Chapter 7

Gating the streets
The changing shape of public spaces in South Africa

Karina Landman

Introduction

Contemporary cities have often been referred to as 'fortress cities' (Davis 1992; Tiesdell and Oc 1998; Graham and Marvin 2001; Webster *et al.* 2002). Demand from some parts of society leads to forces that instigate major changes, leading to greater fortification and privatization in cities worldwide. It is part of a 'fortress mentality', very characteristic of many cities at the turn of the century.

The idea of urban fortification is not new. Since the earliest settlements, people have protected themselves by means of walls and gates (Mumford 1961; Kenyon 1990; Kostof 1992; Morris 1994). Yet these interventions were relatively small. The great difference between these and contemporary cities is the scale and extent of today's fortified enclaves within larger cities. The contemporary 'fortress city' is created by a combination of elements such as gated residential enclaves, shopping malls, secure office parks, gated parks and bunker-like architecture. For example, neighbourhoods or precincts are fortressed from the rest of the city through walls, gates and high-technology surveillance systems. Precincts are fortified and privatized in this way as a result of the actions of private business, large corporations, wealthier citizens and sometimes also those of local authorities (Dillion 1994; Flusty 1995; Madanipour 1996; Oc and Tiesdell 1997; Ellin 1997; Marcuse 2001; Graham and Marvin 2001). Consequently, the nature of the public realm has been changed through the privatization of public space, services and governance. Davis, referring to 'Fortress LA' and the militarization of public space in Los Angeles, describes a city in which the 'defense of luxury has given birth to an arsenal of security systems and an obsession with the policing of social boundaries through architecture' (1992: 154). In this way, gated communities contribute to the wide-scale phenomenon referred to as the loss of the public realm in contemporary cities across the world.

Similar trends are also occurring in South Africa. In response to many challenges, including high levels of crime and violence, and growing

levels of fear of crime and a range of insecurities, there has been a huge growth of physical boundaries through fences and walls, burglar bars and shutters on building façades, and boomed barricades on public roads. Consequently, the urban landscape has become a tapestry of fortified and often privatized enclaves of various forms and sizes, juxtaposed with a growing number of low-income housing developments and informal settlements.

The question is whether or not this poses a problem in cities. In order to address this question, one needs to explore the relevance of public space in cities. There are many definitions of public space, highlighting different aspects such as the common ground (Carr *et al*. 1992), sharing through contact with strangers and peaceful coexistence (Walzer 1986), or free access (Tibbalds, cited in Madanipour 1996). In essence, public space can be summarized as 'space that allows all the people to have access to it and the activities within it, which is controlled by a public agency, and which is provided and managed in the public interest' (Madanipour 1996: 148).

Public space is important because it 'expresses and also conditions our public life, civic culture, everyday discourse' (Walzer, quoted in Madanipour 1996: 146). Tibbalds points out that the public realm is 'the most important part of our towns and cities. It is where the greatest amount of human contact and interaction takes place' (in Madanipour 1996: 146). It is therefore important that the development of urban public space, as part of a larger public sphere, addresses the tensions inherent in the contemporary transformation of the urban public realm and contributes to the emergence of an urbanism that promotes social integration and tolerance (Madanipour 1999: 879).

This chapter explores the transformation of public space in South Africa and its implication and meaning in that country. The first section sets the scene and explains the context of public space in the country. This is followed by a brief theoretical overview of the process of spatial transformation, introducing a conceptual framework to explain the process, and a model to interpret the nature of space in specific places. These frameworks are then applied in two case studies in South Africa, highlighting the empirical data and analysis of the findings. The penultimate section discusses the implications of these findings, paving the way for a number of conclusions related to the privatization of urban space in South Africa.

Public space in South Africa: yesterday and tomorrow

The nature and use of public space has been a contentious issue throughout the history of South Africa, since it is closely related to and can often be conceived as a product of large-scale socio-spatial engineering that goes as far back as 1656 when the Dutch settled in the Cape, and which culminated in 'high apartheid' in the second half of the twentieth century. This ideology of apartheid resulted in a struggle for the control of urban space in South African cities. As a result, planners started to carve up society into racial

categories (Swilling 1991), with certain areas earmarked for specific racial groups. The apartheid policy was linked to a social system based on 'setting apart' or dividing different race groups in space. This made the power of apartheid crucially dependent on spatiality (Robinson 1996). The physical isolation of whites from other racial groups received great attention. Because of the racial dualism, the terms 'whites' and 'non-whites', evident in apartheid, were used widely, in everything from government notices to notices on park benches and public toilets. Apartheid entailed the design of a multitude of laws preventing those who were not classified as white from occupying or using declared white space (Christopher 1994). In this way, preferred social space was created and enforced through the nature of physical space.

