern and thus in the early 1990s when South Africa re-entered the international market, the economies of, mainly the largest cities, underwent significant structural adjustments to compete with global demands (Lemanski 2007). Cape Town's integration into the global economy worsened the already existing inequalities in the city with

development ideologies attempting to keep up with those of the global North, emphasising foreign investment, a thriving service sector, tourism, and international standards of office parks, shopping malls and conference centres, in line with characteristics of other world cities (Crankshaw 2012). Marks and Bezzoli (2001: 31) examined the developmental direction of Cape Town in relation to the construction of "Century City" and discussed how emphasis was placed on the "upgrading of transport facilities, particularly the airport and port; putting Cape Town in the fast lane of the information super-highway; expanding the Western Cape's professional service sector; and developing a strong private equity and venture capital sector" to further expose and integrate Cape Town into the world city arena. Cape Town as an established metropolitan area and tourism destination has already attained international recognition, but it is the wanting to be further integrated into the global economy that is causing Cape Town to develop on the trajectory it is currently on (Turok 2001). Miraftab (2007) investigates the instances of CIDs in the central city areas of Cape Town which has parallel discussions with the research of Marks and Bezzoli, these spaces of inner city renewal work in line with post-apartheid neoliberal processes that create an inner city environment that can attract global business functions and allow for Cape Town to include itself in international competition. Similar to the research mentioned above conducted by Pirie (2010) and Miraftab (2007), Gibb (2007) also looks to provide a Southern lens to the world city debate by using Cape Town and its recent growth trends to solidify that there are world cities that do exist out of the developed world. The emergence of Cape Town in the world city discourse is rooted in undertakings in urban renewal and central city improvements by urban planners and private sector investors in order to attract more foreign financial attention to foster local economic growth (Gibb 2007).

In 2000 the city looked to attract more foreign activity by establishing the Cape Town Partnership which was dedicated to "regenerating Cape Town's central city and promoting it as a destination for global business, investment, retail, entertainment and leisure" (Lemanski 2007: 451). This urban regeneration would be achieved through CIDs in order to "imprint Cape Town in the minds of the global economic community, to attract foreign investment, to construct world-class facilities, and to market the locality as a premier leisure and business destination" (Gibb 2007: 541). The idea was to reverse the visual and financial downturn of Cape Town's CBD through policing and cleaning the inner-city street areas and promoting downtown Cape Town as an attractive place to work and live. Cape Town is also a world-renowned tourist destination attracting tourists and their income from all around the world.

This is where Cape Town as a destination, whether for business or leisure, is attractive to other countries. World class facilities have been built within the city in order to capitalise on any market opportunity that may result in more economic development for investors and the people who live in centre of Cape Town.

In the growing service sector context of Cape Town, the identification of eight focus services sectors to achieve the goal of global integration includes the following; tourism, hi-tech industry, film and television, craft production, financial services, medical services, research and equipment (Marks & Bezzoli 2001). The sites of these new service sector industries are of key concern to this study not only in the context of global integration and competition, but also in the developmental local context of Cape Town as patterns of location will show where investment and activity is originating from. Sinclair-Smith and Turok (2012) investigate the spatial economy of Cape Town and note that recent developments are still taking place in the city centre as well as being skewed towards the city's high income suburbs where there is more space available and locations suited more to the professional services. Lemanski (2007: 459) also mentions how even though Cape Town is following international and world city trends in terms of tourism, and the expansion of the service industry, it still demonstrates "growing polarisation of its spaces and social groups, between those with access to international networks, opportunities and resources and those resigned to isolation and poverty".

Other important trends mention how "older industrial areas with more run-down environments and congested roads are struggling in comparison with newer business parks" within Cape Town (Sinclair-Smith & Turok 2012: 406). The reason for this is due to more suburban locations attracting a greater share of economic activity due to lower-value land uses such as office functions and light industry operations with more available land and increased access to main highway routes (Sinclair-Smith &Turok 2012). This speaks to the deindustrialisation that has been documented in the city with the rise of the new flexible forms of production specific to the service sector. The following section will address deindustrialisation in Cape Town.

3.5 DEINDUSTRIALISATION IN CAPE TOWN

Deindustrialisation is of concern to the research as it is one of the outcomes of neoliberal development in both developed and developing country contexts. During the post-second World War era until the 1970s, modes of production in more developed countries were characterised by the Fordist regime of production with; intensive manufacturing operations,

rise and spread of mass consumption, market regulation and convergent industries. But, towards the mid-1970s the growth of the global economy saw a shift towards the post-Fordist regime in developed countries of flexible accumulation and the expansion of the service sector of economies (Pacione 2009). The switch from Fordist to post-Fordist means of production marked a shift in the way goods and services were produced and consumed all around the world. The developed industrial economies of the global North began the shift to a more neoliberal, flexible production system associated with "mass production and mass consumption" and aided by improvements in technology, transport and communications allowed operations and services to reach any location within the growing global economic system (Marks & Bezzoli 2001: 28). Equally associated with this shift to a highly flexible mass economy is the instance of deindustrialisation which can occur in both developed and developing country contexts. Deindustrialisation in developed and developing economic contexts refers to the decline in share of manufacturing employment as well as a decline in the share manufacturing sectors contribute to the overall GDP in an economy (Saeger 1997).

Deindustrialisation differs in developed and developing country contexts with developed countries having experienced significant decline in manufacturing activity due to the 'new international division of labour', based on the spatial separation of administrative and managerial functions from production functions in terms of industry location (Bluestone & Harrison 1982). In the developed country context deindustrialisation started occurring in the late 1960s with the OECD (Organisation for Economic Co-operation and Development) countries which consisted of 18 European countries, the USA and Canada (Palma 2014). Deindustrialisation in these countries occurred as economies became increasingly exposed to more available and much cheaper import materials from the global South which saw manufacturing employment and industry sectors decline in the years between 1970 and 1990 (Tregenna 2011). Deindustrialisation was previously thought to only occur in more advanced economies and according to Rowthorn and Ramaswamy (1997: 2) deindustrialisation was a sign of success and strength of an economy where "the pattern of trade specialization among the advanced economies explains why some countries deindustrialize faster than others" and why expansions in the service sector could mean better economic prospects in the future.

Within the developing country context deindustrialisation however takes a different form and is much more harmful to the economies of those cities and countries. In developing country contexts deindustrialisation began in the late 1980s with rapidly expanding economies of East Asia and also economies of Latin America and South Africa, with countries in Latin America

and South Africa showing some similarities in their deindustrialisation processes. Through further investigation into deindustrialisation in developing economies the term 'premature deindustrialisation' was coined. Premature deindustrialisation occurs in places where industrialisation has not fully developed but due to the advent of increased global competition and certain specific economic policy contexts, deindustrialisation started occurring. Rodrik (2016) speaks about premature deindustrialisation and how it can contribute to stunted economic growth and development in cities. Manufacturing activities are seen as integral to the initial phases of growth in economies and also works to absorb a significant proportion of unskilled labour thus providing economic opportunities to those who cannot access the well-paid highly specialised service sector occupations. Manufacturing activities are vital to the expansion and survival of developing economies and "early deindustrialization could well remove the main channel through which rapid growth has taken place in the past" (Rodrik 2016: 3).

With reference to premature deindustrialisation Chile and South Africa are numerously cited within the literature due to their unique economic policy contexts in which deindustrialisation started occurring. The period between 1964 and 1973 saw Chile's manufacturing sector become the greatest contributor to the country's economy with most foreign direct investment flowing into production in cars, televisions, radios, refrigerators and alike products (Gwynne 1986). The reason behind Chile's manufacturing success was due to manufacturing operations being integral to Chile's national economic performance and thus the industry sector was shielded by government policies in order to preserve the backbone of the economy. When the military government took control of the country in 1973 all protective measures placed upon the manufacturing sector were removed and a "reduction in industrial protection, the promotion of more diversified exports and the privatization of state-owned enterprises" became the new policy for the government (Gwynne 1986: 4). As a result, firms in the manufacturing sector suffered great losses due to ill-performance at both local and international scales and the Chilean currency began to depreciate in value. It was found that the radical and rapid restructuring of the economy away from supporting manufacturing activities and import industries towards a more comprehensive trade and financially liberal economic regime resulted in the ultimate decline of the manufacturing sector in Chile (Palma 2014).

Szirmai (2012) also mentions how the increasing impact of neoliberal economic restructuring, globalisation, reduced tariffs and barriers, and the influence of financial and market liberalisation can sometimes force developing economies into urbanising faster in order to keep

up with the constantly changing global markets and environments that economies are exposed to (Dasgupta & Singh 2006). The rationale behind discussing the example of Chile in this review is because South Africa too underwent a sudden shift in economic policy pointing towards financial liberalisation, deregulated markets and increased global integration and recognition, a policy which once again greatly affected the manufacturing sector and resulted in premature deindustrialisation to occur in major cities in the country.

Imbs (2013) speaks directly about South Africa's economy leading up to the early 2000s, with the economy diversifying throughout the late 1970s through the 1990s up until 2000, when the economy then "displayed a reversal in this trend, a respecialisation of the economy back to 1970s levels" of manufacturing but increasing levels of service sector share in relation to levels of GDP (Imbs 2013:529). This premature deindustrialisation witnessed in South Africa is seeing a national increase in the average GDP share of the service sector at the expense of the manufacturing sector. In addition, Imbs (2013) further suggests that South Africa's premature deindustrialisation is a reflection of the openness of the economy since its exposure to the international markets in the 2000s, which evidently saw the country deindustrialise as a whole from region to region and allow for the service sector to take over the majority GDP share of the economy.

In the South African context, Nel & Hill (2001) discuss deindustrialisation in KwaZulu-Natal (KZN) and draw parallels with the deindustrialisation that took place at the national scale. Deindustrialisation on a local and national scale was onset by; exposure to international market forces in the 1990s, reductions in state-intervention in the form of subsidies to firms in the former apartheid Homelands, closure of industrial labour-intensive operations in smaller towns and centralisation of operations in urban centres, improvements in transport infrastructure which allowed for more accessible urban centres, and a decline in the size and scale of mining operations due to a declining market and more improved technologies (Nel & Hill 2001).

Cape Town has experienced more than three centuries of urban development and restructuring which has created the metropolitan city inhabited today (Wilkinson 2000). In the context of Cape Town, the exposure to international competition in the late 1980s and 1990s resulted in the closure of factories in sectors such as clothing and textiles and while this was occurring employment and activity in the service industry began to grow (Borel-Saladin & Crankshaw 2009). Cape Town's manufacturing decline can be put down to increased capital investment

into most economic sectors which resulted in technological advancements and improvements in other production factors, this greatly affected the relationships between capital and labour (conflict with labour legislation and trade union pressure for higher wages) in the manufacturing sector and in turn resulted in fewer jobs being available and an overall decrease in employment of the sector as a whole. Since deindustrialisation started occurring in Cape Town; the wholesale, retail and accommodation sectors have grown, but the fastest growing services sectors in Cape Town have been the finance, insurance, real estate and business services. Crankshaw (2012: 837) also mentions how the impact of changing economic structures of the cities sees "shifts from goods-producing industries to service-producing industries and has resulted in the growth of high-income, white-collar jobs and the decline in middle-income, blue-collar jobs". The reintegration of Cape Town into the world economy played a significant role in the closure of manufacturing locations and contributed greatly towards the unemployment of manufacturing workers and the increase in employment opportunities for high-earning professionals (Lemanski 2007).

Post-Fordism and its embrace in Cape Town following industrial decline from the 1980s saw the city start to develop towards urban development trends in line with world cites of the global North (Lemanski 2007). According to the South African Cities Network (SACN), Cape Town's sectoral employment since 1996 shows a clear stagnation in the manufacturing sector while other service sectors such as finance, and commercial services dominate employment shares. With the service economy becoming more central to the economic concerns of Cape Town it is ultimately resulting in the manufacturing sector's downfall (SACN 2006). The manufacturing sector has not completely disappeared from the Cape Town economy and still contributes to the GDP, with the roots of this decline found in shifting employment trends as a result of the loosening controls on, and the opening up of markets to global economic forces from the mid-1990s onwards. It is reported that more than 50 000 jobs in vital food, textile and clothing industries were lost as a result of increased competition from cheaper international imports and market liberalisation (SACN 2016, Lemanski 2007). The manufacturing sector in Cape Town has also displayed increased movement towards more urban peripheral locations where land is more affordable with good access to transport links. However, increasing evidence from older industrial areas is showing the conversion of old industrial premises to business and retail service spaces indicating that inner-city manufacturing firms were being replaced by service sector business operations (Sinclair-Smith & Turok 2012).

With deindustrialisation referring to a decrease in the share of manufacturing employment, growth trends expressed by developments in Cape Town point towards a strengthening service sector economy demanding high-skilled labour further placing those operating outside of this sector at risk of unemployment. Urban development trends since the early 2000s have focussed on attracting as much foreign investment capital as possible to Cape Town to further contribute towards economic growth in the city. This includes the establishing of CIDs to renew inner city areas, as well as aggressive place-marketing showing "significant investment in new tourism infrastructure and the construction of an array of new international class hotels and other visitor facilities" to make Cape Town a world renowned leisure and business tourist destination (Jenkins & Wilkinson 2002: 40). Crankshaw (2012: 839) also mentions that the income from foreign investments "in the form of waterfront redevelopment, world-class hotels, international conference centres, casinos, shopping malls, and office parks, is geared toward the needs of wealthy foreign tourists and the growing information technology, film, and financial sectors" further indicating more of the employment share in Cape Town will be taken up by the service sector. These developments are said to be taking place in the central city and city-fringe locations in Cape Town with hotels, business parks and new accommodation being built, as well as urban renewal in-line with attracting increased local and international investment in areas such as Woodstock and Observatory (Booyens 2012). Synonymous with urban renewal initiatives in Cape Town is the prevalence of the private security sector and its services that control and police these designated spaces throughout the city. The following section will address security in a neoliberal city setting and the globalised spread of the private security sector in Cape Town.

3.6 SECURITY IN A NEOLIBERAL CITY

In keeping with the concurrent themes of neoliberal economic restructuring and globalisation, the global growth of the private security sector has impacted heavily on urban landscapes and urban governance in both developed and developing country contexts. In this instance the expansion of the private sector and its infiltration into modes of urban governance has altered the way in which private and public spaces are perceived, controlled and policed. This of concern to the study with Cape Town and indeed South Africa, being some of the major private security hotspots in the world today. This section will review the conception and growth of the private security sector, and its relevance to the study in the context of Cape Town.

To introduce the topic of security in a neoliberal city context such as Cape Town there is a need to mention where and when the private security sector originated from and what caused its rapid spread worldwide. According to Abrahamsen and Williams (2011) there has been an absence in literature pertaining to the growth and globalisation of commercial and private security due to larger conceived matters to do with private militias and corporate soldiers. After the end of the Cold War around 1991 private military companies (PMCs) transformed from private contractors to powerful, complex corporations employed and supported by stronger sovereign nations such as the USA and Britain (Baum & McGahan 2009). This growth can be attributed to intensive periods of privatisation, globalisation and policy shifts which allowed the sector to place itself strategically amidst shifts in social, political and economic spheres of governance in both developed and developing countries (Baum & McGahan 2009). Around this period military downsizing took place amongst the global superpowers, as well as a withdrawal of military operations from unstable areas which resulted in an increase in supply and capacity of de-commissioned military personnel and equipment flooding the private military industry (Kinsey 2006). This same time-period also saw advancements in the dissemination of neoliberal policies which effectively infiltrated countries in the developing country context which made them susceptible to such shifts in governance and policy (Brenner & Theodore 2005). During post-apartheid restructurings, South Africa became an important site for the growth of the private military industry with previously deployed South African military personnel forming the main recruitment body for PMCs throughout the 1990s (Abrahmsen & Williams 2011). The survival of South Africa's previous military and security sectors is what allowed South Africa to become a leader in the private security field with the sector's percentage contribution to the county's GDP higher than any other country in the world (Abrahamsen & Williams 2007).

Linked to the growth of private security companies (PSCs) in South Africa was the introduction of neoliberal reforms and the increased emphasis on the prospective positive influence the private sector could have in terms of assistance to the public sector (McDonald 2008). Key in this neoliberal debate are the afore-mentioned themes of globalisation and privatisation which both contributed to the spread and acceptance of the private security doctrine in the South African economy. The growth in of the private security sector can be linked to both neoliberal economic restructuring processes as well as the world city debate mentioned earlier in the chapter (Sections 3.3 and 3.4) with the aspect of security (in the form of private security) forming a key aspect of the study into self-identifying business parks in Cape Town.

In Cape Town the privatisation of security forms a part of the broader privatisation scheme covering multiple aspects of public service and infrastructure provision, the cause of this being the dissatisfaction amongst wealthy urban elites towards state-provided services and infrastructure (McDonald 2008). Samara (2010) discusses urban neoliberalism and the modes of governance it enables in terms of the re-enacting of apartheid tendencies under the guise of democracy in South Africa, thus reproducing previous apartheid spatial inequalities. Sassen (2005) also mentions one of the outcomes of striving towards the neoliberal world city status is an increase in social inequalities and polarisation within cities. In this context both in residential and commercial settings, the urban elite tend to retreat into secured private enclaves 'protected' from the inequalities surrounding them. This is where the increasing role of the private sector and its investment may supplement or completely replace public service provision (Didier, Peyroux & Morange 2012). These private enclaves consist of multiple forms with primary examples being residential gated estates, and in the study context, secured commercial park spaces which today both constitute prominent features of Cape Town's urban landscape. The perceptions of fear amongst the population contributes to the emphasis of security seen and experienced in South African cities. These private sector enclaves are controlled and regulated by property owner's associations where "public spaces become private enclaves of privilege" with the policing of these spaces left to PSCs (McDonald 2008: 211). These spaces and modes of policing worsen the already existing political and social inequalities in cities by reinforcing apartheid-like exclusionary practises and further marginalising the urban disadvantaged.

Security in a neoliberal city such as Cape Town is a complex urban phenomenon and is manifested in the form of gated establishments and a widespread and powerful private security sector. PSCs are contracted to police specific spaces and areas of the city and work to control and shape the image of the space to the requirements of those who own or run the activities of the property. PSCs are employed to control the inner workings of a space and thus have an effect on the way these spaces are seen and interacted with. Security and the perception of fear are important factors in the commercial landscape within the City of Cape Town.

3.7 CONCLUSION

The literature survey looked to identify the different types of commercial park spaces encountered in the literature and derive a common term to identify the presence of these types of spaces. Commercial park spaces was the term selected due to the shared space among economic or research operations, with definitions often overlapping between terms. Following this clarification was the analysis of key concepts of neoliberal economic restructuring which stemmed from neoliberal post-apartheid restructurings, Cape Town being identified as a world city resulting from the push for greater global recognition, deindustrialisation as an outcome of neoliberal development, and lastly, the proliferation of private security activities rampant throughout Cape Town. These four themes are all inter-related and can be applied directly to the current context existing in Cape Town and will play a vital role in the analysis of commercial parks and SIBPs in Cape Town. The next chapter will commence the analysis of the research.

CHAPTER 4 A MACRO-ANALYSIS OF COMMERCIAL PARK SPACES

4.1 INTRODUCTION

This chapter aims to paint an overarching image of Cape Town's commercial park spaces of which the most common types of park are industrial, business and office parks. The macro-analysis involved the collection of both spatial and temporal data throughout the research process with the goal of conceptualising the three types of park phenomenon in space over time, truly speaking to the geographical focus of the study. This chapter will focus on the overall spread of commercial parks throughout Cape Town with further focus on the locational specifics of the parks. In order to introduce the macro-analysis into commercial park spaces, an overview of Cape Town's spatial economy of development will be outlined in order to place the commercial park spaces correctly in the context of Cape Town.

