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A macro analysis and GIS application of urban public space closures in Cape Town, 1975 — 2004

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Abstract

Citizens in Cape Town have been claiming urban public space for private use since the 1970s. This article endeavours to trace the extent, identify patterns and investigate the processes utilised by citizens in the claiming of urban public space in the city. This article aims to add to the growing corpus of knowledge on the erosion of urban public space by focussing on the micro, erf-sized level, by seeking to understand the history of the erosion of urban public space as entrenched in legislation and to highlight the impact that individual citizens, not major real estate developers or large organisations, can have on the shaping of urban public space within the urban landscape.

Keywords: Cape Town, urban public space, GIS

Abstrak

Inwoners het al sedert die 1970s aanspraak op stedelike publieke ruimtes in Kaapstad gemaak. Hierdie artikel poog om die omvang, patrone en prosesse wat burgers van die stad gebruik om stedelike publieke ruimtes op te eis. Die artikel het ten doel om 'n bydra te lewer tot die groeiende korps van kennis oor die erosie van stedelike publieke ruimtes deur te fokus op die mikro, erf-groote vlak, deur die geskiedenis van die erosie van stedelike publieke ruimtes soos geïmplementeer is deur wetgewing te ondersoek, en derhalwe om die rol wat die burgers van die stad, en nie groothandel ontwikkelaars of groot organisasies kan hê in die vorming van stedelike publieke ruimte binne die stedelike landskap.

Sleutelwoorde: Kaapstad, stedelike publieke ruimte, GIS

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1. Introduction

The roots of the spatial patterns that are manifested in contemporary urban South Africa are embedded in the segregationist policies of the apartheid era (Robinson, 1996). The result of these policies has been a unique urban morphology that needs to be undone in order to create the conditions, for what the current administration of the City of Cape Town envisions itself, as: a sustainable city, a dignified city, an accessible city, a credit city, a competent city, a safe and caring city and a prosperous city (City of Cape Town, n.d.: online).

Ten years after the transition to a democratic dispensation in South Africa in 1994, great strides have been made to provide services to those South Africans that were marginalized by apartheid policies. However, in spite of these gains, research has shown that huge inequalities still exists amongst the population (Roberts, 2000; Desai, 2005; Roberts, 2005). This inequality is manifested, *inter alia*, in the urban morphology of the cities and towns of post-apartheid South Africa. The wealthier urban sector have tended to create residential laagers of opulence, walled off from the surrounding urban landscape, thereby creating private, supposedly safe, residential areas, in which the residents are 'protected' from the unwanted attentions of the urban poor and those surviving on the fringes of urban society.

The polarisation of urban space continues unabated in the post-apartheid era (Turok, 2000; Turok & Watson, 2001). Areas of urban space have been gated, barricaded and controlled in an attempt to safeguard the lives and possessions of urban residents. The result of the gating of urban space is a patchwork of fortified areas within cities (Landman, 2000a), exclusive zones that are privatised by those who can afford to shut out the rest of the city. Much research has gone into the gated community phenomenon, internationally (Gooblar, 2002; Leisch, 2002; Webster, Glasze & Frantz, 2002; Wu & Webber, 2004) and in South Africa (Landman, 2000b; van de Wetering 2000; Hook & Vrdoljak, 2002; Jürgens & Gnad, 2002; Landman, 2002; Landman & Schönreich, 2002).

The repeal of the Group Areas Act, influx control, the demise of statutory apartheid¹ in the latter half of the 1980s and early 1990s

¹ This article uses the terms white and black as was entrenched in apartheid legislation. For the purposes of this paper, black refers to the apartheid grouping of Black African, Coloured and Indian; except where the individual groupings are used.

and the creation of a democratic South Africa in 1994 have had a profound effect on urban areas that were negatively affected by apartheid laws. The resultant growth in urban areas has had a tendency to mirror the huge economic disparity in the population of South Africa, a post-apartheid disparity reflected in the urban morphology of South African cities and towns. In Cape Town, those that are economically able tend to reside in wealthy, previously advantaged suburbs and display a tendency to protect their assets by various means; which includes the fortification of living space, the purchasing of dwellings in security estates and increasing the level of surveillance of private homes (Lemanski, 2004; Saff, 2004). It is important to note that the rise of gated communities, security complexes, the fortification of living space and the surveillance and control of urban public space is a global phenomenon as those individuals and organisations who can afford to, seek to protect themselves from the economically less privileged.

In Cape Town, long before the above-mentioned strategies became vogue; there was a means that could be used by citizens to claim urban public space. This article endeavours to trace the extent, identify patterns and investigate the processes utilised by citizens in the claiming of urban public space in Cape Town. This article aims to add to the growing corpus of knowledge on the claiming and closure of urban public space by focussing on the micro, erf-sized level, by seeking to understand the history of the claiming of urban public space as entrenched in legislation. The study also highlights the impact that individual citizens, not major real estate developers or large organisations, can have on the shaping of urban public space within the urban landscape.