In order to address these restricted spaces of yesterday, the present government in South Africa developed a number of policies to guide contemporary planning and design practices in the country. These include the Development Facilitation Act 1995, the Urban Development Framework (1997), and the White Paper on Spatial Planning and Land Use Management (2001) at national level and the Municipal Structures Act 1998 and Municipal Systems Act 2000 at local level. While the detail and application of these documents differ, one dominant theme emerges. All these documents support a vision for open, integrated and inclusive public spaces and include the promotion of integrated development in one way or another. This includes spatial and socio-economic integration. Spatial integration is concerned with the integration of previously disadvantaged areas with the better-performing parts of the city, and the provision of a range of facilities in underdeveloped areas. Social integration is concerned with the integration of different groups in various urban areas to allow for greater interaction and more vibrant communities, while economic integration encompasses greater accessibility to economic opportunities for all urban residents.

However, the envisioned nature of more inclusive spaces for tomorrow is currently being challenged through the proliferation of fortified spaces, fuelled by a number of drivers and pressures, including insecurity and crime. The early 1990s saw a dramatic increase in the levels of recorded crime in South Africa, to a large extent related to political violence, and this trend has continued even after the move to democracy in 1994 (Schönteich and Louw 2001). Of particular concern, though, is the high level of violence experienced, with crimes such as murder, rape and assault having among the highest incidence rates in the world (Du Plessis and Louw 2005). Despite promising decreases in the reported levels of certain crimes, they are still disturbingly high. For instance, although the murder rate decreased from almost 77 per 100,000 of the population in 1994–1995 to just under 40 in 2005–2006, it is still more than seven times the world average of 5.5 and twenty times higher than the British rate of just under 2 per 100,000 (Burger 2007). These patterns have often been

attributed to a persisting 'culture of violence' in South Africa (Hamber 1999). Linked to this pervasive culture of violence is an endemic culture of fear that is prevailing in most South African cities (Dirsuweit 2002). For example, a national victim of crime survey conducted by the Institute for Security Studies (ISS) in 2003 revealed that despite the fact that South Africa's crime rates have decreased or stabilized during the past five to seven years, the public's fear of crime increased between 1998 and 2003 (Mistry 2004). As a result, urban fortification has increased tremendously in the country, including the gating of streets. This raises many questions about the nature of these changes and their impact on the urban form and function.

From space to place: a continuous process of change

According to Badenhorst (1999), those who study the relationships between social processes and spatial form are in agreement that social structure, and particularly the divisions in society, precipitate in urban structure, and that urban residential patterns act as a mirror image of the relevant society. The South African city cannot, therefore, be viewed separately from the society in which it occurs and the history of that society where it still has an impact on the present city.
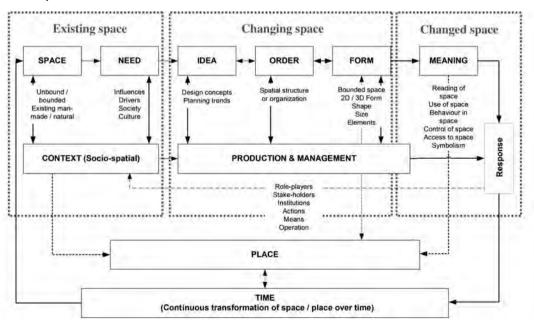
Therefore, in order to understand the urban space, one has to understand the social process of urban transformation and the aspects influencing its changes. One way to understand the urban development process is to concentrate on development agencies, the structures with which they interact in the form of resources, rules and ideas, and the social and spatial contexts in which they operate (Madanipour 1996: 154). This emphasizes the close relationship between space and society: social drivers influence spatial change, leading to specific social interpretation and response.

A conceptual framework was developed in order to investigate and explain this process (Landman 2006). This framework offers a way to understand spatial transformation as a socio-spatial process. This happens through a process involving space, need, idea, order, form and meaning, and, parallel with these, the production and management of the spatial intervention in a specific context. (Space refers to the unbound natural or existing human-made space.) This does not happen randomly. It is informed by particular needs at a specific time (related to the context). The need or demand gives rise to an idea about how to address this need. This idea could relate to, for example, reigning planning or urban design trends. The idea is also the beginning of order, of structural organization to order the idea and guide form. Form is the physical manifestation of the need and idea, and takes on a particular shape, texture, size, etc., which is measurable. It reflects the character of a space and contributes to the creation of a particular place, which in turn can be modified over time. Space and place are not arbitrary. They encompass meaning. Spaces or places can therefore be 'read' and 'experienced', and can appeal to people's feelings or emotions – for

example, feeling comfortable in a place, or feeling safe. In such a way, it can also influence the use of space and thus people's behavioural patterns, and consequently people can react differently to different spaces and places. Their reaction may depend on a number of predispositions, including current feelings and experiences. Places can elicit a number of responses, which in turn can add to the transformation of specific spaces if deemed appropriate by a sufficient number of supporters. This returns the cycle to the beginning, where a need arises to change existing human-made space. A range of players involved in the production and management of space influence this process, and constantly influence the need, idea, form, order and meaning in settlements. Apart from the individual blocks, the process can also be broadly divided into three key stages: existing space (context), the transformation of space, and the nature of the changed space. This is illustrated in Figure 7.1.