4.2 OVERVIEW OF CAPE TOWN'S POST-APARTHEID SPATIAL ECONOMY

The current urban form of Cape Town is a direct product of its complex history over the last century. Some of the spatial trends originating before the apartheid system was abolished have survived into the post-1994 era and have translated into the urban form and processes that are seen in contemporary Cape Town. During the apartheid era Cape Town's spatial economy was largely influenced by national legislation dividing the country along racial lines segregating people from urban areas and restricting access to the city. Miraftab (2007: 2) mentions the 1913 Land Act which forced the native population to isolated homelands excluded from urban areas, and the 1950 Group Areas Act which restructured the urban environment in favour of further racial exclusion and "the exploitation of a racialized urban labour force". The 1970s leading up the 1990s saw Cape Town experience increased urbanisation trends (Wilkinson 2000), and at the same time a trend of urban sprawl as a direct result of the Group Areas Act, on the edges of the city pushing the city boundaries further and further with large, low-density housing developments filling up the once open spaces (Watson 2002). According to Wilkinson (2000:197) by the 1970s the city "unleashed a wave of low-density suburban expansion" emphasising an increased reliance on private car ownership and was facilitated by the development of the city-wide freeway pushing the city edges further north, east and south of the city centre. With the implementation of segregationist apartheid spatial policies in the 1960s

and 1970s Cape Town's development was further shaped by the forced relocation of people based on race, from newly designated white areas in the city centre to designated undeveloped township areas in the south-east part of the city where poverty became concentrated (Dewar 2004). This offset high rates of urbanisation as well as urban sprawl impacting greatly on the development directions the city was taking. In the 1980s and 1990s when population controls began to be abolished the city experienced an influx of low-skilled, low-income migrants settling on cheap undeveloped land provided by the government, resulting in a stark increase in the population of the Cape Town (Dewar 2004).

Leading up to the 1990s the CBD was experiencing a decline in economic activity which saw commercial and industrial development shifting its location by decentralising with businesses opting for areas such as Milnerton, Bellville, Durbanville, and Blouberg over more traditional spaces such as in Parow and Goodwood due to good transport links, safer environments and at the time more affordable and larger tracts of land (Dewar et al. 1990, Watson 2002). Wilkinson (2000) and Dewar et al. (1990) mention that the growth in the number of shopping centres and office complexes between 1980 and 2000 helped urge the movement of business activity out of the city centre and into more suburban locations. This pattern of decentralisation continued into the 2000s with more businesses choosing to leave the city centre or traditional commercial or industrial spaces for more suburban areas without established economic centres such as in Claremont, Wynberg, Bellville, Sea Point, and towards Muizenberg (Wilkinson 2000, MCA Africa 2006). Pirie (2007) also states that between 1995 and 2000 office development in decentralised areas was five times that of office development in the city centre with the developments such as Century City and other variations of office complexes and commercial spaces contributing to the attraction of these areas to businesses.

Turok and Watson (2001) conducted an investigation into the direction of development in Cape Town in 2001 and noted the trend of decentralising commercial and industrial activity away from the city core to more peripheral suburban nodes and commercial park spaces along major road networks. Cape Town has suburbs with stark contrasts in the incomes, opportunities, connectivity, and service infrastructure of these locations. In relation to this, studies have noticed a direct relationship between growing high-income residential areas and the flight of economic activity (excluding industrial activity) from the city core to these wealthy suburban areas. This movement has taken the form of commercial developments being constructed as these areas become more suitable in terms of safety, connectivity and infrastructure compared to the older, more weathered environments in the city centre (Turok & Watson 2001, Sinclair-

Smith & Turok 2012). These developments require substantial investments and Turok and Watson (2001) noted that the majority of private non-residential investment occurring in Cape Town was concentrated in the west and northern parts of the city where employment opportunities were expanding, as well it being a residential location for middle and high-income households in gated estates. Development at the time was taking place in expanding decentralised nodes such as Somerset West, Tygervalley, suburbs in the South Peninsula and Claremont.

With reference to Cape Town's uneven spatial development by 2001, there was still a clear lack of development in the South-East area of Cape Town such as in Philippi and Delft and surrounding areas which hold the largest population of low-income households in the city. These areas in the South East are known for having populations with low disposable incomes, low property values, sub-standard service provision and infrastructure, as well as an unstable social environment not conducive to wealthy private sector investment which gives an indication why any investment in the area may be deterred (Dewar 2004). This lack of investment can also be applied to the city centre, as mentioned the city centre experienced a decline leading up to 2000, and Dewar (2004) importantly noted that it was inflated rental rates that indicated a lack of investor confidence in the city. This contributed to the absence of office development in the city centre since 1994. According to Turok and Watson (2001) the property market and institutional forces at play dictate where private development takes place and translates into development continuously taking place in affluent areas as investors know for certain their investments are safe and sustainable. This investor confidence leads to residential and non-residential developments taking place in affluent areas where the high-income and skilled labour force tends to reside thus creating a process of investment and development that can be upholstered by a skilled labour force and wealthy consumer base in these locations (Turok 2001).

Another reason for the outward spread of business activity towards suburban nodes can be the economic shift to financial services, information technologies and other management occupations. This shift saw many of the older buildings in the city centre unable to cope with the infrastructural demands of the industry, along with the lack of available space to develop, provided even more reason to increase development in decentralised areas with the purpose of meeting the high demand for modern commercial work spaces (Turok 2001). Further negative perceptions pushing activity out of the city centre included a lack of parking, traffic congestion, issues of security and safety, and litter. These perceptions coupled with the increased

investment into, and attraction of decentralised areas saw the establishment of business parks providing safe, clean and accessible spaces for businesses to rent and operate within (Turok & Watson 2001). This movement of formal activity away from the city centre as well as the establishment of business parks and similar commercial parks spaces has continued to occur and has raised questions over the development trends taking place in Cape Town.

Sinclair-Smith and Turok (2012) enquired into the spatial economic structure of Cape Town by investigating the main trends in the formal economy using business survey data collected between 2001 and 2005. Findings from this study relate to Turok and Watson's (2001) study in terms of the spatial patterns solidifying themselves in the context of Cape Town. Clear similarities with regards to the decentralisation of formal economic activity and the shifting of the city's economic functions can be seen, as well as little or no activity in the South East of Cape Town with exceptions near Athlone, Saxenburg and Airport Industria. Sinclair-Smith and Turok (2012) noted specifically the spatial decentralisation and deconcentration of formal economic activity from the city core towards more decentralised suburban nodes on the periphery of Cape Town. This occurs as a result of an overconcentration of economic activity and firms in the space constrained city centre, resulting in congestion and infrastructure blockages incurring additional business costs for the firms located there. The choice to locate in peripheral suburban areas became wider in the early 2000s where firms had greater options for a safer, more modern premises such as within enclosed business parks and office complexes.

The explanations as to why firms vacate the city centre seems straightforward but further investigation reveals that decentralisation and deconcentration can be more dominant for specific economic sectors and firms and not standard by any means (Sinclair-Smith and Turok 2012). Firms such as corporate head offices, lawyers, accountants and other professional service providers that rely on face-to-face interactions with clients and sharing of information will tend to remain in the city centre (Turok 2001). Economic activities that tend to branch further from the city centre towards suburban and peripheral commercial locations include; architects, engineers, call centres, data processing and administrative firms, building contractors, or companies who are more cost-sensitive or need large tracts of land. This shifting of activity to suburban areas is made possible once again by the reliance on private car ownership and the acceptance of undertaking long commutes to work by the employees. Smaller firms owned and managed by the same person may also locate in suburban areas closer to the owner's home to reduce commuting costs (Turok 2001).

In keeping with the pattern of decentralisation, Sinclair-Smith and Turok (2012) also noticed that decentralisation of economic activity was more dominant towards some areas compared to others which called for further qualification of where and why this was occurring. Some locations are more attractive investment opportunities compared to others due to areas having high land values or a population with high-disposable incomes, and as previously mentioned the value of property plays an important role in terms of where development takes place. This however is not the only reason, some locations are preferred by businesses due to the presence of tourist attractions, or agglomeration factors such as shared services and infrastructure, which fosters the clustering of firms depending on the nature of the economic activity (Turok 2001). Between 2001 and 2005 the most dominant economic area in Cape Town was the CBD despite increased momentum in growing areas such as Century City and Tygervalley. In this same period growth was also being seen in the Northern and Southern Suburbs and along the West Coast as suburban areas without established economic centres began absorbing firms moving from established economic centres (Sinclair-Smith & Turok 2012). Turok and Watson's (2001) findings saw little new development in the South-Eastern locations of Cape Town with a lowincome population, low property values and an unstable economic environment as contributing factors to the lack of development. Emerging economic nodes between 2001 and 2005 included Bellville in the Northern Suburbs, and Montague Gardens, Milnerton, and Killarney Gardens along the West Coast. Large tracts of available (undeveloped) land were developed in this period for retail, wholesale, and business operations positioned close to a high-income skilled residential populations thus contributing greatly to the growth of these areas (Pirie 2007).

The higher-income residential areas were not the only growth points in the city between 2001 and 2005 with traditional industrial areas in peripheral locations also expanding. These industrial areas provide more affordable business locations with secure business parks geared towards light industrial activity and relate directly to the callings of this study. These areas include; Westlake and Muizenberg in the South, Saxenburg Industria near Kuils River, Airport Industria, Killarney Gardens, and in Somerset West (Sinclair-Smith & Turok 2012). The Epping Industrial area was the city's most prominent location for manufacturing activity in the city with older, industrial nodes in Parow and those surrounding Voortrekker Road experiencing a decline in activity. Economic sectors in Cape Town are subject to sector-specific dispersal according to Sinclair-Smith and Turok (2012) with different sectors being attracted to specific locations. Between 2001 and 2005 manufacturing growth moved towards peripheral areas with good land availability and good transport connections. However, in the

Salt River and Pinelands areas growth was seen in the manufacturing districts but as a result of manufacturing firms being replaced by newer businesses and retail operations converting and rehabilitating the more outdated industrial environment (Sinclair-Smith & Turok 2012).

The fastest growing sectors by 2005 were the finance and professional service sectors which had the greatest effect on spatial trends in the city. Growth took place in more central locations compared to the manufacturing sector but in established suburban nodes such as the Northern Suburbs and the West Coast. Locating in these high-income residential areas provides greater access to transport networks, skilled labour as well as a good customer base which all help to reinforce the economic strength of already established economic areas (Sinclair-Smith & Turok 2012). As indicated by Turok and Watson (2001) the majority of private non-residential development took place in already established suburbs and this trend continued to occur as Sinclair-Smith and Turok (2012) pointed out that the highest rates of economic growth in Cape Town took place in and around high-income suburbs. "Unusually strong growth" was evident in; Wynberg, Somerset West, Westlake and Tokai in the South and Durbanville in the Northern Suburbs and with the growth originating from small businesses providing professional services to the surrounding areas (Sinclair-Smith & Turok 2012: 405). Additional economic growth was also seen in suburbs experiencing high-income residential developments such as in the Northern Suburbs and the West Coast.

Spatial change in Cape Town is still occurring but under the guise of spatial development trends that began in the decades leading up to the end of the apartheid era. Undesirable development trends highlighted in the 1980s and 1990s solidified themselves over time and clearly still direct where and what type of developments are happening in the city. Findings from Sinclair-Smith and Turok's (2012) study as well as Turok and Watson's (2001) highlighted the main spatial development trends taking place in post-apartheid Cape Town and pin-pointed specific areas subject to additional economic growth and business concentrations. These patterns will be explored in the sections to follow with the proliferation and location of enclosed business parks and commercial park spaces in Cape Town forming the basis of the investigation.

4.3 A SPATIAL OVERVIEW OF CAPE TOWN'S COMMERCIAL PARK SPACES

In this section the overall spread of commercial parks in Cape Town will be explored with a section dedicated to each specific type of park. During the data collection process it was noted that a number of parks did not specify in their signage the type of park it was, merely stating

the name followed by the term 'park'. For analysis purposes these parks were added to the database of office parks to avoid misunderstanding when presenting the focus of the study on self-identifying business parks. In the industrial park database, locations signed as industrial centres and industrial estates were also included. The primary data collected will be combined with spatial data obtained from public access databases hosted by the City of Cape Town and previous studies to paint a full picture of where these parks are prevalent, and possible reasons why the parks are located where they are. The commercial park spaces will also be analysed with respect to traditional industrial suburbs to show if there is a presence of park spaces in older, established manufacturing locations. Traditional industrial locations were determined by reviewing studies on the industrial development of Cape Town up until the 1980s. Whittingdale (1973) listed Cape Town's industrial areas up until 1970 with Central City, Sacks Circle, Zonnebloem (previously District 6), Triangle Farm, Woodstock, Lansdowne, Epping Industria 1 and 2, Wetton, Salt River, Elsies River, Observatory, Diep River, Parow, Maitland, Beaconvale, Kensington, Retreat, Ndabeni, Athlone, Paarden Eiland, Newlands and Rondebosch as the locations.

Figure 4.1 illustrates the distribution of commercial parks per major district in the city and Figure 4.2 illustrates the overall distribution of commercial parks in Cape Town. The data collection process revealed a total of 148 commercial parks in Cape Town with 44 industrial parks, 59 office parks and 45 self-identified business parks (see Table B1. Appendix B).

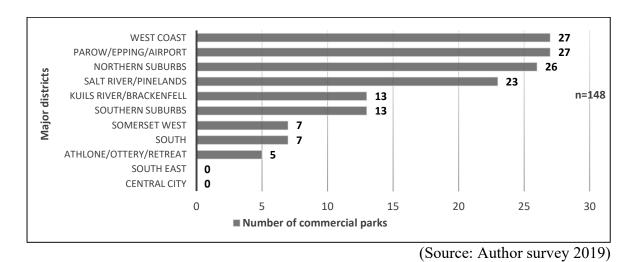
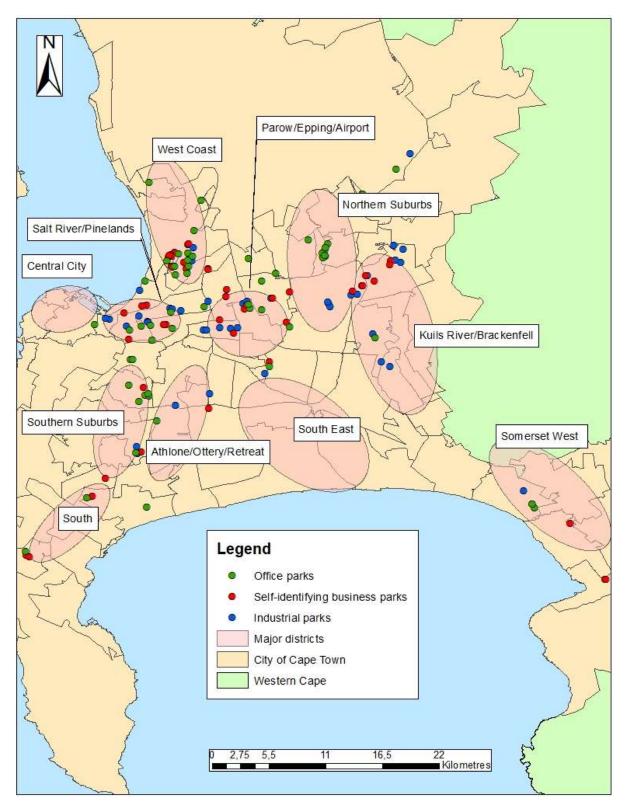


Figure 4.1 Distribution of commercial parks per major district in Cape Town

Looking at overall distribution trends in line with the 11 major districts it is clear where the broad locations of the various parks can be found within Cape Town. The greatest concentration of commercial parks was found in four areas making up 70% of the parks (103 commercial parks) which include; the West Coast area of Cape Town with a total of 27 parks, followed by 27 parks in Parow/Epping/Airport district and 26 in the Northern Suburbs district, and lastly the Salt River/Pinelands district holding 23 parks in total. With regards to the remainder of the parks; 13 parks were located in the Kuils River/Brackenfell district, 13 parks in the Southern Suburbs, seven parks each in Somerset West and South districts, and lastly five in the Athlone/Ottery/Retreat district. The data shows an absence of parks in the Central City and South-East district of the city.

As mentioned in previous studies the Central City area is the most established business node of the city, but from 1990 leading into the 2000s the CBD environment was in decline. This was due to; inflated rental rates pushing firms further away, a more spread client base connected by the freeways, suburban locations offering cheaper and larger tracts of land, options to build specialised office parks catering to the needs of modern businesses, reduced need for client contact for some sectors, and overall deterioration of the physical environment of the CBD (Dewar 2004). This together, with a lack of available space and the environment becoming outdated to contemporary business operations, contributes to the lack of commercial park development in the area. The absence of development in the South East is also a pattern documented in previous studies with pre-existing and current conditions not conducive to attracting the type of developments required by the business and professional services operating within Cape Town. Figure 4.2 overleaf shows the overall spread of the three variations of commercial park found in Cape Town. The major districts in which most of the parks fall indicates areas where economic activity is concentrated within that specific district, with regards to the parks falling outside those boundaries they fall within suburbs outside of the main areas of economic activity. These parks that fall outside the major district boundaries are included in Figure 4.1 as the suburbs still form a part of the major district mentioned.



(Source: Author survey 2019)

Figure 4.2 Spatial distribution of commercial parks in Cape Town

4.3.1 Office parks

The data collection process revealed a total of 59 office parks spread across Cape Town. Figure 4.3 below illustrates the distribution of the parks per major district in the city.

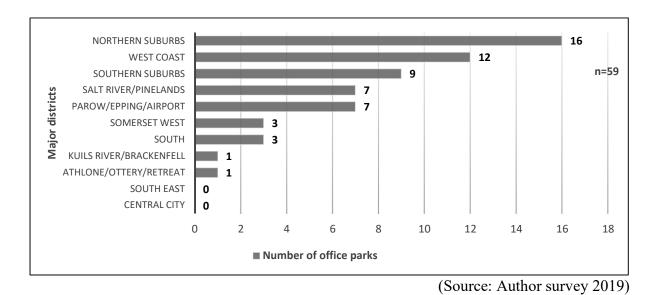
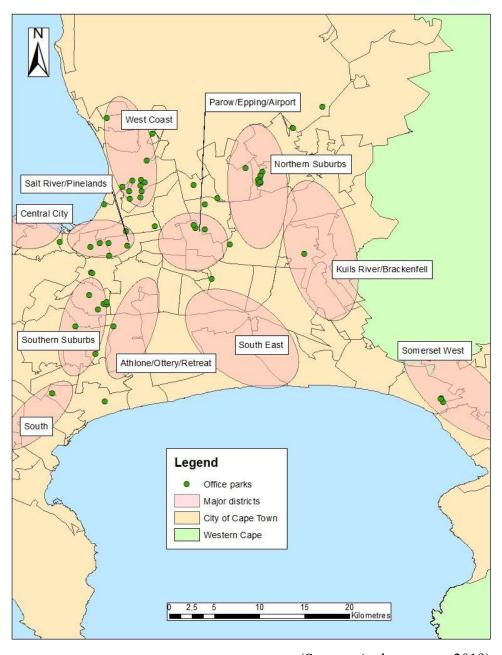


Figure 4.3 Distribution of office parks in Cape Town

There is a concentration of office parks in the Northern Suburbs of Cape Town with 16 out of the 59 parks (27%) being found in this area. Within the Northern Suburbs eight parks (50%) were located in Bellville, two in the Tygervalley area, two in the Plattekloof area and four in Durbanville. Twelve parks were located in the West Coast district with five parks in Milnerton, three in Century City, three in Montague Gardens and one park in Blouberg. In the Southern Suburbs nine parks were found with three parks located in Kenilworth, two parks in Constantia and one park found in each of Claremont, Rondebosch, Elfindale and Rosebank. Seven parks were located in Salt River/Pinelands district with two parks found in each of the Pinelands and Ndabeni areas, and one park in each of the Maitland, Zonnebloem and Observatory areas respectively. Seven parks were found in the Parow/Epping/Airport district with three parks located in Parow, two parks in Elsies River and one park found in Airport Industria, and Goodwood. Three parks were located in the Somerset West district with two parks in the Firgrove Rural and one park in Bakkershoogte areas respectively. Three parks were also located in the South district with one park found in the Westlake, Muizenberg and Sunnydale areas. The remainder of the parks include; one park in Kuils River in the Kuils River/Brackenfell district and lastly one park in Ottery in the Athlone/Ottery/Retreat district.