2. Methodology: a GIS application

Two pieces of legislation, which enacted and facilitated urban public space closures, were promulgated during the 1970s and in 2003.² A total of 2 378 Provincial Gazettes were consulted in order

² The first was Ordinance 20 of 1974, promulgated on 29 November 1974 and published in The Province of the Cape of Good Hope Official gazette of 3 December 1974. All gazetted urban public space closures from 7 February 1975 to 30 January 2004 were enacted under Ordinance 20 of 1974, after which the City of Cape Town by-law relating to the management and administration of the City of Cape Town's Immovable Property was utilised to enact urban public space closures. The City of Cape Town by-law was published in the Provincial Gazette of the Province of the Western Cape on 28 February 2003 and the first urban public space closure enacted under it took place on 13 February 2004.

to source the urban public space closures in the study area. A total of 1 018 gazetted closures were found. The data recorded from the provincial gazettes included: the gazette number, the gazette date, the suburb in which the closure occurred, the type of closure and the reference number linking the gazetted closure to an individual map reference.

The individual map reference number, known as an S-number, corresponded to A4-sized maps at the City of Cape Town: Land Information Management Department. These maps showed the precise location of the closure, the size of the closure, the name(s) of the applicant(s), a reference number to a document file and a reference number to a large roll map. Each closure location was verified on the roll map to accurately determine where each closure was located. The data that was collected on each suburb was entered into a geographic information system from which maps could be produced. The reference number to the document file allowed access to correspondence entered into between all the role-players in each closure application. All correspondence of all closures in Camps Bay and Mitchell's Plain were investigated and entered into the Statistical Package for the Social Sciences (SPSS™) to conduct a qualitative analysis of the data.

The collected data was analysed on a Microsoft Access database that contained twelve variables, resulting in 10 161 individual entries of information. The primary objective was to extract annual and five-yearly segment timelines to graphically express the number of closures in the different closure groups and present it expressed as a percentage or numerically. In addition to the graphs, the database allowed for the numeric calculation and tabular presentation of closure numbers per closure group and per suburb; the total and average size of closures and the percentage of closed space per suburb.

Variables from the Microsoft Access database, together with the results of calculations conducted with the data, were exported to a Geographic Information Systems (GIS). The GIS package used was ArcView 3.3 and it facilitated the production of maps from the data. A GIS suburbs layer was sourced from the City of Cape Town: Environmental Management Department from which the 80 suburbs in the study area was isolated and 21 data fields were added for each suburb, resulting in 240 individual entries. The maps created with the GIS visually displayed the study area, closure trends in

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each of the suburbs over the study period and the percentage of closed space per suburb.

The closure data transcribed from the Provincial Government gazettes can be deemed to be error-free as Provincial Gazettes are legal documents and any error could impact negatively on the legality of the closures. The GIS base data layer is used by all GIS users within the City of Cape Town and is the most accurate, up-to-date suburbs layer available. Thus, the data produced in the analysis and the resultant presentation of maps, graphs and tables has a high degree of accuracy. Unfortunately, 16% of the map records at the City of Cape Town: Land Information Management Department did not have a value for the amount of closed space and this was a constraint in determining the total amount of closed urban public space in the study area.

A political timeline of the study area is necessary for contextualisation. The area represents a cross-section of differences of class, socio-economic conditions, apartheid race groupings, employment levels, literacy levels and ownership of material goods, which can be found between and within suburbs in the City of Cape Town. The suburbs within the study area each have their own particular history and unique character and have been either advantaged or disadvantaged through the processes that have shaped Cape Town's urban history. It is against this backdrop of differences between suburbs in the study area that the analysis of urban public space closures takes place and allows for the examination of inter-suburban patterns and processes.

3. Local authority background

According to the City of Cape Town official geographical information systems suburbs layer created in January 1999, there are eighty suburbs in the central city substructure. However, this was not always the situation as suburbs were either part of the Cape Town municipality; were municipalities on their own or were governed by apartheid-era racially based local government structures at any given time between the study timeline of 1975 and 2004.

In 1975 most of the study area fell under the jurisdiction of the City Council of Cape Town, which was an amalgamation of various municipalities that took place in 1913 and 1927. Pinelands, the exception, acquired municipal status in 1948 and functioned as such;

separate from the City Council of Cape Town, until 1995 when it was incorporated into the City of Cape Town. Two of the Black African townships in the study area, namely, Langa and Nyanga, fell under the jurisdiction of the Cape Peninsula Bantu Affairs Administration Board, which was created in 1973 (Weichel, Smith & Putterill, 1978; City of Cape Town, 1982; Cameron, 1999). The third Black African township in the study area, Crossroads, was proclaimed as an emergency camp in June 1976 and came under the control of the Divisional Council of the Cape (Weichel, Smith & Putterill, 1978). In 1979 the Cape Peninsula Bantu Affairs Administration Board amalgamated with the South Western Cape Administration Board to form the Western Cape Administration Board (City of Cape Town, 1982). After 1987, the Black African suburbs of Langa, Nyanga and Guguletu, falling under Black Local Authority jurisdiction, were known as the Ikapa Town Council (Cameron, 1999).

By 1975, most coloured suburbs were under the municipal jurisdiction of the City Council of Cape Town (Cameron, 1999) with the implementation of the Group Areas Act in 1950. Residents of older, racially mixed suburbs of, for example, Mowbray, District Six and Simon's Town were displaced to housing estates and township developments on the Cape Flats (Western, 1996; Urban Problems Research Unit, 1989; Jeppie & Soudien, 1990; Field, 2001). Outlying suburbs in the southeast of the study area, except Mitchell's Plain, fell under the jurisdiction of the Divisional Council of the Cape, which was responsible for the development of the, at the time, peri-urban coloured and Indian areas (City of Cape Town, 1982).

The establishment, in 1983, of the Tri-cameral representation in Parliament for whites, coloureds and Indians meant a change in local government structures was necessary to complement the changes taking place in the national government structure. The change in local government structures was facilitated by the promulgation of the Regional Services Act of 1985 that allowed the Greater Cape Town Regional Services Council to replace the Cape Divisional Council. This change at local government level allowed coloureds and Indians in Cape Town to administer their, what were termed, 'general' and 'own affairs' (Cameron, 1993). Thus, the Regional Services Councils were not recognised by the government "... as fully fledged metropolitan authorities ... (but) ... as an extension of existing primary local authorities" (Cameron, 1995: 405).

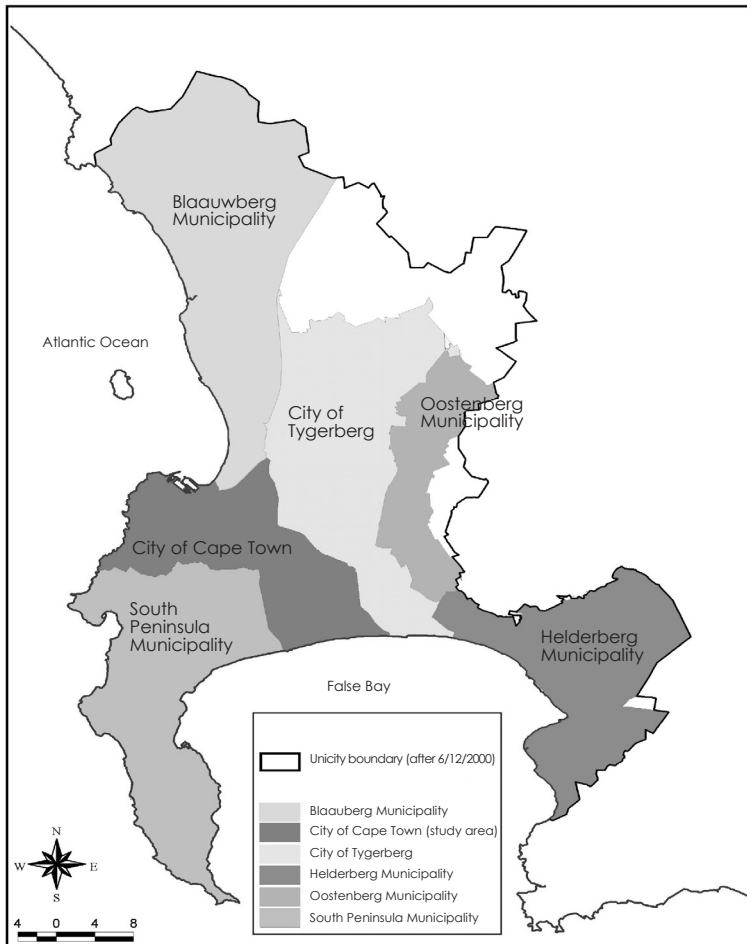


Figure 1: Cape Town, with previous municipal substructure regions, including the study area
Source: Spocter, 2005: own drawing

The Southeast portion of the study area, previously controlled by the Cape Divisional Council came under the jurisdiction of the Greater Cape Town Regional Services Council. The system of Regional Services Councils, which started functioning on 1 July 1987, was vehemently opposed by the white liberal City Councils, such as Cape Town (Cameron, 1986; 1993; 1995). However, the

functions of the Regional Services Council were only dissolved after the transition to a democratic South Africa.

The Local Government Transition Act of 1993 provided the basis for democratically elected local government structures (Cloete, 1995). The process of demarcation of boundaries in the Cape Metropolitan Area was long, arduous and fraught with difficulties as "... the Cape Metropolitan Area was the most fragmented of South Africa's metropolitan areas" (Cameron, 1999: 137). In spite of the complexities, South Africa entered a new era of democratically elected local government structures after the November 1995 local government elections. The adoption of the six metropolitan substructures took place after the 1996 local government elections. The amalgamation of the Cape Metropolitan Council and the six metropolitan substructure regions took place on 6 December 2000 and the new unified City of Cape Town came into being (Figure 1). However, the previous council substructures will continue to administrate their areas until the new corporate structure is implemented (City of Cape Town, 2004: online).

4. Types of urban public space closures

The urban public spaces that are closed are described in the government gazettes by the types of urban public spaces that they are. The urban public space classification types were narrowed down into a manageable number of categories to simplify the data analysis and extraction, resulting in the creation of three broad categories of urban public space closure types. The criteria used to categorise the 36 urban public space closure types were the size, purpose and general use of the closed space³ (Table 1). The total number of successful urban public space closures in the study area and study period was 1 018 closures.

³ A different word order was used in describing what essentially would be the same phenomenon, for example, 'Closure of road' and 'Road closed'.