It is important to note that when looking at the spread of office parks in relation to traditional industrial locations it was seen that only ten of the total 59 office parks fell within traditional industrial locations. Out of the ten parks, three were found in Parow, two parks in Elsies River, and one park in Zonnebloem (previously District 6), and Observatory, Maitland, Rondebosch and Wetton areas respectively. This further illustrates the choice of location for office park spaces and reiterates the attraction of more peripheral suburban locations for commercial activity. Figure 4.4 illustrates the spread of office parks throughout Cape Town.



(Source: Author survey 2019)

Figure 4.4 Spatial distribution of office parks in Cape Town

4.3.2 Industrial parks

The data collection process revealed 44 industrial parks spread throughout Cape Town, the spread of the parks can be seen in Figure 4.5 and Figure 4.6 below. Spatial data shows the industrial parks present in eight of the 11 major districts throughout the city.

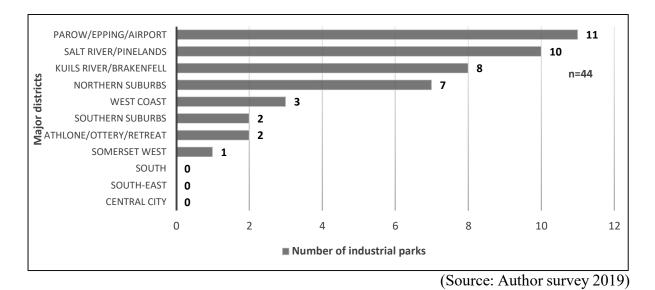
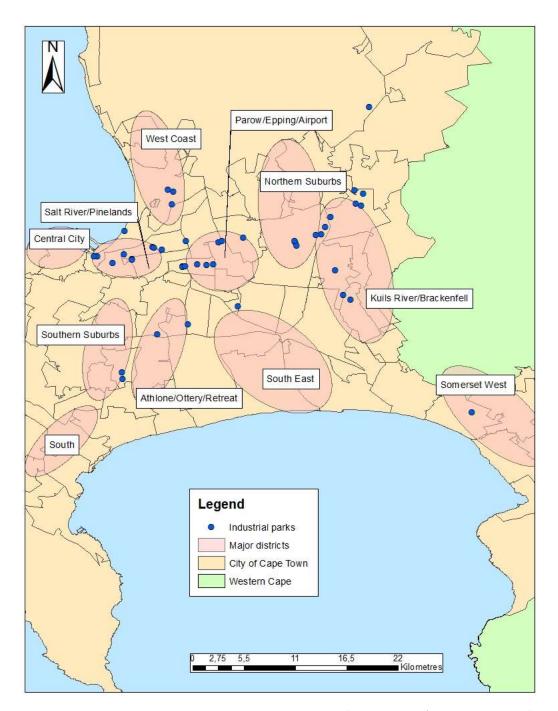


Figure 4.5 Distribution of industrial parks in Cape Town

The greatest concentration of industrial parks was found in the Parow/Epping/Airport location with 11 parks present. Within this district; six parks were located in Epping Industria (three in Epping Industria 1 and three in Epping Industria 2), two in the Elsies River area and one park each in the Parow, Goodwood and Airport Industria areas. The second most concentrated area was the Salt River/Pinelands district with ten industrial parks recorded in this location. Six parks were located in the Maitland area, two parks in Woodstock and one park in both the Observatory and Paarden Eiland locations. In the Kuils River/Brackenfell district eight parks were recorded with five parks in Brackenfell, two in Blackheath and one in Kuils River. In the Northern Suburbs seven industrial parks were noted with three parks found in both Stikland Industria and Bellville locations and one park found in Fisantekraal slightly north-east of Durbanville. Within the West Coast district three industrial parks were found all concentrated in the Montague Gardens area. In the Southern Suburbs two industrial parks were recorded, one in Diep River and one Elfindale. The Athlone/Ottery/Retreat district also contained two parks with one park found in both the Athlone and Ottery areas. Lastly one park was located in Somerset West in the Firgrove Rural area.



(Source: Author survey 2019)

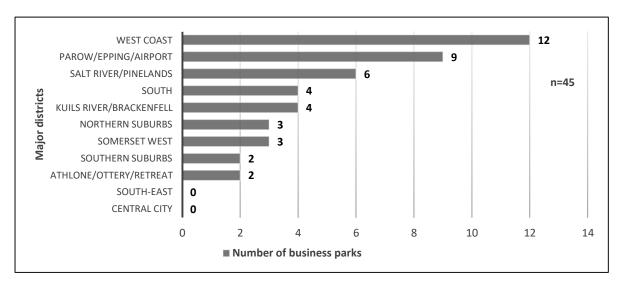
Figure 4.6 Distribution of industrial parks in Cape Town

When looking at the distribution of industrial parks in relation to traditional industrial locations it was noted about 45% (20 parks) of industrial parks fell within older industrial areas. Five industrial parks were found in Maitland, three industrial parks each in Epping Industria 1 and 2, two parks in Elsies River, and one park respectively in the Parow, Triangle Farm, Kensington, Athlone, Observatory, Wetton and Diep River areas. With respect to traditional industrial locations the number of industrial parks falling outside these areas differs only

slightly to those falling within, still demonstrating the importance of established manufacturing locations in the City of Cape Town. The presence of marginally more industrial parks in other locations contributes further to the decentralising trend of formal economic activity away from more traditional areas to peripheral locations.

4.3.3 Self-identifying business parks

Figure 4.7 below illustrates the spread of SIBPs found in the metropolitan area and Figure 4.8 overleaf shows the distribution of the parks. Compared to industrial and office parks, SIBPs were more prevalent than industrial parks with a total number of 45 SIBPs compared to 44 industrial parks, and less prevalent than the 59 office parks. Spatially concentrations were found in nine of the 11 districts throughout the city.



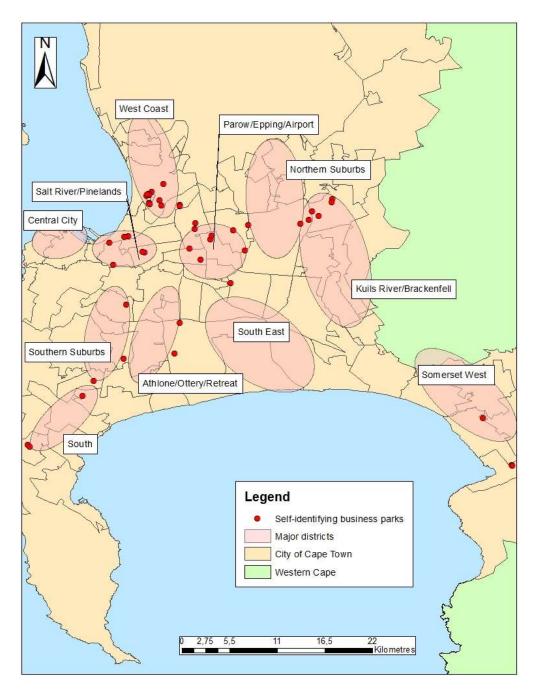
(Source: Author survey 2019)

Figure 4.7 Distribution of self-identifying business parks in Cape Town

The West Coast district holds the greatest concentration of business parks with 12 business parks recorded. Three business parks were found in Marconi Beam, and two business parks each in Milnerton, Montague Gardens, Edgemead and Century City locations, with lastly one park found in the Parklands area. The next most concentrated location was the Parow/Epping/Airport district with nine business parks noted. Two business parks were located in Parow, as well as two business parks in each of the Goodwood, Epping Industria and Elsies River areas. One final business park was recorded in the Airport Industria location. Six business

parks were found in the Salt River/Pinelands district with two business parks recorded in Brooklyn and one park in each of the following locations; Observatory, Pinelands, Paarden Eiland and Ndabeni. The South district contained four business parks with two parks located in Capri, and one park found in each of the Sunnydale and Tokai areas. The Kuils River/Brackenfell area showed four business parks present with all four parks located in the Brackenfell area. The Northern Suburbs contained three parks in total with two parks located in Stikland Industrial and one park located in Bellville. The Somerset West district also contains three business parks with two found in Gordons Bay and one in the Helderberg area of Somerset West. The Southern Suburbs displayed two business parks with one park found in Claremont and one other in Southfield. Lastly, two business parks were found in the Athlone/Ottery/Retreat with both the parks located in Philippi.

When comparing the locations of self-identifying business parks against traditional industrial locations eight (18%) self-identifying business parks (out of a total of 45) were found in more established industrial areas, with two parks found in each of the Parow and Elsies River areas. One business was then found in each of the Ndabeni, Epping Industria 2, Paarden Eiland and Observatory areas respectively. There are significantly more self-identifying business parks present outside of these central, established manufacturing areas contributing to the forementioned development pattern of commercial developments taking place further away from traditional areas towards more accessible suburban, residential locations.



(Source: Author survey 2019)

Figure 4.8 Distribution of self-identifying business parks in Cape Town

The spatial trends noted in the sections above outline the locations and distribution of the three different commercial park spaces encountered in Cape Town. The greatest concentration of commercial parks was seen in the West Coast, Northern Suburbs and Parow/Epping/Airport areas of Cape Town with 70% of the parks falling within these areas. When comparing findings of where these spaces are developing and previously stated development trends seen in the city, these commercial parks are displaying patterns which were established prior to 1994 and

solidified into the 2000s after Cape Town's fastest economic growth period between 2004 and 2007 (City of Cape Town 2016). The parks are spread unevenly across the city showing attractions to specific areas over others which sees clear concentrations develop with different variations in the type of park existing in close proximity to one another.

4.3.4 Zoning analysis of commercial parks

This section will pay specific attention to the zoning of the three variations of commercial parks in Cape Town and the specific zoning of the land parcels the parks fall on. Spatial zoning data used in the analysis was obtained from the City of Cape Town Open Data Portal (City of Cape Town 2018) and City of Cape Town Map Viewer (City of Cape Town 2019). Land use in Cape Town is decided according to zoning laws and zoning schemes which dictate what type of development is allowed to take place on a specific piece of land in the city. The City of Cape Town: Municipal Planning Amendment By-law 2017 (City of Cape Town 2017) is the most recent zoning regulation scheme and specifies each zoning variation according to a code and indicates what kinds of uses are permitted on the land, the size of the building development allowed, and other provisions that can be accommodated on the land parcel. Table 4.1 below illustrates the spread of the three variations of commercial park according to zoning designation in Cape Town. During the analysis the spatial zoning data for two parks was unattainable from the publically available zoning data.

Table 4.1 Zoning analysis of commercial parks

Zoning designation	Business parks	Industrial parks	Office parks	Total	% Sum of zonings
General Industrial 1-2	22	26	13	61	41.2
Transport Zoning 2	7	12	9	28	18.9
General Business 1-7	8	0	14	22	14.8
Mixed Use 1-3	2	3	5	10	6.7
Single Residential 1	2	1	2	5	3.4
Local Business 1	0	0	5	5	3.4

Zoning designation	Business parks	Industrial parks	Office parks	Total	% Sum of zonings
Local Business 2	2	1	3	6	4.0
Open Space 3	0	0	2	2	1.4
Transport Zoning 1	1	0	2	3	2.0
Utility	0	1	1	2	1.4
Agricultural Zone	1	0	0	1	0.7
General Residential 1	0	0	1	1	0.7
Open Space 2	0	0	1	1	0.7
Community 1	0	0	1	1	0.7
Total	45	44	59	148	100

(Source: Author survey 2019)

The analysis process identified 14 separate zoning designations (each zoning designation explained in full in Appendix C) in which the parks occupy, the most prevalent zoning being "General Industrial 1 and 2" (GI 1-2) with 41.2% of the total sum of commercial parks being located on land zoned for industrial use. Although 14 different zones were identified 75% of the total number of zoned parks fell within three subdivisions. Following GI 1-2 with 41.2% was "Transport Zoning 2" (TR 2) amounting to 18.9% showing another designated zoned parcel of land that is conducive to commercial park development. The "General Business" (GB 1-7) zone holds the third-highest percentage of zoned commercial parks with 14.8% of the total sum locating in general business areas. The three above-mentioned zones make up 75% of all zoned commercial parks showing a clear trend in the general zoning locations of commercial parks in Cape Town. The presence of 41.2% of zoned commercial parks in the GI 1-2 zones gives an indication that industrially zoned land is preferred for commercial park development and that industrial areas are where a majority of the parks are located. The zones containing the least percentage of commercial parks were the "General Residential 1" (GR 1), "Open Space 2" (OS 2), "Community Zoning 1" (CO 1) and "Agricultural Zoning" (AG) all containing one commercial park. The lack of presence in these zones speaks to the strict planning regulations that are enforced in Cape Town with dominant land uses remaining as promulgated by planning laws, but as affordable commercial spaces become increasingly scarce it could see land parcels zoned for other purposes be encroached upon for commercial economic activity.

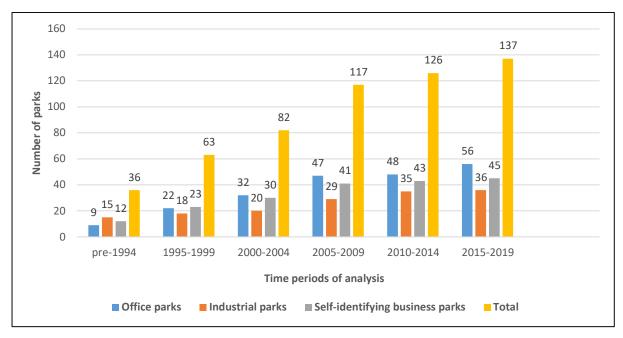
With reference to the spread of the three variations of commercial park some similarities and differences can be seen between industrial, office and SIBPs. Industrial parks and SIBPs both have over 40% of the total numbers present in zone GI 1-2 with industrial parks at 60%, and SIBPs with 49%. No self-identifying business parks were found in the "Utility Zoning" (UT), "General Residential 1" (GR 1), "Open Space 2" (OS 2) and "Community Zoning 1" (CO 1) designations as well as no industrial parks present in the "Local Business 1" (LB 1) and zones. The presence of two self-identifying business parks in the "Single Residential 1" (SR 1) zone may also be a cause for discussion as these zoning designations do not make provision for the development of office or business premises in that zone. One SIBP identified in the study was situated on "Agricultural Zoning" (AG) land located in Philippi in the Athlone/Ottery/Retreat district.

Results from the analyses shows a clear concentration of commercial parks in the north and west of Cape Town and can be related to previous locations of investment and development that have been sustained by the high values of the property and the socio-economic standpoint of those who live in these residential locations. The lack of development in the south-east of Cape Town is highlighted in this study once again and can be placed alongside the north and west of the city when discussing the reinforcing of older spatial trends and its impact on the city. This section looked at the spatial distribution of commercial parks spaces in Cape Town and was viewed in the context of an update on the spatial development trends seen in studies in the past. Trends off-set before the apartheid era ended were solidified by the developmental direction pursued by the city in the years leading up to, and after 1994 which morphed Cape Town into the complex urban system existing today. The following section will look at the temporal aspect of the study and will comment on the growth of commercial park spaces in post-apartheid Cape Town.

4.4 TEMPORAL ANALYSIS OF COMMERCIAL PARK SPACES IN CAPE TOWN

In the previous section the focus was on the spatial organisation of the different types of commercial park spaces in Cape Town which provided an over-arching image of where these parks are located and where the concentrations of these parks can be found. This section offers another viewpoint into these commercial parks spaces by providing a temporal aspect to the study. Temporal data was selected according to Surveyor General (SG)-approved dates signed on publicly accessible SG diagrams on databases hosted by the city of Cape Town. For analysis

purposes commercial parks with SG-approved dates falling before 1994 will be grouped in a custom time-interval "pre-1994", with the rest of the SG-approved dates being grouped in five-year periods to aid in comparing and analysing the temporal data. Figure 4.9 illustrates the growth of Cape Town's commercial parks spaces over time.



(Source: Author survey 2019)

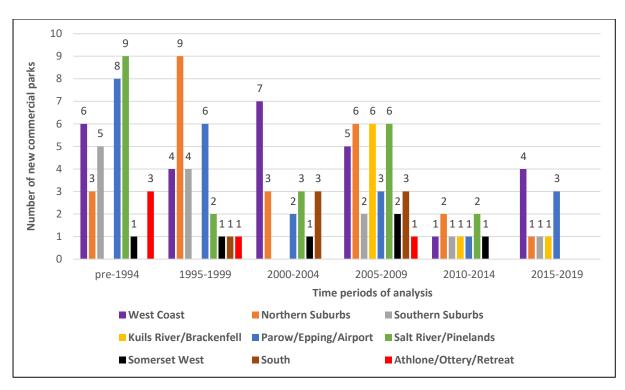
Figure 4.9 Growth of commercial park spaces in Cape Town over time

Acknowledging the limitations during the temporal data collection process Figure 4.9 above illustrates the pattern of growth the three variations of commercial park spaces encountered from pre-1994 until the present date. In line with the limitations the database of industrial park SG-approved dates was affected the most by the limited availability of SG data. In total the SG data of nine industrial parks and two office parks was unattainable. In leading up to 1994 the most prevalent variation of commercial park was industrial parks with 15 parks by 1994 followed by SIBPs with 12 and office parks with nine and a total of 36 commercial parks. In 1999 the number of SIBPs was higher than that of industrial parks with 23 parks recorded compared to 18 industrial parks and 22 office parks, also illustrating a 75% increase in total parks numbers since 1994. From 1999 onwards self-identifying business parks experienced higher growth and greater numbers than industrial parks but began to lag behind the growth of office parks. By 2004 the number of office parks at 32 began to exceed both industrial parks

with 20 and SIBPs at 30 emphasising the increasing demand for office spaces Cape Town experienced during this period. Percentage growth over the ten-year period for commercial parks was 128% in 2004. The pattern of growth indicated by the figure shows the most growth-intensive five-year period for all three variations of commercial park was between 2004 and 2009 where the total percentage increase in park numbers was 43%. Office park numbers increased by 47% from 32 to 47, industrial parks increased from 20 to 29 with a percentage increase of 45% and self-identifying parks with a percentage increase of 37% from 30 to 41 parks.

From 2010 until present the growth of these commercial park spaces has slowed especially in the case of industrial parks but patterns still display an increase in the population of parks in the city. The slowing of growth can be attributed to a decrease in available land for development as well as periods of slower economic growth in the Cape Town economy. At the conclusion of the temporal data collection process for commercial parks the number of office parks had increased from 48 parks in 2010 to 56 parks by 2019, industrial parks increased from 35 to 36 parks in total, and lastly self-identifying business parks from 43 parks to 45 parks in total. Conclusions from this analysis indicate similar growth-intensive periods for the commercial parks with all three variations experiencing the highest growth rates between 2004 and 2009. The rates of growth for the parks slowed after 2009 but the slight increases in numbers still indicate future growth in the number of parks in the city.

The growth of commercial park spaces can be analysed according to the major spatial districts outlined in the beginning of the chapter. Figure 4.10 overleaf illustrates the growth of commercial parks per major district in Cape Town according to new parks established during the five-year periods after 1994.



(Source: Author survey 2019)

Figure 4.10 Growth of commercial park spaces in Cape Town

As illustrated in Figure 4.10 prior to 1994 not all of the districts contained any variation of commercial park with mainly; the Northern Suburbs (three parks), Southern Suburbs (five parks), Salt River/Pinelands (eight parks), the West Coast (six parks), Parow/Epping/Airport (seven parks), Athlone/Ottery/Retreat (three parks) and, Somerset West (one park) contained commercial park spaces. Between 2004 and 2010 park numbers grew in all of the districts with major growth occurring in; Northern Suburbs by eight parks, Salt River/Pinelands with an addition of eight parks and the West Coast by seven parks. Steady and slowing growth periods can be seen between 2010 and present with slight increases in the number of across all of the districts. Over the study period the West Coast and Northern Suburbs showed the largest increases per district with possible reasons being the availability of cheaper land as well as being situated within economic growth points of the city. Four districts did not experience any additions in parks between 2014 and 2019 with the South, Athlone/Ottery/Retreat, Somerset West, and Salt River/Pinelands areas all recording the same figures. The Parow/Epping/Airport district experienced the highest increase in parks with three additional parks added after 2014 with the other districts all increasing by one or two parks in the period between 2014 and 2019.

4.5 CONCLUSION

This chapter aimed to outline the spatial distribution as well as the temporal evolution of commercial park spaces in Cape Town. The spatial and temporal data can be linked to broader decentralising urban processes noted in Cape Town with the West Coast and Northern Suburbs being mentioned in previous research as economic growth areas with high potential for absorbing the economic activity fleeing the CBD and more traditional economic centres (Sinclair-Smith & Turok 2012). A lack of commercial park development in the South-East of Cape Town further solidifies trends from the early 2000s of absent development and growth in the most economically disadvantaged and undeveloped parts of the city.

The spatial data indicates a clear concentration of parks in West Coast, Northern Suburbs, Parow/Epping/Airport, and Salt River/Pinelands districts of the city with up to 70% of the parks falling within these areas. The temporal analysis provided an indication of the growth periods each variant of commercial park encountered per major district in the city and also showed the contrast in the numbers and growth of self-identifying business parks against the prevalence of industrial and office parks in Cape Town. Major growth periods noted were between 2004 and 2010 with the West Coast, Northern Suburbs, and Salt River/Pinelands districts experiencing the most pronounced growth. With regards to the zoning of the parks, three zoning designations hold 75% of all the parks with the "General Industrial 1 and 2" (GI 1-2) "Transport Zoning 2" (TR 2) and "General Business" (GB 1-7) being the most encountered land zoning designations. "General Industrial 1 and 2" (GI 1-2) holds the greatest share of zoned commercial parks with 41.2% indicating the older industrial spaces are being reconfigured to accommodate more modern and diverse business needs.

Following this overview of all commercial park spaces the following chapter will focus specifically on the prevalence of self-identifying business parks in Cape Town with the goal of uncovering the physical characteristics and configurations of these park spaces.

CHAPTER 5 A MICRO-ANALYSIS OF SELF-IDENTIFYING BUSINESS PARKS

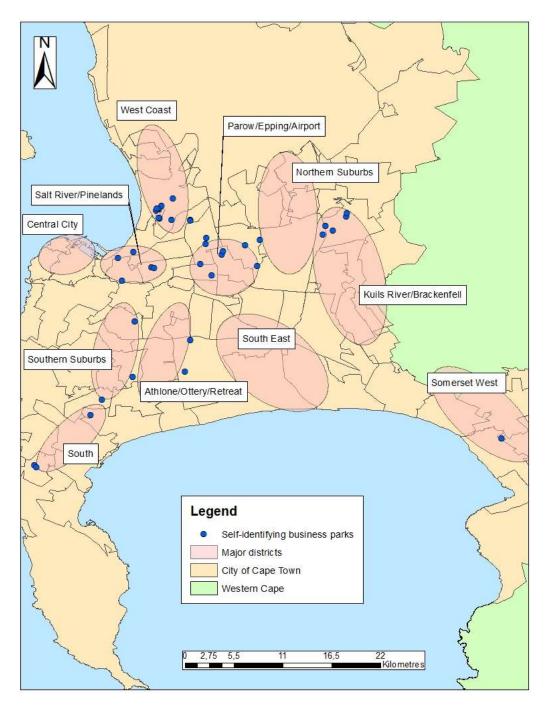
5.1 INTRODUCTION

The aim of this chapter is to highlight the varying as well as common physical characteristics of business park spaces found in Cape Town, and to help paint a more holistic image of the configurations of these parks. Contributing to this investigation are both primary and secondary sourced data collected by the researcher throughout the research process. This chapter will address objective three of the research by exploring the physical characteristics of SIBPs.

The following sections will report the surveyed SIBPs, elements of security encountered at park visits, the sizes of the SIBPs, the number of parking spaces, and the presence (if any) of green spaces within the park premises. The SIBP visits were conducted with the goal of uncovering the structural organisations of the parks and the physical make-up of these types of commercial spaces. The information presented in this chapter is aligned to the following chapter looking at the nature and types of business operations that take place within SIBPs in Cape Town.

5.2 SURVEYED SELF-IDENTIFYING BUSINESS PARKS

From the total of 45 SIBPs a random sample of 39 parks was selected and visited by the researcher with the goal of observing the business park space through a lens of four identified parameters including security elements, park sizes, parking facilities and presence of green spaces, all of which will be mentioned in the sections and sub-sections to follow. Figure 5.1 displays the 39 surveyed SIBPs in Cape Town. The SIBPs visited included; 11 in the West Coast district, eight in the Parow/Epping/Airport district, five in Salt River/Pinelands district, four each in the South and Kuils River/Brackenfell district, two each in the Athlone/Ottery/Retreat, Southern Suburbs and Northern Suburbs, and lastly one SIBP in the Somerset West district.

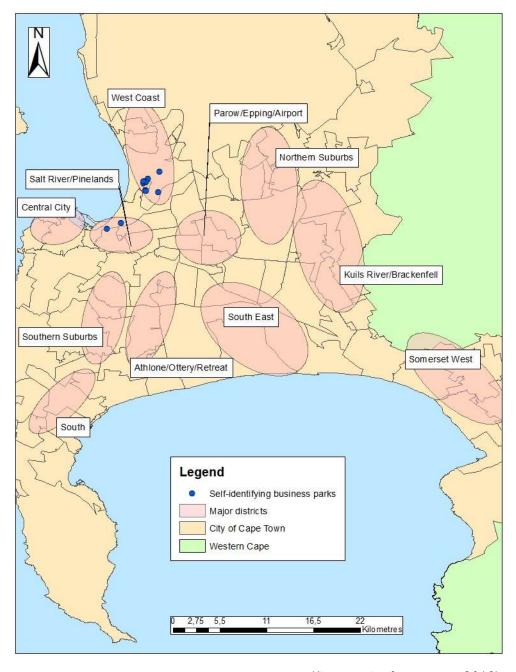


(Source: Author survey 2019)

Figure 5.1 Surveyed self-identifying business parks in Cape

With regards to park visits different modes of transport were used to reach the parks with a private car (including Uber services) and the public MyCiti bus system (depending on the areas the parks are found), all used more than once throughout the duration of the data collection process. After the data collection process it was noted only 11 of the sampled 39 SIBPs were accessible through the MyCiti bus system with the remainder requiring private transport. Figure

5.2 illustrates the SIBPs accessed through public transport. Of the 11 SIBPs accessible through the MyCiti bus system nine were located in the West Coast district and two in the Salt River/Pinelands district demonstrating where the MyCiti bus stops are concentrated in the city. The lack of accessibility to the SIBPs through the MyCiti bus system also gives an indication of the reliance on private car transport for both the employees within and the customers of the SIBPs.



(Source: Author survey 2019)

Figure 5.2 Self-identifying business parks accessed through the MyCiti bus system

Depending on the mode of transport used at each visit the researcher either entered the parks on foot or within a car or, if allowed entry, would begin to collect data from within the various parks. Figure 5.3 below illustrates the 10 (out of 39) SIBPs where the researcher was denied entrance to the premises. Six of the 10 SIBPs that denied the researcher access to the premises were found in the West Coast district, followed by one park in each of the South, Salt River/Pinelands, Parow/Epping/Airport, and Kuils River/Brackenfell districts respectively.



(Source: Author survey 2019)

Figure 5.3 Self-identifying business parks where access was denied

This section presented the SIBPs visited by the researcher during field research highlighting the parks reachable by the MyCiti bus system which were found mainly in the West Coast and Salt River/Pinelands areas. The parks in which the researcher was denied access to also lead into the topic of the following section, the proliferation of security features in SIBPs.

5.3 SECURITY FEATURES OF SELF-IDENTIFYING BUSINESS PARKS

Security and insecurity form a key aspect of the urban fabric encountered today and the commercial landscape in Cape Town is no different. Private security services are encountered on a daily basis for urban residents in most African cities and are made ever-present by inadequate public police services and the general sentiment amongst people to lack complete trust in the public police system (Abrahmsen & Williams 2011). Yarwood and Paasche (2015) also make reference to the securing of territory and the use of space to exclude people and values that perceive to threaten those within secure controlled spaces. Private security companies in this context are contracted to secure and control spaces for commercial, retail or residential purposes. With the private sector gaining more control over the urban landscape Elden (2010) refers to a privatisation of space where commercial interests are strong enough to control the policing and securing of spaces within urban settings. As the private sector gains a greater foothold on securing urban space, it translates onto the street level with the presence of physical barriers and person-power to control people and activities "that do not conform to the assigned purposes of these spaces" (Paasche, Yarwood & Sidaway 2014: 1561).

South Africa has one of the biggest private security sectors in the world in terms of its contribution to the country's GDP and has been a core component of the country's development since the 1970s (Yarwood & Paasche 2015). Stemming from the apartheid era the private security sector has been a part of urban South African life and has been stimulated by a continuation in high rates of crime and violence throughout the country. A constant fear of crime has become synonymous with South African urban landscapes and contributes to the ubiquitous nature of private security services found in cities (Lemanski 2006). While examining SIBPs as a component of the built environment of Cape Town, encounters with private security services and other elements constituting security were exceedingly common during the data collection process of visiting the 39 randomly sampled SIBPs. The omnipresence of private security services at SIBPs in Cape Town further emphasised the obsession with security/insecurity in South Africa mentioned in the literature and were seen as

inseparable from the SIBP space no matter the location (Abrahmsen & Williams 2011). Elements of security identified include the presence of signs and surveillance, perimeter barriers, guards and use of logbooks.

5.3.1 Signs and surveillance

The first element of security in SIBPs to be discussed is the prevalence of surveillance cameras and security warning signage encountered during field research. Where the researcher was permitted access to the SIBPs, information regarding the observable presence of cameras as well as notices of "24-hr armed monitoring and response" and similar displays were recorded as being found in the park. Entrance to ten SIBPs was denied and thus reduces the sample number to 29 SIBPs for the purpose of this section looking at signs and surveillance within the parks. In a total of 29 SIBP visits, three (10.3%) of the parks did not contain any elements of surveillance or security signage, in contrast to the remaining 26 parks (89.6%) that had both warning signage and security cameras throughout the various park spaces. Figure 5.4 illustrates examples of such security signage encountered at SIBPs. The presence of rapid response security services and 24-hour monitoring in almost all of the SIBPs emphasises the importance of security to those involved in management of the park, as well as the tenants. Upon arriving at the entrances to some SIBPs it was also noted that certain of them tended to have more visible security measures in terms of guards, surveillance and perimeter barriers than others such as in the Century City, Bellville, Brackenfell and Milnerton areas. When examining commercial property websites pertaining to SIBPs included in the study it was found that security is a key selling point in the advertisements to those wishing to rent and locate business operations in a secured, shared business park spaces (Ikon Group 2019, Commercial Space 2019, Anvil Property 2019).



(Source: Google Street View 2019)

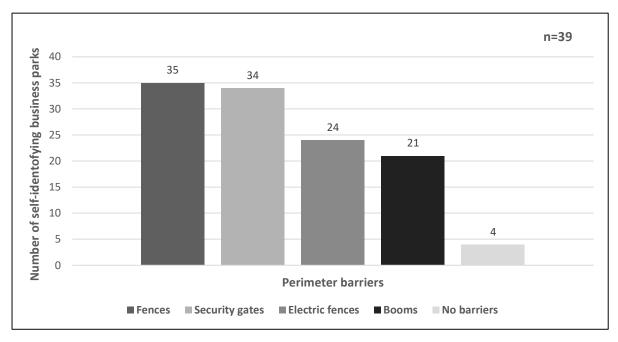
Figure 5.4 Examples of security signage seen in self-identifying business parks in (a)

Somerset West and (b) Brackenfell

The three parks which did not contain any notices of security services and video surveillance were found in Philippi in the Athlone/Ottery/Retreat district, Parow Industria in the Parow/Epping/Airport district and Ndabeni in the Salt River/Pinelands district, and according to SG data were established in 1966, 1999 and 2003 respectively. In visiting these three slightly older SIBPs in particular the spaces were noted as much smaller in terms of total number of units, and more informal arrangements of business operations within the boundaries of the park such as in Philippi where the SIBP is home to a non-profit city-council development program (Oasis Place 2019). The surrounding areas of these parks looked much older and dilapidated in comparison to other parks found in the West Coast, South or the Southern Suburbs and yet it was in these spaces in the more developed, safer areas that had greater security measures. It was also noted larger SIBPs also tended to have more of a security presence whether it be the amount of signage or surveillance seen on site or the nature of the encounters between the researcher and the security guards at park entrances.

5.3.2 Perimeter barriers

The second element of security to be discussed is the perimeter barriers of the SIBPs, which are booms, security gates, fences, electric fences and walls. Even if the researcher was denied entry to the SIBPs, information regarding the perimeter barriers was still recorded. Figure 5.5 below illustrates the variation of perimeter barriers of SIBPs visited.



(Source: Author survey 2019)

Figure 5.5 Types of perimeter barriers encountered in self-identifying business parks in Cape

Town

Throughout the data collection process the first observable point of the SIBPs was the access point and the nature of perimeter security upon entry or refusal of entry into the parks. The most commonly found perimeter barriers included security gates with 34 (87%) SIBPs and fencing on the perimeter in which 35 (90%) SIBPs all had. Electric fencing was the next most common perimeter security measure with 24 (62%) SIBPs having electrified security usually found above the fencing surrounding the property. Presence of booms at entry and exit points formed the next common feature with 54% of SIBPs having controlled booms on the premises with further analysis showing 51% of parks having both security gates and controlled booms and entry and exit points on the property. One SIBP manager in Century City mentioned the importance of controlling movement in and out of the premises which houses multiple units

with high-value technology and equipment. In this instance there had been a case where security was compromised (Pers com 2 2019). Figure 5.6 illustrates examples of perimeter barriers at entry points encountered at SIBPs in Cape Town.



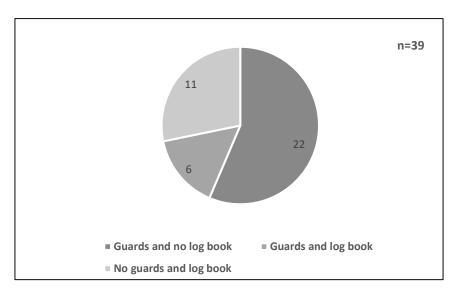
(Source: Google Street View 2019)

Figure 5.6 Examples of entry points found in self-identifying business parks in (a) Epping and (b) Airport Industria

Two parks were found to have no entry or exit point barriers but still had fencing and electric fencing surrounding the perimeter. Lastly, only two parks in the sampled number of SIBPs did not have any form of perimeter security barriers with these parks being found in Ndabeni and Paarden Eiland in the Salt River/Pinelands district. The SIBP in Paarden Eiland consisted of one standing block of units of multiple stories and had a different structure compared to other SIBPs which were usually of single or double-story structured units. Perimeter barriers form the boundaries of control for the SIBPs and the presence of electric fencing and secure gates on the urban space represents a communication of ownership and control of activities and operations within those boundaries. The security-manned perimeter barriers encountered at the entrances of parks speak to the controlling of space seen at SIBPs with dedicated entry and exit points controlling the traffic and movement in and out of park premises.

5.3.3 Guards and logbooks

The final security element to be looked at is the presence of guards and presentation of logbooks upon entry into the SIBPs. When visiting the parks any contact with a guard at the entrance to the park was recorded whether denied or allowed entry into the premises. With reference to Figure 5.7. Eleven (28%) parks did not have a guard at the entry and exit points of the park, at six parks (16%) encounters with guards and presentation of log books was recorded, and for the majority 22 (56%) parks only guards with no log books were encountered at the entry and exit points. Only once allowed access by the security was the logbook presented to the researcher.



(Source: Author survey 2019)

Figure 5.7 Presence of guards and logbooks at self-identifying business parks

Guards were usually found in stations or rooms situated at the entrance or on the side of the entrances to the parks as seen in Figure 5.8, and often included more than one security guard on duty at the same time. Throughout the park visits guards were not seen patrolling the perimeter and once permitted access did not present any further impediment to the collecting of information within the SIBPs.



(Source: Google Street View 2019)

Figure 5.8 Security guard rooms at a self-identifying business park in Philippi

The proliferation of security elements encountered throughout the SIBPs points to security being a core component of the commercial park landscape with the tenants of the parks wanting assurance their company or business activities and assets are safely housed. The policing of the spaces are outsourced to PSCs who exclusively control and shape the space into what property associations and property owners desire it to be. The extent of the presence of private security forces can be linked back to South Africa's powerful private security sector and the prevalence of security measures in all variations throughout SIBPs in Cape Town. This highlights the demand for security companies and the services they provide and ties in with the dominant and thriving private security sector South Africa is home to (Abrahmsen & Williams 2011), and the presence of fortified neoliberal spaces in general.

5.4 PHYSICAL CHARACTERISTICS OF SELF-IDENTIFYING BUSINESS PARKS

Aside from observing elements of security, the physical make-up of these shared business spaces was also a focus of interest in the study into finer details of SIBPs in Cape Town as well as into the term business park itself. In the build up to the analysis of the types of business operations that take place within SIBPs, this section will pay attention to the physical characteristics of the parks namely the size of the park with reference to the number of units and size of the land parcel (square metres), the number of parking spaces provided, and the presence (if any) of open green spaces and elements of ecological considerations within the SIBPs. Throughout the data collection process inadequate data was obtained for ten parks out

of 39 due to denied access, time constraints of SIBP visits, and the size of the SIBPs in some cases and thus have been excluded from the study.

5.4.1 Sizes of self-identifying business parks

The first structural aspects of SIBPs to be discussed is the number of units and the size of the land parcel in which the SIBP lies. In this study units refer to individual company spaces in SIBPs with the size of the parks measured in square metres. Data pertaining to the sizes of the erven (land parcels) were found and compared using two online databases provided by the City of Cape Town and the Western Cape Department of Agriculture (City of Cape Town 2019, WCDoA 2019). Figure 5.9 illustrates the sizes of all 45 SIBPs, the sizes were divided into three categories and termed "small", "medium" and "large".

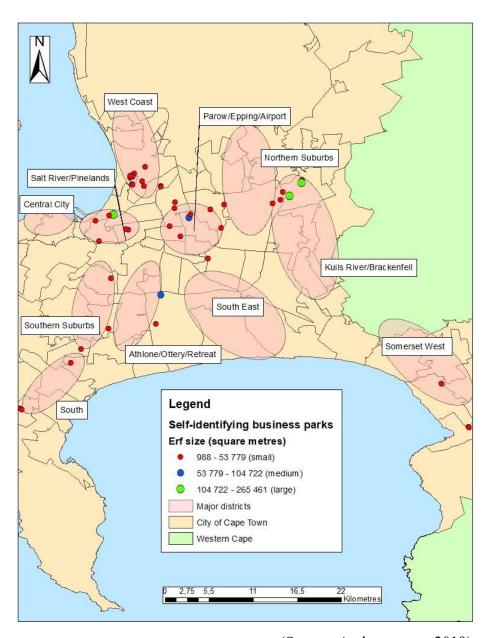
Thirty-nine (86%) of the SIBPs are classified as small with perimeters ranging between 988m² and 53 779m² and are the most prevalent of SIBP size located in Cape Town and are spread throughout nine of the 11 districts (Figure 5.9). Notable trends for the small SIBPs include 11 (28%) of parks located in the West Coast, eight (21%) parks in the more industrial areas in Parow/Epping/Airport areas and also five parks in the Salt River/Pinelands area. Three (7%) large SIBPs were identified with sizes ranging between 104 722 m² and 265 461m² with two of the three largest SIBPs are found in Brackenfell in the Kuils River/Brackenfell district and the third found in Brooklyn within a larger gated complex in the Salt River/Pinelands district. Three SIBPs (7%) were classified as medium-sized with perimeters ranging between 53 779m² to 104 722m² found in Philippi in Athlone/Ottery/Retreat and, Epping and Elsies River in Parow/Epping/Airport. In addition to Figure 5.9 is Table 5.1, linking the sizes of the SIBPs with the year in which they were established.