Table 1: Groups of urban public space closure types

<i>Group 1: Motorised-use spaces</i>		<i>Group 2: Non-motorised use spaces</i>		<i>Group 3: Recreation and vacant land spaces</i>	
Closure of public road		Closure of public footpath		Public place closed	
Road closed		Public passage closed		Public open space closed	
Public street closed		Closure of lane		Closure of city land	
Closure of public street		Passage closed		Closure of erven	
Level crossing closed		Closure of passage		Portion of public place closed	
Public road closed		Pedestrian way closed		Closure of portion of public place	
Closure of portion of avenue		Closure of service alley		Portion of city land closed	
Portion of public street closed		Portion of public passage closed		Portion of public open space closed	
Portion of public road closed		Portion of passage closed		Portion of erf closed	
Portion of street closed		Portion of lane closed		Closure of portion of erf	
Closure of portion of street		Closure of portion of public footway			
Portion of thoroughfare closed		Portion of drainage passage closed			
Portion of public thoroughfare closed					
Portion of road closed					
<i>Total Group 1 closures:</i>	609	<i>Total Group 2 closures:</i>	142	<i>Total Group 3 closures:</i>	267

Group 1 closures included spaces used by motorised vehicles and that are wide enough to allow motorised vehicles to drive in/on them. Group 2 closures consist of spaces that are associated with a non-motorised use, as used by cyclists and pedestrians. This group of urban public space closures were also narrower in width than the first group. In many instances, this group of closed spaces were remnants of 18th century urban planning that facilitated the use of narrow spaces for walking and fire control purposes (Shell, 1994). Furthermore, apartheid-era low-cost housing township planning also used these spaces for people to access transport corridors from the square layout of housing structures (Mills, 1989). Group 3 closures are spaces that are large and usually associated with a recreational land use or vacant land.

4.1 Closure according to years

Figure 2 shows the number of applications per group over the study period. The grouping of urban public space closures into three

groups made it easier to document and structure the data in order to extract patterns in the study area. Certain suburbs within the study area displayed a tendency to a specific type of closure. The largest percentage of urban public space closures came from Group 1 (60%), followed by Group 3 (26%) and Group 2 (14%).

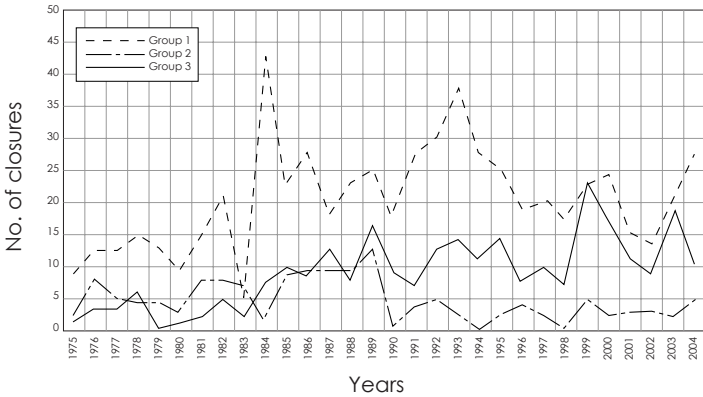


Figure 2: Number of closures per group over time
Source: Spocter, 2005a: own graph

4.2 Closures according to suburbs

The study period has been divided into time periods of five years. Within each cohort, different suburbs have different numbers of closures. Figure 3 has three categories of number of closures, namely; 0-7, 8-14 and 15-21, to which the labels of low, medium and high could be ascribed to represent closure intensity within a particular period.

In the first period utilising the new closure legislation (1975 — 1979), the suburb with the number of closures in the high category is Central Cape Town — the Central Business District. The two suburbs with closures in the medium category are Claremont and Pinelands, with the rest of the suburbs in the low category. The CBD and Claremont are major nodes of economic activity, while Pinelands is a high-income residential area.