Table 5.1 Size of self-identifying business parks and year of establishment

Year of self- identifying business park establishment	Small (988m²- 53 779m²)	Medium (53 779m²- 104 722m²)	Large (104 722 m² - 265 461m²)
Pre-1994	9	2	0
1995-1999	12	0	0
2000-2004	7	0	0

Year of self- identifying business park establishment	Small (988m²- 53 779m²)	Medium (53 779m²- 104 722m²)	Large (104 722 m² - 265 461m²)
2005-2009	8	1	3
2010-2014	2	0	0
2015-2019	1	0	0
Total (45)	39	3	3

(Source: Author survey 2019)



(Source: Author survey 2019)

Figure 5.9 Self-identifying business parks according to erf sizes

When viewing the sizes of the SIBPs a majority 39 parks (86%) classified as small with nine parks (23%) being established before 1994. Four of the parks were found in the West Coast with two parks in Edgemead, one in Milnerton and one in Montague Gardens. One park was found in Epping, in the older industrial areas found in the Parow/Epping/Airport district. The remaining four parks were each found in Gordons Bay in Somerset West, Claremont in the and Southern Suburbs, Paarden Eiland in Salt River/Pinelands Philippi Athlone/Ottery/Retreat. The period between 1995 and 1999 saw the majority of the small SIBPs constructed with 12 (30%) parks built. The 12 parks were spread between seven districts with three parks found in the Parow/Epping/Airport in Parow, Epping and Goodwood in slightly older industrial areas. Two parks were located in the Northern Suburbs in Bellville and Stikland Industrial, as well as two parks in Salt River/Pinelands in Observatory and Pinelands. Two parks were also located in the West Coast found in Milnerton and Tijgerhof. The remaining three parks were located in Tokai in the South, Southfield in the Southern Suburbs and one park in Somerset West.

Seven parks were established between 2000 and 2004 with four of the parks concentrated in the West Coast, with three parks in Marconi Beam and one park in Montague Gardens. Two of the remaining three parks were located in the South district in Capri and Tokai, and one park in Ndabeni in Salt River/Pinelands. Between 2005 and 2009 eight parks were constructed with two parks built in Brackenfell in the Kuils River/Brackenfell district and two parks on the West Coast in Phoenix and Century City. Two parks were also constructed in Airport Industria and Goodwood in the Parow/Epping/Airport district. The remaining parks two parks were found in Capri in the South and Brooklyn in Salt River/Pinelands. Between 2010 and 2014 two parks were constructed and were located in Stikland in the Northern Suburbs and Gordons Bay in Somerset West. The final small SIBP was the only park constructed between 2015 and 2019 and is located in Elsies River in Parow/Epping/Airport.

Three medium-sized parks were identified with two parks established before 1994 located in Milnerton in the West Coast and Epping in the Parow/Epping/Airport district. The most recently built purpose-built medium-sized SIBP was established between 2005 and 2009 and is located in Philippi in the Athlone/Ottery/Retreat district. Three large SIBPs were also identified with all three parks being established between 2005 and 2009, two of the three parks were located in close proximity to one another in Brackenfell in the Kuils River/Brackenfell district, and the third park located in Brooklyn in Salt River/Pinelands. Four of the six medium and large SIBPs were built between 2005 and 2009 indicating an increase in demand for large

parks in this period, with the period between 1995 and 1999 being the most growth intensive period of small SIBPs in Cape Town. Small SIBPs are spread throughout Cape Town with major concentrations on the West Coast and in the Parow/Epping/Airport district. Large SIBPs were found in more industrial locations emphasising the need for space for large production and manufacturing activities.

The second element of size to be looked at is the number of units in SIBPs. It must be noted in the larger SIBPs unit numbers were difficult to derive when unit numbers or signage were not available. SIBP unit numbers ranged from the lowest at five to the highest at 377 units. The smallest park in terms of units was found in Paarden Eiland (Salt River/Pinelands) in the form of one three-storey, multi-purpose office and storage building with five office suites and the remainder of the space utilised for storage as seen in Figure 5.10 (City of Cape Town 2019).



(Source: City of Cape Town 2019)

Figure 5.10 Smallest self-identifying business park in terms of units (indicated by red border and yellow shading)

The SIBP with the highest number of units was found in Mowbray (Salt River/Pinelands) with 377 units spread over 28 buildings in multiple office complexes of three to four floors each, as indicated in Figure 5.11. Units in this SIBP included spaces for various office, storage and manufacturing operations. This site, according to Internet searches, was previously a blanket manufacturing factory but has now been reconfigured to meet the needs of more modern and newer business activities.

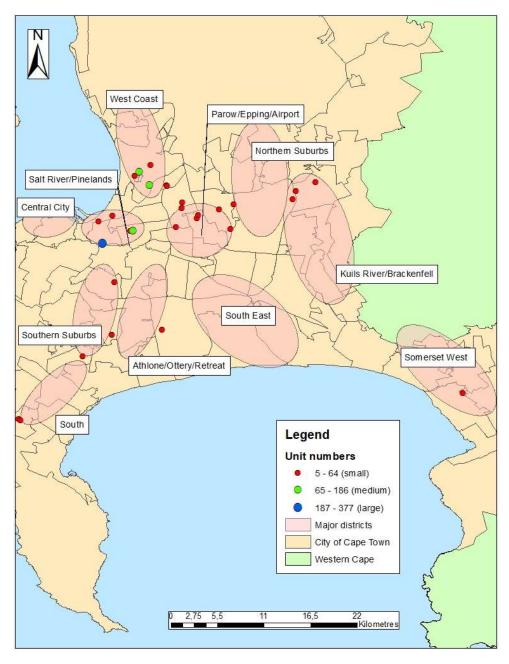


(Source: City of Cape Town 2019)

Figure 5.11 Largest self-identifying business park in terms of unit numbers (indicated by red border and yellow shading)

Unit numbers and sizes of SIBPs varied across the city with the structure and types of units businesses occupy also varying from location to location. Figure 5.12 overleaf illustrates the sizes of SIBPs in terms of unit numbers classified into three categories of "small", "medium" and "large". Of the parks surveyed the total number of business units recorded was 1 424 with the average number of units per business park at 49 units. When examining the data, 25 SIBPs (86%) of the parks were classified as small and had unit numbers at or below 64. These small

SIBPs are spread throughout the study area. Three SIBPs were classified as medium-sized in terms of the number of units with three SIBPs containing units ranging between 65 and 186. These parks were located in Century City and Milnerton in the West Coast, and one SIBP in Pinelands in Salt River/Pinelands. One large SIBP was identified had 377 units in total and was found in Mowbray in Salt River/Pinelands (see Figure 5.11).



(Source: Author survey 2019)

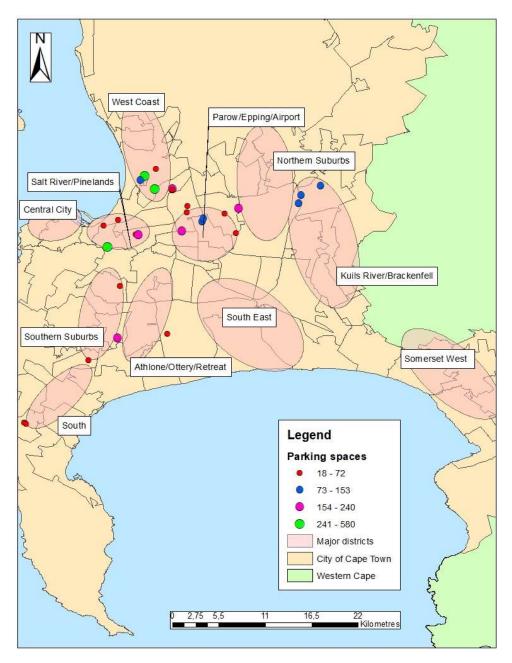
Figure 5.12 Number of units in self-identifying business parks

This section addresses the sizes of SIBPs in terms of the erf sizes and the number of units found in the surveyed SIBPs. In summary 87% of SIBPs surveyed were classified as small in terms of erf sizes and 86% as small SIBPs in terms of unit numbers. The large SIBPs in terms of perimeter sizes are located in Brackenfell in Kuils River/Brackenfell and in Brooklyn in Salt River/Pinelands. The largest SIBPs in terms of units were located in the West Coast and in Salt River/Pinelands with possible reasons being small companies who do not require as much space as a manufacturing operation occupying the spaces within the parks as well as there being more space available. This next section will look at the provision of parking spaces in SIBPs

5.4.2 Parking provision at self-identifying business parks

When visiting the sampled SIBPs the number of parking spaces was also investigated together with the sizes of the SIBPs to provide an indication of whether the SIBPs are developed and revolve around car-centric transport. In assessing the layout of the SIBPs parking was afforded for both tenants and visitors with spaces located throughout the park. It was noted that in some SIBPs space for parking was a matter of concern such as in one park in Tokai (South) (Pers com 2 2019) and parks in Elsies River Industrial (Parow/Epping/Airport) (Pers com 4) where the volume of cars whether tenant or visitors was over the capacity of the park. This can be related to the reliance on private car ownership as well as vehicular transport for goods existing in these park's spaces. Figure 5.13 overleaf shows the spread of recorded parking spaces in SIBPs in Cape Town.

The smallest number of parking spaces found in an SIBP was 18 spaces found in Goodwood in the Parow/Epping/Airport district and the largest amount of parking spaces afforded for found in Mowbray in the Salt River/Pinelands district with 580 (see Figure 5.11). The average number of parking bays recorded in the study was 132 parking bays per SIBP indicating a moderate allowance for parking in line with the more prevalent size of SIBPs found as small SIBPs.



(Source: Author survey 2019)

Figure 5.13 Parking spaces in self-identifying business parks

Parking requirements may also vary between tenants of parks with some companies requiring large parking bays for fleets of trucks or heavy construction vehicles. In some of the larger SIBPs open spaces with overgrowth within the premises were used for parking of private cars and large logistics trucks belonging to companies in the park. Four SIBPs visited allowed increased space for parking beneath the office units or building at the ground level, these parks were found in Century City (West Coast), Montague Gardens (West Coast), Stikland (Northern

Suburbs) and Capri (South). Following the investigation into the sizes of the parks an analysis into the presence of green spaces in SIBP will be covered.

5.4.3 Green spaces in self-identifying business parks

Green spaces in the SIBPs was determined by the presence of maintained or open tracts of lawn, flower beds and garden spaces and the presence of trees inside the premises of the park, green spaces found at the entrances outside the perimeter of the park were not recorded. Green spaces were observed in the study to understand if green elements were important for the aesthetics and image of the park, and whether it was a feature at all the physical landscape of the park. Five parks were noted as having maintained gardens and lawn spaces and were found in Century City (West Coast), Philippi (Athlone/Ottery Retreat), Tokai (South), Brackenfell (Northern Suburbs) and Milnerton (West Coast). In addition, these parks were all established between 1996 and 2009 and upon visiting the parks were seen as newer-built spaces with dedicated green spaces. These parks have demarcated areas for the upkeep of lawns and gardens and add to the visual aesthetics of the SIBP spaces and to the value gained by the tenants of such spaces.

The manager of a SIBP in Century City mentioned specifically the importance of the garden to the body corporate of the park and the hiring of a professional who maintains the green spaces found within (Pers com 1 2019). This same park in Century City also uses recycled water from the park to maintain the gardens and buildings to prevent the usage of municipal water. On three instances parks were seen to have an overgrowth of grass and weeds in sections in the park which were used for parking purposes and were not included in the study as green spaces. Weeds and overgrowth can be viewed as green spaces but were not classified as such in the context of this study. In total 19 (68%) of the SIBPs did not contain any green spaces with the manager of one park in Pinelands (Salt River/Pinelands) stating the park is 'water-wise' and has chosen not to have any green spaces to conserve water consumption (Pers com 3 2019).

In the context of Cape Town where water and open stretches of land are becoming increasingly scarce it was important to highlight the presence of any green spaces seen within the SIBP spaces. From visiting the SIBPs and experiencing the space from within the secured boundaries green spaces are not found uniformly throughout the parks in the city. Only select parks such as in Philippi (Athlone/Ottery/Retreat) Century City (West Coast) and in Brackenfell (Kuils River/Brackenfell) which have more infrastructure as well as space than others, are afforded

green spaces. In terms of its contribution to the SIBP space besides the aesthetic value of maintained greenery, these spaces can be used for recreational and social purposes, or potential land being preserved for further development within the park. Keeping this in mind other SIBPs located in areas just as crowded by development do not contain any green spaces and use the majority of the open spaces for parking space.

5.5 RESEARCHER EXPERIENCES IN SELF-IDENTIFYING BUSINESS PARKS

Throughout the field research the researcher utilised two different modes of transport to gain access to the 39 sampled SIBPs identified in the study, namely the MyCiti bus systems and a private car. In total 11 parks were reachable through the MyCiti bus service and were limited to this due to the lack of city-wide provision of bus stops and stations. Seven SIBPs had MyCiti stops directly outside or a short walking distance away from the park location and mentioned the presence of public transport access on park websites. In using two different modes of transportation the researcher either entered the premises on foot or within a car as a passenger.

As the SIBP visits through public transport ended it became clear that private security personnel were reluctant to allow the researcher entrance while on foot compared to within a car despite outlining the same reasons for entering the park throughout the research process. Interactions with security personnel were also less when entering the parks within a car. If permitted access to the parks the security personnel explicitly stated that no photographs were allowed to be taken within the park. On some occasions security services also made it clear it was "body corporate rules" and by strict instruction to not allow entry to any person without permission or an appointment with tenants inside the park. If denied entry to the premises by security, access to park management or members of the body corporate on site was sought after. This too was limited as only seven of the 39 parks had individuals involved in management of the park on site when requested. Through speaking with the management in the parks where possible, security was outlined as one of the main concerns for the well-being of the park's tenants and the reputation of the park.

Aside from the security factors, while conducting research within the SIBPs the close proximity between businesses and the number of units sometimes squeezed together stood out in a number of parks. The co-habitation and competition for commercial space between diverse business operations makes these SIBP spaces sites of economic development and connectivity in Cape Town. After conducting field research and recording the characteristics of the parks it

was noted all the parks had similar security elements and features, further than this the parks all had differences in units, elements of green spaces, parking arrangements, and services provided giving these spaces a unique character which can be linked to the surrounding urban landscape.

5.6 CONCLUSION

This chapter looked to highlight some of the key physical features encountered in SIBPs throughout the data collection process. Elements of security were analysed and identified as a main physical component of SIBPs with perimeter barriers of gates and fencing as well as electric fencing working in tandem to fortify the parks. The presence of private security and rapid response signage in almost all of the sampled parks indicate the need by the tenants of these places for a highly secure workplace environment. The control over spaces being one of the defining factors behind the private policing of places.

In leading up to the next chapter on the types of business operations that take place in SIBPs, the outlining of the number of units and number of parking bays was necessary to inform the character (in some cases) of spaces needed, used and shared by a diverse range of business operations. In looking at the sizes of the SIBPs the smaller parks were most prevalent throughout the city with 87% of parks being classified as small. The number of units in the parks gave an indication of the intensity of clustering taking place within the parks and also the different capacities of SIBPs to house multiple commercial activities. The analysis into the physical characteristics of SIBPs will play a further role in upcoming chapters, where the nature of business operations found in SIBPs further shapes what the park spaces may look like and the types of services afforded to tenants of the parks. The following chapter will analyse the types of business operations that take place within SIBPs according to the Standard Industrial Classifications, to investigate the types of businesses in SIBPs in Cape Town.

CHAPTER 6 BUSINESS ACTIVITIES IN SELF-IDENTIFYING BUSINESS PARKS

6.1 INTRODUCTION

This chapter concentrates on the nature of business activities located within identified SIBPs in Cape Town which adds to the micro-analysis of SIBPs in the previous chapter. In fulfilment of objective three it was key to investigate the types of businesses that inhabit these SIBP spaces and to explore whether SIBPs in Cape Town can be linked to definitions and trends noted in the literature on the potential occupants and sector-specifics of business park spaces. During the data collection process as much information on the nature of business activity was recorded at the SIBPs where access was granted to the researcher. The business activities recorded were then organised and coded according to Standard Industrial Classification (SIC) guidelines to provide a detailed representation of the economic sectors and types of businesses that are located in these SIBPs. Each SIBP in the study population will be analysed according to the dominant SIC code for businesses identified within the park, with the most prevalent SIC codes in all of the SIBPs then selected for further analysis. At the conclusion of the data collection processes (as mentioned in the previous chapter) the researcher was denied access from ten of the sampled 39 SIBPs and thus the chapter's unit of analysis is 29 surveyed SIBPs. Similar access issues were also encountered in studies of other gated secure spaces (Spocter 2013, Spocter 2016, Mistry 2019)

This chapter will firstly explain the rationale behind using the SIC system and the structure of the classifications used. Secondly, illustrations of the spatial variations of SIC codes noted within SIBPs spread throughout areas of Cape Town will be discussed. Lastly, a temporal analysis will show the SIC code variation in relation to the SG-approved dates of the establishment of the SIBPs, and spatial-temporal information pertaining to the growth of different sectors and areas in Cape Town over time.

6.2 USING SIC CODES AS A SURVEY METHOD

The SIC codes used in the study are derived from the third revision of the International Standard Industrial Classification (ISIC) and which were adjusted accordingly to match the sectors and activities of the South African economy (South African Reserve Bank 2011). The SIC of all economic activities (Statistics SA 1993) is structured according to the ten broad divisions (1 to

0) covering the spectrum of economic activity in South Africa. All of these divisions contain a further four subdivisions within the specific SIC section code relating to specific activities that are found within the sector. Phillips and Ormsby (2016) discuss the benefits of using classifications in aiding explorative and comparative analyses across all disciplines and state that "likeness and unlikeness" amongst the categories of business and industry and work to define what a company is and is not, and also includes what it does and does not do within the framework (Phillips & Ormsby 2016:2). Table 6.1 illustrates the ten broad SIC code divisions and descriptions used in the study.

Table 6.1 SIC codes and divisions

Standard Industrial Classification (SIC) code	Divisions
SIC 1	Agriculture, hunting, forestry and fishing
SIC 2	Mining and quarrying
SIC 3	Manufacturing
SIC 4	Electricity, gas and water supply
SIC 5	Construction
SIC 6	Wholesale and retail trade: repair of motor vehicles, motorcycles and personal and household goods; catering and accommodation
SIC 7	Transport, storage and communication
SIC 8	Financial intermediation, insurance, real estate and business services
SIC 9	Community, social and personal services
SIC 0	Private households, extra-territorial organisations, representatives of foreign governments and other activities not adequately defined

(Source: South African Reserve Bank 2011: 54)

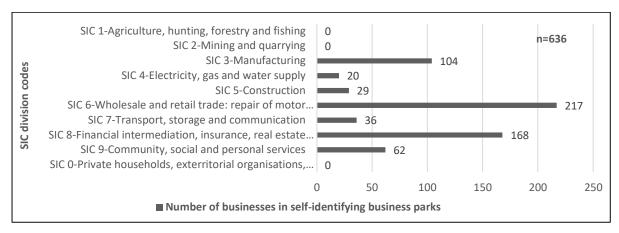
Given the unit of analysis, business activities were analysed in line with two of the subdivisions of the SIC section categories in order to illustrate the variation in types of business activities

taking place within SIBPs in Cape Town (see Appendix D for expanded SIC division codes discussed in the chapter). The next section will deal with the spatial variation of the broad, dominant SIC codes encountered at SIBPs.

6.3 SPATIAL VARIATION OF SIC CODES IN SELF-IDENTIFYING BUSINESS PARKS IN CAPE TOWN

From the 29 surveyed SIBPs a total of 636 businesses were recorded and coded according to the South African Reserve Bank Institutional Sector Guide (South African Reserve Bank 2011) with further clarifications provided by the SIC guidelines (Statistics SA 1993). All the businesses recorded were cross-checked with Internet searches to confirm the nature of business activities of companies before the SIC codes were added to the database. Businesses were classified according to the first two levels of SIC codes providing a business-categorised database of economic activities for each SIBP surveyed. For the initial SIC analysis, all the businesses in the SIBPs were assigned a SIC code according to the most prevalent SIC first-level division code found within the parks.

The SIC code variation found in surveyed SIBPs shows a variety of economic activity taking place within the parks. These spaces house a number of different businesses that fall into different divisions and sub-divisions of the SIC code and illustrate shared spaces between different types of businesses operations. Figure 6.1 below displays the total number of businesses recorded in the study divided into the ten broad SIC divisions.

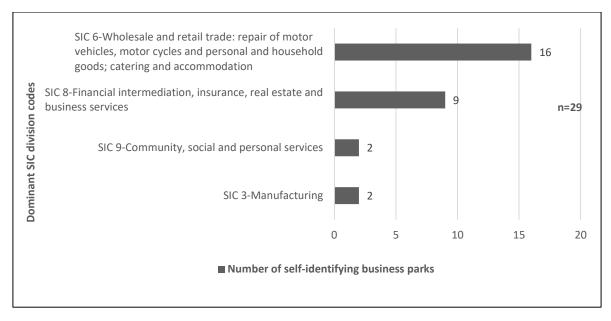


(Source: Author survey 2019)

Figure 6.1 Total businesses and SIC division codes of surveyed self-identifying business parks

Seven of the ten SIC division codes for businesses were encountered at the surveyed SIBPs (Figure 6.1). The following business activities were not present at any SIBPs in this study; SIC 1 (agriculture, hunting, forestry and fishing), SIC 2 (mining and quarrying) and SIC 0 (private households, extra-territorial organisations, representatives of foreign governments and other activities not adequately defined). It is clear that four SIC categories dominate the surveyed landscape with SIC 6 (wholesale and retail trade: repair of motor vehicles, motor cycles and personal and household goods; catering and accommodation), SIC 8 (financial intermediation, insurance, real estate and business services) and SIC 3 (manufacturing) and SIC 9 (community, social and personal services) constituting 551 (87%) of all the businesses encountered during the fieldwork procedure (the percentages used in this section are rounded off figures). The most encountered SIC code for businesses was SIC 6 with 217 (34%) companies involved in associated activities. The next most prevalent business activity recorded was SIC 8 with 168 businesses (26%) involved in service sector and related activities in SIBPs. SIC 3 was recorded as the third-most dominant SIC for businesses with 104 (16%) businesses involved in manufacturing operations and activities. SIC 9 follows SIC 3 with 62 (10%) businesses providing community, social and the personal services. The remaining 85 businesses (13%) fall within SIC 4, SIC 5 and SIC 7. SIC 7 involving transport, storage and communication totalled 36 (6%) businesses, SIC 5 with 29 (5%) businesses relating to construction services, and SIC 4 with 20 (3%) businesses involving activities to do with the production and distribution of electricity, gas and water. This section looked at the total distribution of the ten SIC division codes found in surveyed SIBPs with four SIC divisions culminating 87% of businesses found in the SIBP environment (see Figure 6.2).

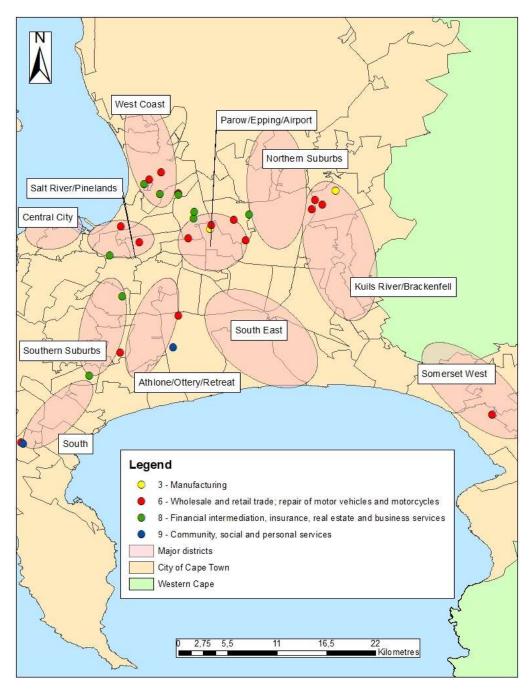
Further analysis into the SIC codes uncovered dominant SIC divisions of business activities taking place in SIBPs. Figure 6.2 overleaf illustrates the most dominant industrial sector classification encountered at SIBPs.



(Source: Author survey 2019)

Figure 6.2 Dominant SIC division codes found in surveyed self-identifying business parks

In all the parks only four of the ten first level SIC division codes are represented as the dominant code (Figure 6.2). It must be noted that the dominant SIC division codes are not an all-encompassing representation of the economic activity in the SIBPs visited. These totals present a broad introduction to the types of businesses mostly found in SIBPs. Figure 6.2 complements Figure 6.3 overleaf and shows the spread of the dominant SIC division codes in Cape Town.



(Source: Author survey 2019)

Figure 6.3 Spread of dominant first level SIC codes in surveyed self-identifying business parks

In relation to Figure 6.2 and Figure 6.3, from the 29 surveyed SIBPs 16 parks (55%) had dominant SIC division codes SIC 6, indicating a concentration of activities pertaining to wholesale and retail trade; repair of motor vehicles and motorcycles found in more than half of the SIBPs surveyed. The locations of these SIBPs were spread throughout nine of the 11 major

districts in Cape Town (see Section 4.2 in Chapter 4). The Parow/Epping/Airport district contains four parks with predominantly wholesale and retail trade; repair of motor vehicles and motorcycles activities. These parks were found in Elsies River Industria, Parow East, Parow Industria and Epping areas. In the West Coast district three parks were identified with dominant division code SIC 6 and were located in Edgemead, Montague Gardens and Milnerton. In the Salt River/Pinelands district two parks were located in Ndabeni and Brooklyn respectively. Two SIBPs were also located in Kuils River/Brackenfell district in the Brackenfell and Brackenfell South areas. The remaining five SIBPs with a dominant SIC division of SIC 6 were individually scattered between the South found in Capri, Athlone/Ottery/Retreat located in Philippi, Somerset West, Stikland Industrial in the Northern Suburbs and in Southfield in the Southern Suburbs district.

The next most dominant SIC division code found in SIBPs was SIC 8 relating to financial intermediation, insurance, real estate and business services and was found in nine (31%) of the parks surveyed. The spatial distribution of the nine SIBPs includes three parks located in the West Coast district, the SIBPs were found in the Century City, Milnerton and Edgemead areas. Two SIBPs were located in the Parow/Epping/Airport district with both SIBPs found in the Goodwood area in close proximity to one another. The remaining four parks were individually located in Tokai in the South, Observatory in Salt River/Pinelands, Bellville in the Northern Suburbs, and Claremont in the Southern Suburbs. It was noted that one park located in Stikland Industrial had two dominant SIC divisions found within the park, with SIC 6 and SIC 8 businesses dominating the SIBP space. One other SIBP located in Capri in the South also contained activity comprising of two dominant classifications with SIC 3 and SIC 6 making up most of the population of businesses in the park.

The manufacturing division SIC 3, and community, social and personal services division SIC 9 constituted the remaining four SIBPs surveyed in the study with two SIBPs (7%) in each division. SIBPs containing businesses with the dominant SIC 3 were located in Brackenfell in the Kuils River/Brackenfell district and Elsies River in the Parow/Epping/Airport district. SIBPs with a dominant code of SIC 9 were located in Capri in the South and in Philippi in the Athlone/Ottery/Retreat district. It is worth noting the SIBP classified as SIC 9 located in Philippi is not a typical business park when compared to the rest of the SIBP sample. The park is home to a community development organisation that provides educational and employment opportunities for community members in the surrounding areas. This was the only SIBP of its kind encountered in the study sample of SIBPs. The following section will focus on the four

most featured SIC codes with the analysis reaching further subdivisions of the SIC classification guidelines.

6.4 FOCUS ANALYSIS OF DOMINANT SIC CODE VARIATIONS IN SELF IDENTIFYING BUSINESS PARKS

The four SIC division code variations SIC 3, SIC 6 and SIC 8 and SIC 9 were the most dominant in the SIBPs surveyed. This section will explore which of the second-level subdivisions of the four dominant major division codes were encountered most frequently at SIBPs. The tables provided in the sections to follow have been derived from the publications of the South African Reserve Bank (2011) and the SIC Fifth Edition (Statistics SA 1993).

6.4.1 Analysis of SIC division code SIC 6

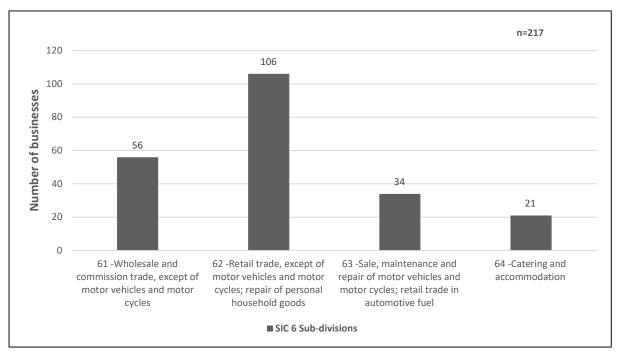
The most prevalent SIC division code in SIBPs was SIC 6, and within SIC 6 are four subdivisions as seen in Table 6.2 which provide greater detail to the business activities in SIC 6.

Table 6.2 SIC 6 Sub-divisions and descriptions

SIC 6 Sub- divisions	Descriptions	Examples of business activities in the surveyed parks
61	Wholesale and commission trade, except of motor vehicles and motorcycles	Food and beverages, stationery, hardware, clothing, furniture, electrical supplies
62	Retail trade, except of motor vehicles and motorcycles; repair of personal household goods	Clothing, cosmetics, tea and coffee, food and beverages, sports equipment, tobacco products, office equipment, locksmiths, plumbing
63	Sale, maintenance and repair of motor vehicles and motorcycles; retail trade in automotive fuel	Car sales, car repairs, motorcycle repairs, auto-body shops, paint workshops
64	Catering and accommodation	Catering, cafés, fast-food outlets, kiosks, restaurants

(Sources: South African Reserve Bank 2011: 54 and Author survey 2019)

In accordance with the sub-divisions in Table 6.2, the total number of businesses falling under SIC 6 are analysed as seen in Figure 6.4 to highlight which sectors within SIC 6 feature the most in surveyed SIBP spaces.



(Source: Author survey 2019)

Figure 6.4 Total number of businesses in SIC 6 and SIC 6 sub-divisions

With Figure 6.4 as a reference, the most frequent SIC 6 business activity encountered at SIBPs was sub-division 62, with 106 (49%) businesses dealing with retail trade and the repair of personal household goods (not of motor vehicles and motorcycles). Sub-division 61 involving wholesale and commission trade (not of motor vehicles and motorcycles) has significantly less the total number sub-division 62 has, with 56 (26%) business falling within the sub-division. Sub-division 63 detailing the sale of automotive fuel, and sale, maintenance, repair of motor vehicles and motorcycles has the second-least amount of businesses classified with 34 (16%) businesses in total. The final sub-division of SIC 6, sub-division 64 dealing with catering and accommodation has the least amount of businesses classified with 21 (10%) businesses in total. Ultimately it is the wholesale and retail sectors that hold the greatest population of SIC 6 businesses in the surveyed SIBPs. Overall only two of the total 29 SIBPs did not contain any SIC 6 business activities. These two parks were located in Philippi in the Athlone/Ottery/Retreat division, and Montague Gardens in the West Coast. The wholesale and retail activities encountered at surveyed SIBPs were noted generally for occupying smaller unit spaces in terms of size with varying types of wholesale and retail trade taking place alongside one another.

6.4.2 Analysis of SIC division code SIC 8

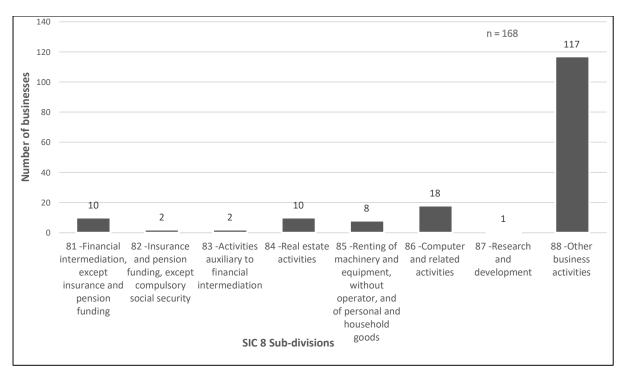
The next SIC division to be analysed in SIC 8 relating to financial intermediation, insurance, real estate and business services. Within SIC 8 are eight sub-divisions as seen in Table 6.2.

Table 6.3 SIC 8 Sub-divisions and descriptions

SIC 8 Sub- divisions	Descriptions	Examples of business activities in the surveyed parks
81	Financial intermediation, except insurance and pension funding	Banking services, financial advisors, finance companies
82	Insurance and pension funding, except compulsory social security	Health insurance, corporate insurance, life-insurance
83	Activities auxiliary to financial intermediation	Insurance brokers
84	Real-estate activities	Property agents, real-estate companies
85	Renting of machinery and equipment, without operator, and of personal and household goods	Car rental, sound equipment, heavy machinery, clothes, corporate event equipment
86	Computer and related activities	Computer repairs, software developers, IT security companies, software providers, IT system installations
87	Research and development	Medical research companies
88	Other business activities	Employment agencies, marketing companies, media companies, engineering, accounting, legal functions, architects, consulting companies, foreign exchange trading,

(Sources: South African Reserve Bank 2011: 55 and Author survey 2019)

With reference to the sub-divisions in Table 6.3, the total number of businesses falling under SIC 8 are seen in Figure 6.5 overleaf as to discover which sectors within SIC 8 feature the most in surveyed SIBP spaces.



(Source: Author survey 2019)

Figure 6.5 Total number of businesses in SIC 8 and SIC 8 sub-divisions

Displayed is the distribution of sub-divisions of SIC 8 found in SIBPs (Figure 6.5). This section dealing specifically with professional and business services comprises the second-highest number of classified businesses in SIBPs. SIC division 8 activities were found in all but three of the SIBPs surveyed with one park being located in Ndabeni in Salt River/Pinelands, and the remaining two in Philippi in Athlone/Ottery/Retreat. From SIC 8, sub-division 88 referring to other business activities not specified in other sub-divisions, clearly dominates the appearance of SIC 8 businesses in SIBPs. From the total of 168 businesses coded as SIC 8 117 (70%) of businesses are classified as other business activities. Following sub-divisions 88, sub-division 86 involving all computer-based activities is the second most prevalent SIC 8 business activity found in surveyed SIBPs with 18 (11%) businesses recorded. Sub-divisions 81 referring to financial intermediation and 84 relating to real estate activities have ten businesses (6%) in each sub-division. In this instance there is a need to clarify what is constituted by "other business activities" which refers to legal, accounting, bookkeeping and auditing activities; tax consultancy; market research and public opinion research; business and management consultancy, architectural, engineering and other technical activities, advertising and business activities not elsewhere specified. With SIC 8 occupying the second-highest number of business classifications there is an indication that the professional services sector (much like

the wholesale and retail sector) are attracted to these secure SIBP spaces. The strong presence of SIC 8 businesses also solidifies the increasing role of professional and business services sectors rendered and in demand in Cape Town.

6.4.3 Analysis of SIC division code SIC 3

Manufacturing classified as SIC 3 is the third-most dominant SIC division code amongst businesses recorded. SIC 3 contains 10 sub-divisions as indicated by Table 6.4 below.

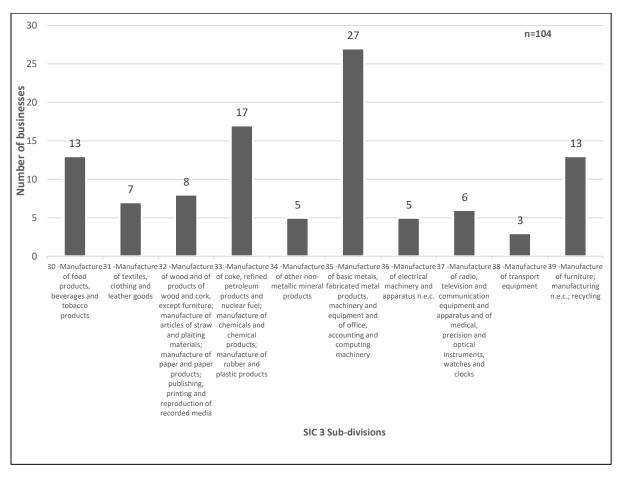
Table 6.4 SIC 3 Sub-divisions and descriptions

SIC 3 Sub- divisions	Descriptions	Examples of business activities in the surveyed parks
30	Manufacture of food products, beverages and tobacco products	Food and beverage manufacturers
31	Manufacture of textiles, clothing and leather goods	Clothing, fabrics
32	Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; manufacture of paper and paper products; publishing, printing and reproduction of recorded media	Printing companies, poster and pamphlet manufacturers, corporate gift manufacturers, manufacture of plaiting materials, manufacturing of kitchen fittings
33	Manufacture of coke, refined petroleum products and nuclear fuel; manufacture of chemicals and chemical products; manufacture of rubber and plastic products	Industrial cleaning supply manufacturers, fertiliser manufacturers, plastics manufacturers, sports equipment
34	Manufacture of other non-metallic mineral products	Glass manufacturers
35	Manufacture of basic metals, fabricated metal products, machinery and equipment and of office, accounting and computing machinery	Steel manufacturers, computer manufacturers, printing manufacturers, specialised machine manufacturers, bronze works
36	Manufacture of electrical machinery and apparatus not elsewhere classified (n.e.c)	Manufacturing of electrical machines, components and cables, manufacturers of lamps and lighting equipment
37	Manufacture of radio, television and communication equipment and apparatus and of medical, precision and optical instruments, watches and clocks	Manufacturing of medical equipment and supplies, manufacturing of communication equipment, lens manufacturers

SIC 3 Sub- divisions	Descriptions	Examples of business activities in the surveyed parks
38	Manufacture of transport equipment	Boat manufacturers, railway car manufacturers, truck tanker manufacturer
39	Manufacture of furniture; manufacturing n.e.c.; recycling	Home and office furniture manufacturers, recycling companies

(Sources: South African Reserve Bank 2011: 54 and Author survey 2019)

In line with the sub-divisions in Table 6.4, the total number of businesses falling under SIC 6 are analysed as seen in Figure 6.6 below.



(Source: Author survey 2019)

Figure 6.6 Total number of SIC 3 and SIC 3 sub-divisions

Figure 6.6 deals with the proliferation of manufacturing operations in SIBPs surveyed in Cape Town. Manufacturing activities were the third most encountered business activity with 104 businesses coded as SIC 3 and related activities. Manufacturing activities were found in 23 (80%) of the 29 surveyed SIBPs. From the total 104 businesses recorded in SIC 3 sub-division 35 was the most frequently encountered manufacturing activity with 27 (26%) businesses classified as being involved in the manufacturing of basic metals, fabricated metal products, machinery and equipment and office, accounting and computing machinery. Following subdivision 35 is sub-division 33 with 17 (16%) businesses dealing with the manufacturing of coke, refined petroleum products and nuclear fuel, chemicals and chemical products, and manufacture of rubber and plastic products. Sub-divisions 30 with 13 (13%) companies and 39 also with 13 (13%) companies make up a further 26% of the SIC 3 division codes recorded in SIBPs. The presence of both large and small companies in the manufacturing sector indicates that is not only companies providing professional or business services and wholesale and retail operations to the public locating in secured SIBP spaces. The manufacturing sector, although experiencing a reduction in activity in Cape Town as a whole, still features in the urban structure of Cape Town.