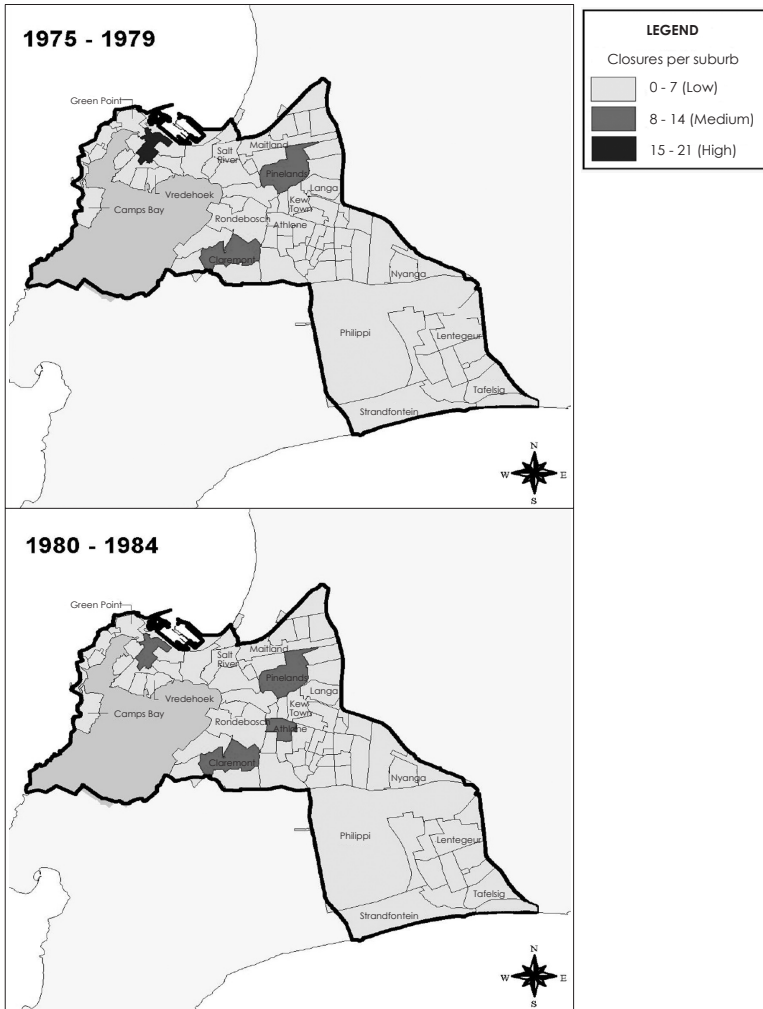


Figure 3.1: Closures per suburb, 1975 — 1984
Source: Spocter, 2005b: own drawing

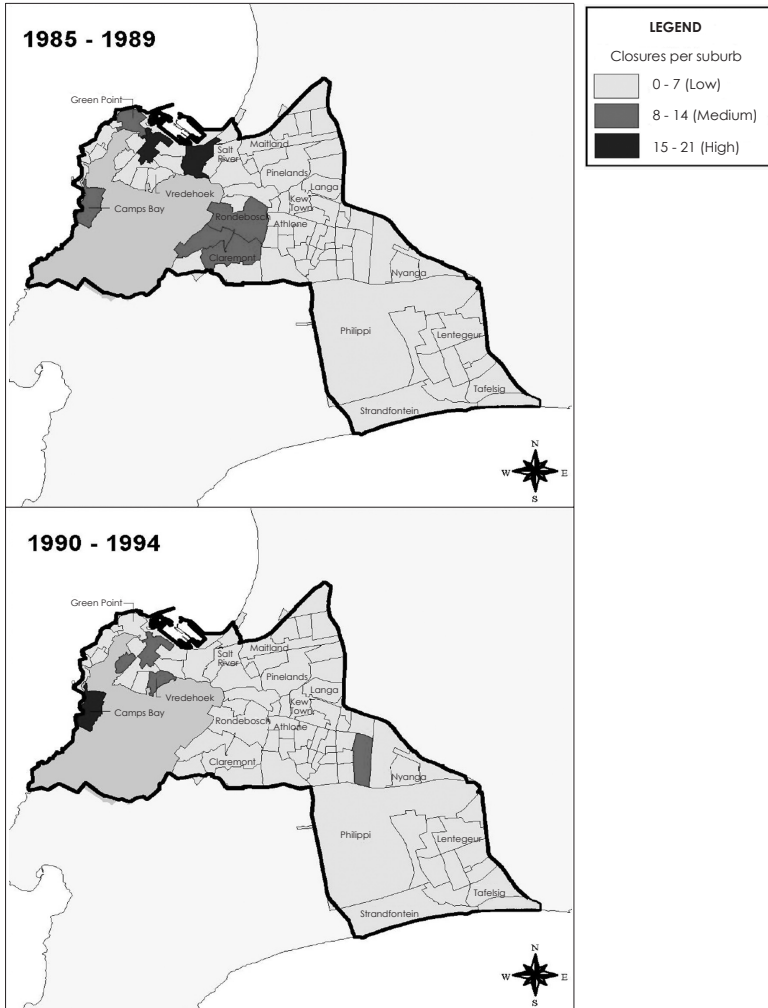


Figure 3.2: Closures per suburb, 1985 — 1994
Source: Spocter, 2005b: own drawing

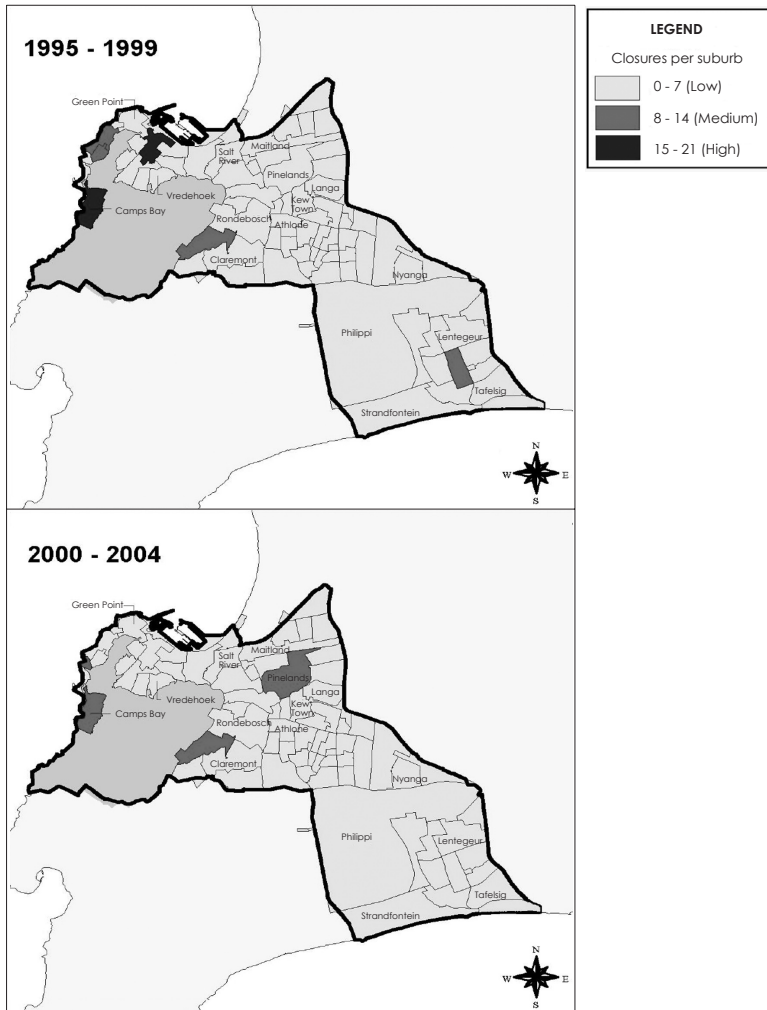


Figure 3.3: Closures per suburb, 1995 — 2004
Source: Spocter, 2005b: own drawing

The first half of the 1980s found the suburbs of once again, Central, Claremont and Pinelands, together with Athlone, have closure numbers in the medium intensity category. The number of closures in Athlone, a black area, in this period could be ascribed to the impact of the construction and widening of Jan Smuts Drive on the closure of feeder roads joining it. Closures that took place in the latter half of the 1980s showed a tendency to be confined to suburbs on the slopes of Table Mountain and Signal Hill. Suburbs with a high closure rate were Central, Woodstock and Camps Bay; while those with a medium closure rate were Green Point, Rondebosch, Newlands and Claremont. There is thus a tendency for these closures to be clustered in high-income areas on the slopes of Table Mountain and it coincides with the period in which there was the highest number of closures in the study area.

The period marking the abolishment of apartheid (1990 — 1994), witnessed a high closure rate in Camps Bay; a clustering of medium closure rates in the city bowl suburbs of Vredehoek, Tamboerskloof and Central, and in Manenberg. Manenberg, a low-income, apartheid-era, black township housing scheme on the Cape Flats has a medium closure rate due to, mostly, the high number of Group 1 type closures. The second half of the 1990s saw a high closure rate in Central and Camps Bay and a medium closure rate in Sea Point, Newlands and Portlands. The established trend of high and medium closure rates continue in high-income suburbs and in the CBD. The exception here is Portlands, a low-income suburb in Mitchell's Plain, which has a medium closure rate in this period owing to all closures, except one, belonging to Group 3 type closures. The 2000 — 2004 period only shows a medium closure rate in Pinelands, Newlands, Camps Bay and Bantry Bay. This is a continuation of an established trend of closure numbers in suburbs within traditionally high rates of closures. The one exception being Bantry Bay a high-income area that witnessed nine closures in this period consisting of mostly Group 1 closures.

The pattern of closures in suburbs shows that most closures took place in high-income older established suburbs clustered in the City Bowl, the slopes of the mountain or in major economic nodes. Most of the older, established suburbs in the study area have seen development take place by 1900. One could argue that development in long-established, built-up suburbs has used most space available and that any land deemed to be under-utilised or vacant would be a sought-after commodity with the potential to