6.4.4 Analysis of SIC division code SIC 9

SIC 9 involving community, social and personal services is the last dominant SIC division code observed in the study and features in Table 6.5 below.

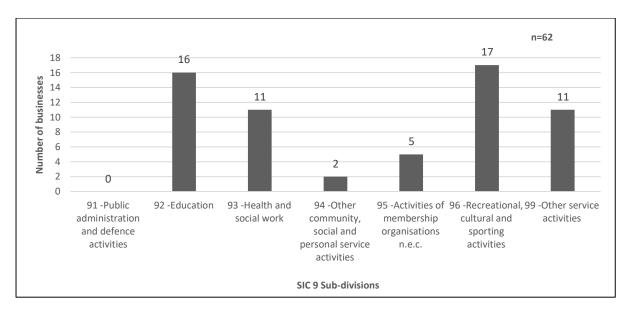
Table 6.5 SIC 9 Sub-divisions and descriptions

SIC 9 Sub- divisions	Descriptions	Examples of business activities in the surveyed parks
91	Public administration and defence activities	Not applicable
92	Education	Hospitality schools, beauty schools, sound engineering schools, animations schools, film schools, extra-lesson providers, engineering and medical training centres, design schools
93	Health and social work	Physiotherapists, rehabilitation centres, dentists, occupational therapy

SIC 9 Sub- divisions	Descriptions	Examples of business activities in the surveyed parks
94	Other community, social and personal service activities	Community development projects
95	Activities of membership organisations n.e.c.	Churches, sports organisations
96	Recreational, cultural and sporting activities	Gyms, dance studios, music studios, cross-fit gyms, event hosting, sound engineering companies
99	Other service activities	Cleaning services, funeral services

(Sources: South African Reserve Bank 2011: 55 and Author survey 2019)

In connection with Table 6.5, Figure 6.7 analyses the population of business activities classified under SIC 9 and the seven SIC 9 sub-divisions.



(Source: Author survey 2019)

Figure 6.7 Total number of businesses in SIC 9 and SIC 9 sub-divisions

SIC 9 is the fourth-dominant SIC division code encountered at SIBPs and amounts to a total of 62 businesses in all of the SIBPs surveyed. Of the 29 surveyed SIBPs community, social and personal services were encountered in 22 (76%) of the parks. The 62 businesses encountered are distributed between six of the seven sub-divisions that fall under SIC 9 as seen in Figure

6.7. SIC 9 sub-division 96 relating to recreational, cultural and sporting activities is the most prevalent sub-division with 17 (27%) companies followed by sub-division 92 relating to educational activities with 16 (26%) companies. Sub-divisions 93 concerning health and social work activities and 99 including other service activities both had 11 (18%) companies each classified within the divisions. The remaining seven (11%) businesses were classified between sub-divisions 95 and 94. Sub-division 95 pertaining to the activities of member organisations was the second-least encountered business activity in SIC 9 with five (8%) companies in total followed by sub-division 94 including other community, social and personal service activities with two (3%) companies in total. The presence of SIC 9 business activities alongside manufacturing, business and wholesale and retail activities highlights the diversity of business activities taking place within SIBPs in Cape Town.

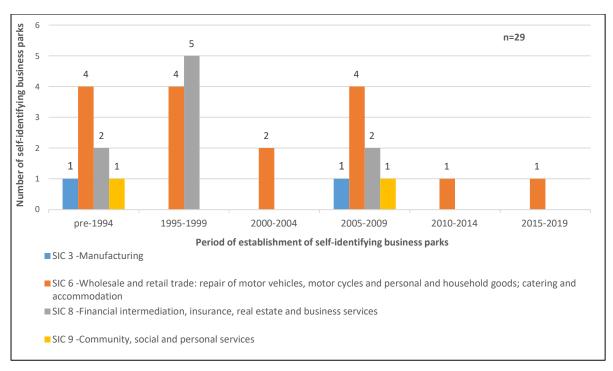
6.4.5 Summary

SIC divisions 6, 8, 3 and 9 are the most dominant SIC division sectors encountered in SIBPs in Cape Town. SIC 6 was the most dominant of the sectors being found in 93% of SIBPs surveyed. Within SIC division 6 sub-division 62 held the greatest concentration of businesses indicating shops and retail outlets of varying products are densely populating the SIBP landscape with small and large retailers electing for secured business park locations for their operations. The high population of retail activities in SIBPs speaks to Luger and Goldstein (1991) and Sinclair-Smith and Turok (2012) who mentioned that secured business park spaces are popular locations for administrative and sales functions as well as various retail activities. SIC division 8 representing the financial intermediation, insurance, real estate and business services sector are found in 90% of the SIBPs surveyed, signifying the importance the sector plays in the contemporary spatial economy of Cape Town. This sector was ear-marked by Sinclair-Smith and Turok (2012) as the fastest growing sector in city with its demand and supply growing throughout different areas of the city. The dominant presence of the manufacturing sector in 80% surveyed SIBPs speaks to the role the manufacturing sector still holds in Cape Town's spatial economy despite a decrease in overall activity, whether large or small, manufacturing activities SIBPs appear to accommodate the needs of the sector. Lastly, the presence of SIC 9 business activities in 22 of the 29 SIBPs (76%) emphasises the adaptability of SIBPs in Cape Town in the diversity of companies it may host, as well as connections to literature cited from international business park studies. Examples of business parks originating from the global North emphasise the co-location of light-industrial operations, business and office functions, retail activities, storage and distribution operations as well as other extended services such as gyms and leisure activities which can be related to the research findings at surveyed SIBPs in Cape Town (Hogg & Nilon 2015, Hwang, Zhu & Tan 2016).

6.5 TEMPORAL ANALYSIS OF SIC CODE VARIATION IN SELF-IDENTIFYING BUSINESS PARKS

Following the analysis of the spatial variation of SIC codes in Cape Town this section looks to uncover the temporal aspect of the SIC variation found in surveyed SIBPs. This section will compare the dominant SIC division codes assigned to the surveyed SIBPs in relation to when the parks were established according to SG-approved data previously referred to in Chapter 4. Figure 6.8 displays the temporal variation of dominant SIC divisions in surveyed SIBPs.

In line with Figure 6.8 overleaf the dates in which the SIBPs and its assigned SIC division codes are displayed. In total 16 SIBPs containing a dominant division SIC 6 were recorded, four of the parks were established before 1994, four parks between 1995 and 1999, two parks between 2000 and 2004, four parks between 2005 and 2009, and lastly two parks established between 2010 and 2019. Figures indicate companies classified as SIC 6 have been occupying SIBP spaces from before 1994 with the trend continuing till 2019. Dominant division SIC 8 constitutes nine of the 29 SIBPs with two parks established before 1994, five of the parks being established between 1995 and 1999 and lastly two parks established between 2005 and 2009. With reference to SIC 3, two of the SIBPs were classified as SIC 3 and were established before 1994 and between 2005 and 2009. SIC 9 was also assigned to two SIBPs with one park established before 1999 and one park established between 2005 and 2009.



(Source: Author survey 2019)

Figure 6.8 Temporal variation of dominant SIC divisions in surveyed self-identifying business parks

The most significant temporal trend derived from the data is the five SIBPs classified as SIC 8 being established between 1995 and 1999. From this period into the 2000s the finance, business and professional services sector expanded rapidly (Sinclair-Smith & Turok 2012) and the appearance of SIBPs with SIC 8 codes being established around this time indicates SIBPs as a potential prime location for these service sector activities. The presence of SIBPs with SIC 6 codes throughout the identified five-year periods also points to SIC 6 business activities finding SIBPs as accommodating and prime locations for operations.

6.6 CONCLUSION

Dominant business activities were classified and explained and helped further an understanding of what constitutes a business park in the Cape Town context. This chapter highlighted the different types of business activity encountered at surveyed SIBPs and identified four dominant SIC division codes that occupy SIBP spaces. The SIC 6 division holds the greatest population of all the businesses recorded in the study demonstrating the popularity of SIBPs amongst wholesale, retail, motor vehicle and motorcycle repair activities in Cape Town. In terms of

distribution of SIC 6 activities amongst the surveyed parks only two parks did not contain any SIC 6 activities with the remaining 27 parks all containing at least one variation of the sub-divisions within SIC 6. SIC 8 business activities are the second most dominant SIC division and are distributed among 26 of the 29 surveyed SIBPs. The prevalence of SIC 8 activities in SIBPs further reiterate the expansion of the sector, and the potential choices of locations for associated SIC 8 activities and operations. The manufacturing sector SIC 3 also hold a dominant stake in the population of business activities found in SIBPs in Cape Town. SIC 9 was the fourth-dominant SIC code encountered in the SIBPs and represented community, social and personal services existing amongst the previously mentioned SIC divisions.

Definitions encountered in reviewed literature mention the occupying of business park spaces by light industrial, office, administrative and professional services, all of which were encountered within SIBPs in Cape Town. SIBPs in the Cape Town context house varying manufacturing operations speaking to the attraction of business park spaces to different sectors and types of business operations. The multiple variations of business activity outside of the afore-mentioned dominant SIC divisions clearly show the ability and attractiveness of business park spaces to accommodate multiple industries and business activities at once within gated, secured spaces. The provision of different infrastructure and services within the parks make it possible for multiple business activities to co-habit in a shared space and conduct business operations in close proximity to one another. This chapter has highlighted the varying business activities encountered in a study sample of identified SIBPs in Cape Town and plays a critical role in the overall evaluation of SIBP spaces in the context of the study. The findings of this final analysis chapter will be collated with the conclusions of the previous five chapters and will form the basis for the concluding chapter to follow.

CHAPTER 7 CONCLUSION

7.1 INTRODUCTION

This chapter will encapsulate the main findings of the study in terms of the formerly mentioned research problem, aims and objectives (Chapter 1), the theoretical perspectives and reviewed literature (Chapters 2 and 3), the macro-analysis of commercial park spaces (Chapter 4), and micro-analysis of SIBPs (Chapters 5 and 6). The research will conclude with a review of the research limitations, recommendations for future research, and lastly, some closing remarks.

7.2 REVISITING THE AIM AND OBJECTIVES

The aim of the study was to explore and understand the changes in Cape Town's commercial park spaces with a focus on the locations and characteristics of self-identifying business parks. To achieve this aim the first objective looked to review theoretical perspectives and relevant literature addressed in Chapters 2 and 3, in order to conceptually inform the study.

The theoretical perspectives referred to in Chapter 2 consisted of a review of the progression of locational theories, cluster theories, and the political economy approach as key identified theories specific to this study on commercial parks generally and SIBPs specifically in Cape Town. Locational and cluster theories were chosen to conceptualise the clustering and agglomeration of economic activities and relating this to the clustering of economic activities in SIBPs in Cape Town. Beginning with the classic locational theories Weber states it is the agglomeration of economic activities and the rise of urban centres that creates uneven spatial development in cities. This can be applied to the Cape Town context with multiple areas which previously had no economic footprint gaining traction and attention from property and real-estate development and maintaining that development in those specific areas.

Cluster theories also proved a good reference point as they explained how economic clusters fostered economic growth and diversification in countries of the global North, which subsequently led to the globalising of cluster models in economies around the world including the global South. Clusters were seen as flexible models for locating economic activity and began to infiltrate policy which allowed the model to spread. New industrial spaces and the prevalence of industrial districts are spatial manifestations of these cluster theories with these spaces today housing a diverse range of economic activities. The aforementioned and new industrial space theories can be applied to the Cape Town context with the associated impacts

of deindustrialisation (as seen in Cape Town) directly linked to the rise in new industrial spaces in cities.

Developing from these location and cluster theories were other more human approaches looking at the spatiality and locality of development that was taking place and played a key role in the context of this study. Over time the traditional (more economic) theories became deficient in accounting for the complexity behind spatial development patterns, which resulted in more human approaches infiltrating theoretical discourses. From the 1970s onwards theories began to consider extra-economic factors in contributing to where economic activity is taking place. In the study context of commercial parks and SIBPs, economic and non-economic factors were taken into account enforcing the incorporation of Cape Town's complicated history into the research. With economic activities being a crucial factor, it was necessary to discuss elements of economic geography and how the approaches of looking at connected economic and urban phenomena has changed since the conceptions of the discipline. Enquiries into the new economic geographies allowed the study to view the spatial economy of Cape Town as being a socially and politically merged aspect of the urban environment.

The integration of Marxist political economy approaches allowed the study to recognise Cape Town's uneven nature of development and link it to the prevalence of commercial parks as spatial manifestations of the neoliberal, capitalist development that have and continue to take place in the city. The associated spatial displacement of capital is present in the Cape Town context with the deconstruction and reconstitution of urban economic spaces to suit production and market needs. With Cape Town on a development trajectory for increased global recognition as a world city the urban environment will continue to be transformed and reconfigured. When examining the spatial-economic development patterns of Cape Town and its impact on the built environment, it was important not to isolate any single theory to inform the study but allow multiple perspectives from a contextual social, political and economic stand-point to inform the research.

Literature pertaining to the advent of industrial, business and office parks was reviewed which yielded multiple definitions and research relating to these spaces originating from the global North. Definitions cited were used loosely and interchangeably in prior research highlighting the flexibility of these spaces and were applicable to commercial park spaces encountered in the developing country context. This can be linked to globalisation and the spread of development practises from the North and its adoption into developing economies of the South.

The review of literature in the study context of Cape Town saw key definitions, neoliberal economic restructuring, the world city discourse, elements of premature deindustrialisation, and security in a neoliberal city all informing the study. Elements of neoliberal economic restructuring were identified throughout policy documents and development discourses and trends in spatial-economic development relating to South Africa and Cape Town which provided the foundations for the context of the entire study. The world city discourse was then introduced to provide a deeper understanding of the developmental direction Cape Town has chosen to follow and the impacts these developments can incur on the built environment and economy of a city. Further contributing to this was the experience of premature deindustrialisation in Cape Town resulting in the decreasing share in employment and GDP contribution from the manufacturing sector, and the subsequent rise in the service sector in the Cape Town economy. Spatial manifestations of neoliberal economic restructuring, the world city discourse and deindustrialisation are all present and happening in the Cape Town context and commercial parks are the sites in which these ideals are being actualised.

The increasing role of the service sector and its rise at the expense of the manufacturing sector, reinforced intense spatial inequalities inherited from the apartheid era with development migrating further away from less developed areas to wealthy developed locations. This again highlighted the neoliberal forms of development in the South African context. Investigating security in the context of a neoliberal city in the global South was also key in establishing the origins of the private security sector and its rapid infiltration into policing and control systems in cities worldwide. The adoption of the private security model in the Cape Town context again links to the infiltration of ideals and modes of governance in the globalised economy with international companies being able to solidify operations around the world. Security and perceptions of safety have a significant influence on everyday life in the South African context which reiterates why elements of security were included in the analysis of SIBP spaces. All of these themes were connected and inter-related and helped critically inform the development trajectories of SIBPs in Cape Town.

Linking to objective two, locating and creating a database of commercial parks in Cape Town, this was achieved through extensive Internet, City of Cape Town and business park database searches, which yielded a total of 148 commercial parks in the city. Of the 148 commercial parks, office parks featured as the most dominant form of commercial park variation with 59 (40%) office parks. SIBPs proved the next most prevalent commercial park with 45 (30%) parks followed by industrial parks with 44 (29%) parks in total. Spatial and temporal data

pertaining to the total population of parks was also collated and analysed illustrating a clear concentration of parks in the West Coast, Northern Suburbs, Parow/Epping/Airport and Salt River/Pinelands districts in Cape Town with almost 70% of the parks falling within these areas. The temporal analysis into commercial parks revealed the most growth intensive period for commercial parks being between 2004 and 2010 with the West Coast, Northern Suburbs and Salt River/Pinelands districts experiencing the highest growth rates in terms of parks established in the city.

In addressing objective three, the investigation into the physical characteristics of SIBPs, this objective was achieved by taking a calculated random sample of 39 SIBPs and conducting field research at each of the specific sites. Field research consisted of travelling to the SIBP sites using either private transport or the MyCiti public bus service in order to assess how accessible in terms of transport the parks were. It was noted only 11 of the parks were accessible through the MyCiti bus service emphasising the existing trends and reliance on private car use in Cape Town. SIBPs were assessed in terms of aspects of security, sizes of the parks in terms of unit numbers and parking spaces provided, and elements of green spaces within the parks. Aspects of private security such as signs and surveillance, perimeter barriers, and the presence of security guards were encountered at the majority of SIBP visits with security personnel denying the researcher access to the parks on ten occasions. Security elements proved to be one of the defining components amongst the entire study population of SIBPs.

In terms of sizes of the parks the data was provided by the erf data information and revealed up to 87% of SIBPs identified as small parks with units ranging from 5 to 64 units spread throughout nine of the 11 districts city-wide. With reference to the amount of parking spaces it was noted that some SIBPs did not have sufficient paring provision for tenants. Both size of the parks and nature of business activities dictate the extent of the parking required by tenants, customers and suppliers at SIBPs. The presence of green spaces within SIBPs was also investigated and included maintained gardens and lawn areas as well as demarcated green spaces within the parks. Only a small population of SIBPs contained designated green spaces which are said to add to the value and aesthetics of locating in these secured spaces. Other reasons for this can be attributed to intense periods of water shortages and the adapting of water conservation strategies in SIBP in Cape Town.

Addressing objective four was achieved by recording the various business activities encountered at the 29 SIBPs with a total of 636 businesses classified according to SIC major

division and sub-division codes. Four SIC major divisions were identified amongst the businesses in SIBPs with SIC 6 (wholesale and retail trade: repair of motor vehicles, motor cycles and personal and household goods; catering and accommodation), SIC 8 (financial intermediation, insurance, real estate and business services), SIC 3 (manufacturing) and SIC 9 (community, social and personal services) containing 87% of all business activities. Of all the SIC categories, SIC 6 was the most dominant business activity with the retail or wholesale activities varying from park to park. An important discovery in the research into business activities at SIBPs was the prevalence of SIC 8 activities and the second most dominant SIC major division. The proliferation of finance, business and professional activities in SIBPs can be directly linked to the economic development trends noted in Cape Town with an increasing share of economic activity taking place in the service sector.

After examining the business activities in SIBPs, it was clear SIBPs are able to house a great diversity of businesses independent of location, within a shared space including shared infrastructure and services. The SIBP landscape in terms of industrial sector activity and structure can be related to definitions originating from the global North, with business parks in Cape Town containing a variation in activities ranging from manufacturing to beauty and personal services within a shared space of units of similar size and architecture. The presence of leisure activities such as gyms and dance studios also add to the characteristics of SIBPs in Cape Town in accommodating the different interests and business needs of the affluent local and international population Cape Town strives to attract.

7.3 RESEARCH LIMITATIONS

Limitations were encountered during the research process, including the absence of land parcel and SG data for the spatial and temporal aspects of the study. The industrial park data was most affected by the lack in SG data. Not all of the erf numbers and dates were able to be collected due to database errors and a lack of access to up-to-date land parcel information. The lack of public transport accessibility to the SIBPs in the city also proved to be a limitation to the study. Of the total 39 sampled parks only 11 were accessible through the MyCiti bus service with the service stops not geographically spread enough to reach all the park locations.

Major limitations to the analyses was the denial of access to ten SIBPs by private security personnel at the entrance to the parks. The absence of on-site management also made it difficult to arrange access to the site and to collect information through personal communications within

the SIBPs. Worth mentioning is the difference in encounters with private security personnel when entering the parks as a pedestrian compared to within a private vehicle with security personnel more likely to allow the researcher entrance via the latter. When collecting unit and business activity information the lack of display of unit numbers made the collection of data difficult once inside the SIBPs, with some parks being too large in size to fully record without any further information about tenants being provided. The limitations encountered in the research created challenges during the research process but did not significantly affect the overall results presented in the study. The limitations encountered can be used constructively in further research enquiries.