be assimilated into existing properties. Thus, persons and organisations have tried to maximise land use by purchasing and privatising available pockets, strips and slivers of land around their properties.

Research into gated communities in Johannesburg shows that the highest demand for road closures came from those in middle- and high-income suburbs (Jürgens & Gnad, 2002). One can juxtapose this with the large number of micro-privatised spaces in Cape Town situated in middle- and high-income areas. Thus, middle- and high-income suburbs tend to have more privatised space, not only because they can afford to buy the property, but also for any other reasons that they may have, including security. Studies have shown that people with a higher socio-economic status are more likely to contact the authorities to report municipal problems or use any municipal client service (Sharp, 1982). It could also be that high-income earners would want to protect their assets as best they can and that if the closure of urban public space would help, then they would do that.

The only suburbs on the Cape Flats with a high and medium closure rates are the middle-income, previously whites-only suburb of Pinelands and low-income black suburbs of Athlone, Manenberg and Portlands. Building density might be lower in these areas and there might be more land available on the Cape Flats, thus the need to closure and privatise land is not as great as in established areas. One could postulate and suggest that as the city sprawls, older suburbs on the Cape Flats could follow the trend set by older, high-income areas, as the demand for land in these areas increase and infill takes place.

4.3 Closures according to former race/space categories

The division of urban areas into racial categories has imprinted an indelibly unique morphology on South African cities. For all the liberal leanings of the Cape Town City Council during the apartheid-era, they have not prevented the designation of urban space in Cape Town for the exclusive use of different race groups. Figure 4 indicates, within the study area, the clustering of white suburbs mainly around and on the slopes of Table Mountain, Lion's Head and Signal Hill, visibly separate from black suburbs. Black suburbs are situated on the Cape Flats, a windswept low-lying plain, away from the CBD. There are also four industrial areas and the Philippi agricultural area that is the largest suburb in size within the study area.

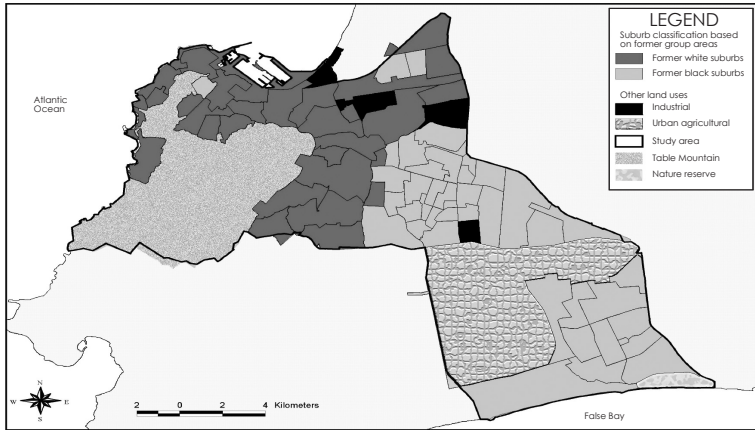


Figure 4: Suburb classification based on former group areas
 Source: Spocter, 2005c: own drawing

White suburbs constitute 41% of the suburbs in the macro study area, but they account for 69% of the total number of closures. Conversely, black suburbs constitute 53% of suburbs, but only account for 28% of closures (Table 2).

Table 2: Number of closures per suburb classification

Suburb classification	No. of suburbs	No. of closures
Former white group areas	33	701
Former black group areas	42	288
Industrial	4	28
Urban Agricultural	1	1
TOTAL	80	1018

This could be because, as mentioned earlier, citizens in economically better-off white suburbs, are more inclined and confident to access municipal services; have the means to familiarise themselves with municipal requirements and by-laws; and more whites than blacks have the capital to purchase additional land. Furthermore, most black suburbs tend to be 'younger' than white suburbs and vacant and under-utilised land might not be as scarce in black suburbs as in white suburbs.

More than two-thirds of closures are concentrated in white suburbs. This is reflective of the disparity between whites and blacks in so many other facets of South African society. However, the analysis of the sheer closure numbers alone belies the intricacies of closure patterns on the race/space level. The investigation of the physical extent of closures in white and black suburbs would further explain the differences of closures in the various suburbs.

4.4 The physical extent of closures

The City of Cape Town: Land Information Management Department have mapped records of most of the 1 018 gazetted, successful citizen-driven urban public space closure applications. These mapped records display, *inter alia*, the size of the closed space; mostly in square metres, but also in hectares and square feet in the case of older maps. The uniform measurement of square metres (m²) was applied to all closures and those not in m² were converted to it.

Unfortunately, 158 map records did not have a figure for the size of the closed space and this represented 16% of the total amount of closures. The reasons for the missing values were because the map was missing; the size of the closed area was not indicated on the map; the closure only affected vehicular access or it was due to administrative errors. Nevertheless, 860 closures, representing 84% of the total closures had a size value and it was possible to calculate the total closed space in the study area for the study period (Table 3).

Table 3: Size values of different urban public space closure groups

Closure group	Total no. of closures	No. of closures with a m ² value	No. of closures without a m ² value	Total closed space (in m ²)	Average size of closures
Group 1	609	513	96	527 818m ²	1 029m ²
Group 2	142	117	25	22 507m ²	192m ²
Group 3	267	230	37	421 733m ²	1 834m ²
TOTAL	1018	860	158	972 058m ²	1 130m ²

Source: Compiled by author from City of Cape Town: Land Information Management Department

Group 1 closures account 54% of closed space, Group 3 closures for 44% of closed space and Group 2 closures for 2% of closed space. The large percentage of Group 3 closures testifies to the earlier observation that increasing numbers of portions of recreational space and

vacant land are being closed. Furthermore, the closure of vacant, state-owned land would increase as it is proposed that South Africa's urban housing needs would be addressed by building high-density housing projects on vacant urban land (Philp, 2004).

Studies that identify vacant land for use for various purposes, including housing, have been commissioned by different local authorities (Western Cape Regional Services Council, 1994; Cape Metropolitan Council, 1998). Group 3 closures has the largest average size of the closure types and this could be as a result of recreation and vacant land spaces being larger, on average, than the other closure groups. The small percentage of Group 2 closures adds credence to the fact that small spaces make up this closure type, which is further affirmed by the low average size of 192m².

The total area of closed space is 972 058m², at an average of 32 401m² per annum. To give this some perspective, one could fit 152 international size (100m x 64m) soccer fields or 32 401 Reconstruction and Development Plan houses of 30m² in that area. The total closed space represents an area similar in size to the suburb of Tamboerskloof (Figure 5).

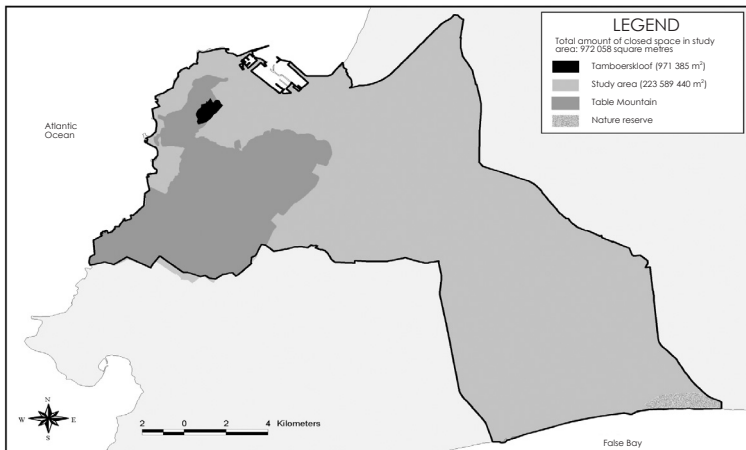


Figure 5: Graphic representation of total closed space (in m²) in the study area
Source: Spocter, 2005d: own drawing

Former white suburbs have 69% of the total amount of closures, but they only constitute 55% of the total closed space. A significant observation is that former black suburbs, although having little more than a quarter of the total number of closures, have close to 40% of the total extent of closures. This could be because, as there is less vacant and under-utilised land in older and established white suburbs, the size of the closed space is less — an average of 759m². Black suburbs on the sprawling Cape Flats have more vacant and under-utilised land, resulting in an average size per closure of close to 1 300m² (Table 4)

Industrial areas have the largest average size per closure, at 2 327m². Industrial erven tend to be much larger than residential erven in order to accommodate the large size of factories, which could be the reason for the large average closure size. Business organisations would also tend to have the capital outlay to purchase large tracts of vacant and under-utilised land.