7.4 RECOMMENDATIONS FOR FUTURE RESEARCH

Recommendations for future research include investigations into the private security sector in the context of secured commercial park spaces. The focus study into SIBPs provided an indication into what elements and characteristics to expect when visiting these commercial spaces and what security features are common at SIBPs. Future research can investigate how modes of private security impact on day-to-day business operations with regards to limiting entry and access to the public. Further enquiries can also investigate how perceptions of security and safety from the international to local level have impacted on Cape Town's growth as a world city, and its aspirations to become a global competitor. The presence of green spaces in commercial parks is another area for future research with ecological considerations such as forms of energy usage, water consumption, effective usage of space, as well as the value these green spaces create within a working environment. In the Cape Town context future investigations into greens spaces can observe how commercial parks cope with water shortages and, if any recycling of grey-water or harvesting of rainwater is actually taking place within these spaces.

The implementation, adherence and policing of land zoning policies by developers is another recommendation for future research, especially with undeveloped land in the Cape Town context becoming increasingly scarce. Linking to this is a further recommendation for research into alternate forms of gentrification and urban renewal, specifically involving commercial park spaces and whether the variety of sites of commercial activity are susceptible to further reconfigurations in the future. A final recommendation for future research can be an investigation into the property developers and agents of these commercial parks spaces. In

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order to fully grasp the deeper functions of shared economic spaces and what drives business

activities to these locations are those who designed and constructed the space. By investigating

the planning behind commercial parks, it may be determined whether parks are purposefully

built to house one specific type of business activity or constructed in a way that is profitable

and adding value to tenants of multiple business interests and activities.

7.5 CLOSING REMARKS

Commercial parks and all the typologies that fall within it form an integral part of the urban

landscape seen in developed and developing country contexts. The concept of commercial

parks stemmed out of the co-location of manufacturing industries in developed countries during

the 1960s, and through the expansion of the global economy, and dissemination of neoliberal

development ideologies, has become a notable feature of the urban-economic fabric seen in

cities today.

In the context of Cape Town and South Africa, the policy and developmental ideological shifts

that took place during the 1990s paved the way for neoliberal market principles and

developments that were to catapult cities such as Cape Town and Johannesburg into the global

economic sphere. Commercial parks can be seen as such landscapes of connectivity and

innovation, but the growth in numbers of these spaces is drawing economic activities out of

traditional locations into more urban peripheral areas shifting the economic centre of gravity

of the city and dispersing economic opportunities further apart. The true impacts of this type

of development may lead to increased global recognition in line with being a world city, but

the impacts on the built environment and the spatial economy of the city will also be profound.

In the globalising world today industrial and economic landscapes are constantly in a state of

flux, creating an urban environment impossible to predict, but also one that holds great

potential for the future.

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PERSONAL COMMUNICATIONS

- 1. Goetz P 2019. Site manager, Millennium Business Park. Cape Town. Interview on 8 August about business park information.
- 2. John 2019. Chairman of the Body Corporate, Tokai Business Park. Cape Town. Interview on 23 August about business park information.
- 3. Business Park Manager 2019. Site manager, Pinelands Business Park. Cape Town. Interview on 9 August about business park information.
- 4. Security Guard 2019. Security guard, Coleman Business Park. Cape Town. Interview on 22 August about business park information.

APPENDICES

Appendix A Ethical clearance approval

Appendix B Table B1. Commercial park database

Appendix C Descriptions of land zoning designations

Appendix D Expanded SIC divisions

APPENDIX A

Ethical clearance approval letter



NOTICE OF APPROVAL

REC Humanities New Application Form

2 August 2018

Project number: 7731

Project Title: A Geography of Business Parks in Cape Town

Dear Mr Nikhil Naik

Your REC Humanities New Application Form submitted on 12 July 2018 was reviewed and approved by the REC: Humanities.

Please note the following for your approved submission:

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)	
02 August 2018	01 August 2021	

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (7731) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

Document Type	File Name	Date	Version
Research Protocol/Proposal	NR Naik FINAL PROPOSAL 2018	11/07/2018	10.00.101
Informed Consent Form	Naik 18675646 2018 Research Consent	11/07/2018	
Data collection tool	Naik 18675646 2018 Interview Questions	11/07/2018	

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee; Human Research (Humanities)

APPENDIX B

Table B1. Commercial park database

Self-identifying business parks

Number	Name of park	Major district
1	Andrew Norman business park	Somerset West
2	Beacon business park	West Coast
3	Bellville business park	Northern Suburbs
4	Betterwood business park	Parow/Epping/Airport
5	Brackengate business park	Kuils River/Brackenfell
6	Brackenrite business park	Kuils River/Brackenfell
7	Centurion business park	West Coast
8	Clareview business park	Southern Suburbs
9	Coenru business park	Parow/Epping/Airport
10	Coleman business park	Parow/Epping/Airport
11	Consani business park	Parow/Epping/Airport
12	Constantiaberg business park	Southern Suburbs
13	CTI business park	Parow/Epping/Airport
14	CTX business park	Parow/Epping/Airport
15	Edgemead business park	West Coast
16	Frazitta business park	West Coast
17	Gordons Bay business park	Somerset West
18	Grasso business park	West Coast
19	Hewetts business park	Parow/Epping/Airport
20	Icon business park	Kuils River/Brackenfell
21	Millennium business parks	West Coast
22	Milnerton business park	West Coast
23	Ndabeni business park	Salt River/Pinelands
24	Northgate business park	Salt River/Pinelands
25	Oasis business park	Athlone/Ottery/Retreat
26	Parow business park	Parow/Epping/Airport
27	Platinum business park	Kuils River/Brackenfell
28	Pinelands business park	Salt River/Pinelands
29	Pine Tree business park	South
30	Point business park	West Coast
31	Prestige business park	West Coast
32	Ravensmead business park	Parow/Epping/Airport
33	River's Edge business park	Northern Suburbs
34	Sheffield business park	Athlone/Ottery/Retreat
35	Solaris business park	South
36	Somerset West business park	Somerset West
37	Southfield business park	West Coast
38	Spearhead business park	West Coast
39	Tokai business park	South
40	Unyawo business park	Salt River/Pinelands
41	Viking business park	Parow/Epping/Airport

Number	Name of park	Major district
42	Waverly business park	Salt River/Pinelands
43	Westlake business park	South
44	Woodbridge business park	West Coast
45	360 business park	Salt River/Pinelands

Office parks

Number	Name of park	Major district
1	Aintree park	Southern Suburbs
2	Airport office park	Parow/Epping/Airport
3	Alphen office park	Southern Suburbs
4	Arden Grove	West Coast
5	Bateleur office park	Northern Suburbs
6	Bella Rosa office park 2	Northern Suburbs
7	Bella Rosa office park	Northern Suburbs
8	Bellfour office park	Northern Suburbs
9	Belmont office park	Southern Suburbs
10	Belvedere office park	Northern Suburbs
11	Black River park	Salt River/Pinelands
12	Bolt park	West Coast
13	The Boulevard office park	Salt River/Pinelands
14	Brookside office park	Southern Suburbs
15	Buena Vista office park	Northern Suburbs
16	Capricorn park	South
17	Central park	Parow/Epping/Airport
18	Century Gate office park	West Coast
19	Connaught park	Parow/Epping/Airport
20	The Crest Estate office park	Northern Suburbs
21	De Tijger office park	Parow/Epping/Airport
22	Diamond park	Northern Suburbs
23	Dundas park	Parow/Epping/Airport
24	The Estuaries	West Coast
25	Fairways office park	Somerset West
26	Garnet park	West Coast
27	Greenford office park	Southern Suburbs
28	Grosvenor Square	West Coast
29	Interactive park	Northern Suburbs
30	Lagoon Beach office park	West Coast
31	M5 park	Salt River/Pinelands
32	Melomed office park	Southern Suburbs
33	Montague Park	West Coast
34	Mountain View office park	Northern Suburbs
35	Old Oak office park	Northern Suburbs
36	Olympic park	Parow/Epping/Airport
37	Oude Molen park	Salt River/Pinelands
38	Old Timber Yard	Salt River/Pinelands

Number	Name of park	Major district
39	Parc du Links office park	Somerset West
40	Park Lane office park	Salt River/Pinelands
41	Pine park	Salt River/Pinelands
42	Platinum Junction	West Coast
43	Plattekloof office park	Northern Suburbs
44	Premier park	Kuils River/Brackenfell
45	Prime park	Southern Suburbs
46	Prosperity park	West Coast
47	PNP office park	Southern Suburbs
48	Railside park	West Coast
49	Red Square	South
50	The Ridge office park	Northern Suburbs
51	Royal Cape park	Athlone/Ottery/Retreat
52	Silver Knight park	Parow/Epping/Airport
53	Somerset Links office park	Somerset West
54	Steenberg office park	South
55	Sunbird office park	Northern Suburbs
56	Sunningdale Suites	West Coast
57	Tannery park	Southern Suburbs
58	Tygerberg office park	Northern Suburbs
59	The Vineyards office estate	Northern Suburbs

Industrial parks

Number	Name of park	Major district
1	Alto industrial park	Kuils River/Brackenfell
2	Athlone industrial park	Athlone/Ottery/Retreat
3	Aster industry park	Parow/Epping/Airport
4	Axe industrial park	Parow/Epping/Airport
5	Berbax industrial park	Salt River/Pinelands
6	Beachwood industrial centre	Salt River/Pinelands
7	Blackheath industrial park	Kuils River/Brackenfell
8	Bloch industrial park	Kuils River/Brackenfell
9	Brice industrial park	Parow/Epping/Airport
10	Cloverleaf industrial park	Salt River/Pinelands
11	Denval industrial park	Parow/Epping/Airport
12	Diep River industrial park	Southern Suburbs
13	Epic industrial park	Salt River/Pinelands
14	Esvian industrial park	Parow/Epping/Airport
15	Fisantekraal industrial park	Northern Suburbs
16	Greenfield industrial park	Parow/Epping/Airport
17	Higro industrial park	Kuils River/Brackenfell
18	Ikhwezi industrial park	Parow/Epping/Airport
19	Kasselsvlei industrial park	Northern Suburbs
20	La Belle industrial park	Northern Suburbs

Number	Name of park	Major district
21	Lilly industrial park	West Coast
22	Maitland industrial park	Salt River/Pinelands
23	Malleon industrial park	Parow/Epping/Airport
24	Manchris industrial park	Northern Suburbs
25	Montague Gardens industrial park	West Coast
26	N1 industrial park	Parow/Epping/Airport
27	Nearby industrial park	Salt River/Pinelands
28	North Point industrial park	Kuils River/Brackenfell
29	Observatory industrial park	Salt River/Pinelands
30	Okavango industrial park	Kuils River/Brackenfell
31	Olive Grove industrial estate	Somerset West
32	Parow industrial park	Parow/Epping/Airport
33	Range industrial park	Kuils River/Brackenfell
34	Royal industrial park	Salt River/Pinelands
35	Saxon industrial park	Northern Suburbs
36	Simplex industrial park	West Coast
37	South Cape industrial park	Southern Suburbs
38	Stewart industrial park	Parow/Epping/Airport
39	Table Bay industrial park	Salt River/Pinelands
40	Timkoe industrial park	Northern Suburbs
41	Van Biljon industrial park	Northern Suburbs
42	Wesmag industrial park	Kuils River/Brackenfell
43	Wetron industrial park	Athlone/Ottery/Retreat
44	8 th Avenue industrial estate	Salt River/Pinelands

APPENDIX C

Description of land zoning designations

- Agricultural Zone (AG) Primary uses include intensive agriculture and horticulture, single house dwelling, environmental conservation, and environmental facilities. Consent uses include additional dwellings, tourist accommodation, mining, animal farming, wind turbines, aquaculture, farm shop, animal care, and any agricultural land uses.
- 2. General Industrial 1-2: (GI1-GI2) Primary uses include industry, restaurants, service station and motor repairs, scrap yards, transport use, agricultural industry, utility services, factory shops, funeral parlours, telecommunications stations, and veterinary services. Consent uses can be issued for abattoirs, places of worship, clinics, entertainment services, aquaculture, shops, offices, and container sites. Other provisions include parking access, security walls, handling of hazardous substances, informal trading, motor repairs and service stations.
- 3. Transport Zoning 1 (TR1) Primary uses include transport use, utility services, multiple parking garages, warehouses and container sites. Consent uses included business premises, flat blocks, hotels, places of entertainment, conference centres, service station and motor repairs, service trade, wind turbines, informal trading and industry. Other provisions include parking, informal trading and air and underground rights.
- **4. Transport Zoning 2 (TR2)** Primary uses are public road and utility services with consent uses including informal trading, multiple parking garages and wind turbines. Other provisions may include construction and deposits of materials, informal trading, air and underground rights and proposed street widening or closure.
- 5. General Business 1-7 (GB1-7) Primary uses include business premises, houses and dwellings, flat blocks, places of worship, hospitals, institutions, hotels, conference centres, expo-centre, service trade, utility services, multiple parking garages, private roads, open spaces and veterinary services. Consent uses include entertainment services, informal trading, warehouses, wind turbines, motor repairs and service stations. Other provisions include informal trading, balcony protection, public footways and street boundaries, parking and wind mitigation.

- 6. Local Business 1 (LB1) Primary uses are for intermediate business and include offices, houses and dwellings, boarding house, utility services, house shop, bed and breakfast establishments, child care and flat blocks. Consent uses include a place of worship, institutions, clinics, guest houses, informal trading, service trade, wind turbines and veterinary services. Other provisions may include carports and parking.
- 7. Local Business 2 (LB2) Primary uses include shops, offices, houses and dwellings, bed and breakfast establishments, boarding house, place of worship, clinic, institution, guest houses, service trade, utility services, open spaces, private roads and veterinary services. Consent uses include informal trading, restaurants, places of entertainment, business premises, supermarket, plant nursery, hotels, conference centres, motor repairs and service stations, wind turbines and multiple parking garages. Other provisions include canopy protection and parking access.
- **8. Mixed Use 1-3 (MU1-3)** Primary uses include business premises, industry, houses and dwellings, flat blocks, hotels, utility services, private roads, open spaces, places of worship, hospitals, institutions, wind turbines, transport use and service stations. Consent uses include entertainment services, informal trading, expo-centre, scrap yards, motor repairs and service stations, recycling centres and veterinary services. Other provisions include balcony protections, parking, informal trading, motor repairs and service stations.
- 9. Utility Zoning (UT) Primary uses include utility services, authority use, freestanding telecommunications base and station. Consent uses include a cemetery, informal trading, funeral services, urban agriculture, airports and wind turbine infrastructure.
- 10. Single Residential 1 (SR1) Primary uses include houses and dwellings, additional use rights can be given to bed and breakfast establishments and home child care. Consent uses include utility services, places of worship, house attached to a shop, guesthouse, institutions, wind turbines, open space, urban agriculture and veterinary services. Other provisions include window/door replacement garages, carports, parking
- 11. General Residential 1 (GR1) Primary uses are group housing and include houses and dwellings, group housing, private roads and open spaces. Additional uses may include flat blocks and home occupations and consent uses include utility services and home child care. Other provisions could include open spaces, design principles, parking, and site development plans.

- 12. Community Zoning 1 (CO1) Primary land uses are local and include a place of worship, clinics, open spaces, filming and rooftop base telecommunication stations. Consent uses include institutions, hospitals, cemeteries, urban agriculture and veterinary practices. Other provisions include parking access and noise mitigation measures.
- 13. Open Space Zoning 2 (OS2) Primary uses are public open spaces and for environmental conservation use. Consent uses include environmental and tourist facilities, places of entertainment, places of assembly, plant nursey, rooftop and freestanding base telecommunication stations., utility services, cemetery, cultural and social gatherings, urban agriculture, informal trading, the harvesting of natural resources, air and underground rights and wind turbines. Other provisions can be made for construction and deposits of materials.
- 14. Open Space Zoning 3 (OS3) Designated as special open spaces primary uses are open spaces, private roads and environmental conservation use. Consent uses include environmental and tourist facilities, places of entertainment, places of assembly, plant nursey, rooftop and freestanding base telecommunication stations., utility services, cemetery, cultural and social gatherings, urban agriculture, informal trading, the harvesting of natural resources, air and underground rights and wind turbines. Other provisions can be made for construction and deposits of materials. Other provisions only consists of approval for consent use and informal trading.

APPENDIX D

Expanded SIC divisions (from South African Reserve Bank 2011)

SIC 1: Agriculture, hunting, forestry and fishing

Sub- division	Title of category
	MAJOR DIVISION 1: AGRICULTURE, HUNTING, FORESTRY
	AND FISHING
11	Agriculture, hunting and related services
12	Forestry, logging and related services
13	Fishing, operation of fish hatcheries and fish farms

SIC 2: Mining and quarrying

Sub- division	Title of category
	MAJOR DIVISION 2: MINING AND QUARRYING
21	Mining of coal and lignite
22	Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying
23	Mining of gold and uranium ore
24	Mining of metal ores, except gold and uranium
25	Other mining and quarrying
29	Services activities incidental to mining of minerals

SIC 3: Manufacturing

Sub- division	Title of category	
	MAJOR DIVISION 3: MANUFACTURING	
30	Manufacture of food products, beverages and tobacco products	
31	Manufacture of textiles, clothing and leather goods	
32	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; manufacture of paper and paper products; publishing, printing and reproduction of recorded media	
33	Manufacture of coke, refined petroleum products and nuclear fuel; manufacture of chemicals and chemical products; manufacture of rubber and plastic products	

Sub- division	Title of category
34	Manufacture of other non-metallic mineral products
35	Manufacture of basic metals, fabricated metal products, machinery and equipment and of office, accounting and computing machinery
36	Manufacture of electrical machinery and apparatus n.e.c.
37	Manufacture of radio, television and communication equipment and apparatus and of medical, precision and optical instruments, watches and clocks
38	Manufacture of transport equipment
39	Manufacture of furniture; manufacturing n.e.c.; recycling

SIC 4: Electricity, gas and water supply

Sub- division	Title of category	
	MAJOR DIVISION 4: ELECTRICITY, GAS AND WATER SUPPLY	
41	Electricity, gas, steam and hot water supply	
42	Collection, purification and distribution of water	

SIC 5: Construction

SIC 6: Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; hotels and restaurants

Sub- division	Title of category	
	MAJOR DIVISION 6: WHOLESALE AND RETAIL TRADE;	
REPAIR OF MOTOR VEHICLES, MOTORCYCLES AND		
PERSONAL AND HOUSEHOLD GOODS; HOTELS AND		
	RESTAURANTS	
61	Wholesale and commission trade, except of motor vehicles and	
	motorcycles	
62	Retail trade, except of motor vehicles and motorcycles; repair of	
	personal household goods	
63	Sale, maintenance and repair of motor vehicles and motorcycles; retail	
	trade in automotive fuel	
64	Hotels and restaurants	

SIC 7: Transport, storage and communication

Sub- division	Title of category	
	MAJOR DIVISION 7: TRANSPORT, STORAGE AND	
	COMMUNICATION	
71	Land transport; transport via pipelines	
72	Water transport	
73	Air transport	
74	Supporting and auxiliary transport activities; activities of travel	
	agencies	
75	Post and telecommunications	

SIC 8: Financial intermediation, insurance, real estate and business services

Sub- division	Title of category	
	MAJOR DIVISION 8: FINANCIAL INTERMEDIATION,	
	INSURANCE, REAL ESTATE AND BUSINESS SERVICES	
81	Financial intermediation, except insurance and pension funding	
82	Insurance and pension funding, except compulsory social security	
83	Activities auxiliary to financial intermediation	
84	Real estate activities	
85	Renting of machinery and equipment, without operator, and of personal	
	and household goods	
86	Computer and related activities	
87	Research and development	
88	Other business activities	

SIC 9: Community, social and personal services

Sub- division	Title of category	
	MAJOR DIVISION 9: COMMUNITY, SOCIAL AND PERSONAL	
	SERVICES	
91	Public administration and defence activities	
92	Education	
93	Health and social work	
94	Other community, social and personal service activities	
95	Activities of membership organisations n.e.c.	
96	Recreational, cultural and sporting activities	

Sub- division	Title of category	
99	Other service activities	