Table 4: Percentage of total closed urban public space per suburb classification

<i>Suburb classification</i>	<i>No. of closures</i>	<i>% of total closures</i>	<i>Total size of closures (in m²)</i>	<i>% of total closed space</i>	<i>Average size per closure (in m²)</i>
Former white	701	68.8%	531 876m ²	54.7%	759m ²
Former black	288	28.3%	374 113m ²	38.5%	1 299m ²
Industrial	28	2.8%	65 155m ²	6.7%	2 327m ²
Agricultural	1	0.1%	914m ²	0.1%	914m ²

Most suburbs have less than 25 000m² of closed urban public space. Six suburbs have between 25 001m² and 50 000m² of closed space while five suburbs have more than 50 000m² of closed urban public space (Figure 6). This indicates that the size of the cumulative closed urban public space in suburbs is not high and those suburbs that do have a relatively high cumulative size of urban public space are dispersed in the study area, with a cluster in the adjoining suburbs of Rondebosch, Claremont, Rondebosch East and Crawford.

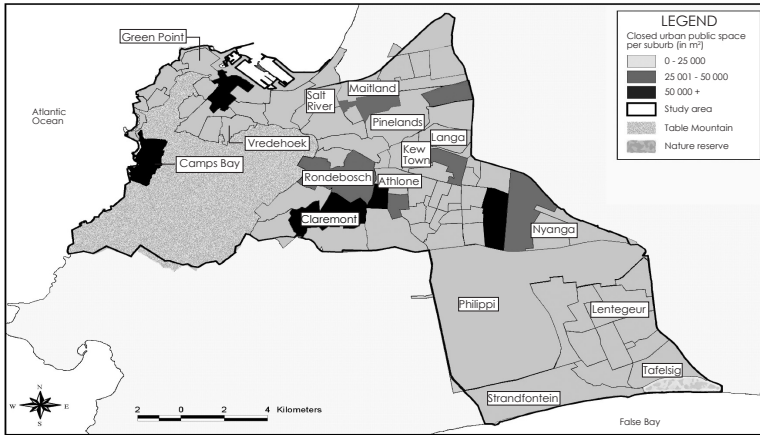


Figure 6: Total of closed urban public space per suburb, 1975 — 2004 (in m²)
 Source: Spocter, 2005e: own drawing

The calculation of closed space as a percentage of suburb size shows a similar trend. The suburbs of Rondebosch East, Crawford and Central have the highest percentage of urban public space privatised, followed by Newfields, Camps Bay and Thornton (Table 5). The high percentage of closed urban public space in Rondebosch East can be, in part, attributed to a single Group 1 closure of 58 700m² that was gazetted on 10th December 2004. The rest of the suburbs have less than two percent of their total suburb area privatised.

Table 5: Closed urban public space as percentage of suburb size⁵

% closed space	Suburb
3.0% and more	Rondebosch East (7.04%) Crawford (3.18%) Central (3.09%)
2.0% - 2.9%	Newfields (2.87%) Camps Bay (2.2%) Thornton (2.09%)
Less than 2.0%	Rest of the suburbs

⁵ The total area (in m²) of each suburb was divided by its total closed space (in m²) and expressed as a percentage.

The total coverage of the study area is 223 589 440m², thus the closed and privatised urban public space represents 0.43% of that total (see Figure 5). One could infer that at face value, these closures do not seem to impact the city morphology on a broad scale and that large parts of the study area are not being privatised. However, these closures do have an impact on the fine scale personal/private space of citizens.

5. Conclusion

The macro analysis of urban public space closures identified certain trends pertaining to closures from 1975 to 2004. The number of closures was relatively low after the introduction of the closure ordinance in 1974, but increased substantially in the latter half of the 1980s and the first half of the 1990s, a period in which three peaks of number of closures was identified. Furthermore, there has been a shift to increasing numbers of closures of recreation space and vacant land.

Closures tended to take place in high- and middle-income formerly white suburbs, but the average size of closures were higher in industrial areas and formerly black suburbs. Notwithstanding the seemingly large areas of closed space, these closed spaces only formed a fraction of a percentage of the total study area size. Thus, urban public space closures seemed to have more of an impact on the personal/private space of individuals rather than the broader city morphology.

There were 1 018 gazetted urban public space closures that were cartographically recorded on variously sized paper maps by the City of Cape Town: Land Information Management Department. A dire need remains for the compilation of a GIS database of all urban public space closures. This would allow the City of Cape Town to monitor the time-space patterns of urban public space closures and the different scales of impact on the City. The same GIS database could contain information regarding the location of gated communities and secure estates in the city. A central GIS depository of urban public space closure information could inform policy- and decision-making and could assist the city in curbing polarisation within the urban sphere. By using GIS as a decision-making tool to influence urban public space policy, the City of Cape Town would be able to move closer to the vision of it being a sustainable city, a dignified city, an accessible city, a credit city, a competent city, a safe and caring city and a prosperous city.

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