Although this is a highly simplified abstraction of a complex process, it offers a way to conceptualize space and place in the urban design process and understand some of the aspects involved in the process of urban transformation. It can also be argued that this is a design process that is based on an individual designer's process, and may therefore prove difficult to apply to a complex social process where many actors are involved and no one designs the outcome. While this is true, a broader interpretation will allow for a wider application, where this framework becomes a representation of multiple processes where need and demand represent a multiple range of needs, and production and management a wide range of players involved in many actions that occur simultaneously and on a constant basis. If one

7.1
A framework for investigating the making and changing of urban space.

takes such a viewpoint, the framework starts to offer a way to interpret spatial transformation and design in urban areas as part of a much broader socio-spatial process, building on previous research (Boyer 1995; Liggett and Perry 1995; Madanipour 1996; Short 1996; Massey 1994, 1999).

Lastly, the framework starts to raise questions about the nature of space in cities and its relation to place. However 'amorphous' and 'intangible' our reaction whenever we feel or know space, it is typically associated with the concept of 'place' (Carmona *et al.* 2003). Therefore, places are essentially centres of meaning constructed out of lived experience (Relph 1976). By imbuing them with meaning, individuals, groups or societies change 'spaces' into 'places'; for example, Wenceslas Square is particularly meaningful to the citizens of Prague (Carmona *et al.* 2003).
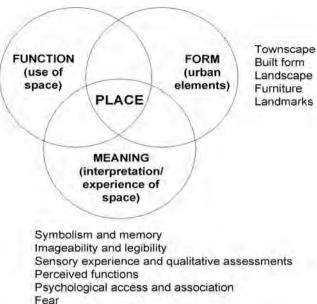
Space is therefore the starting point for understanding place. For Norberg-Schultz (1980), a place is a space that has a distinct character. Relph (1976) points out that space provides the context for places, but derives its meaning from particular places. Continuous spatial transformation is a characteristic of any settlement, whether it happens relatively regularly (e.g. in large cities) or is part of a very slow process (e.g. in small rural villages) (Madanipour 1996). If the dynamism of the concept of space-time is employed, place can be understood as open and porous – 'place becomes a moment in the ever-changing social relations at all scales' (Massey, quoted in Madanipour 1996: 23).

Relph (1976) furthermore argues that 'physical setting', 'activities' and 'meaning' constitute the three basic elements of the identity of places. Building on his work, Punter and Montgomery (cited in Carmona *et al.* 2003) located the components of place and a sense of place within urban design thought (see Figure 7.2). This illustrates how urban design interventions can contribute to a sense of place. It also reflects the intricate relationship between society and space. The city, or settlement, is a stage where different actors play out their various roles (Short 1996); or, to be more specific, public space is 'the stage upon which the drama of communal life unfolds' (Carr *et al.*, quoted in Madanipour 1996: 146). These performances or interactions are socio-spatial. 'They all *take place* [emphasis in original text]. They occur in a spatial setting. Space is not just a backdrop. Space and place are crucial to what performances are given and how they are received' (Short 1996: 252).

As is pointed out in the introduction, tensions, however, emerge when over-emphasis on individual places leads to the transformation of public spaces into privatized common spaces for only a selected few through, for example, privatization and access control. This process was investigated in South Africa through the application of the conceptual framework presented above in four case studies of gated communities in Johannesburg and Pretoria. The case studies involved the use of various methods to gather empirical data, including documentation review of neighbourhood newsletters and reports from the city council, spatial analysis of

7.2
The components of place. Based on an illustration by John Montgomery, as depicted in Carmona *et al.*, 2003: 99.

Land uses
Use patterns
Noise and sound
Pedestrian &
vehicular flows
Cultural events
Accessibility

**FUNCTION
(use of
space)**

**FORM
(urban
elements)**

PLACE

Townscape
Built form
Landscape
Furniture
Landmarks

**MEANING
(interpretation/
experience of
space)**

Symbolism and memory
Imageability and legibility
Sensory experience and qualitative assessments
Perceived functions
Psychological access and association
Fear

the neighbourhoods, and semi-structured interviews with the residents, representatives from the security companies patrolling these neighbourhoods and officials from the local authority.

Transformation of public space through gated streets

The number of gated communities in South Africa, including enclosed neighbourhoods and security estates, has grown significantly in the past five years. They occur in various forms across the country and contribute to a significant transformation of the urban landscape (Landman 2003). *Large security estates* in South Africa are mostly located on the urban periphery. They offer an entire lifestyle package, including a secure environment, a range of services (garden services, refuse removal, etc.) and a variety of facilities and amenities such as golf courses, squash courts, cycle routes, hiking routes, equestrian routes and water activities. These are private developments where the entire area is developed by a private developer. These areas and buildings are physically walled or fenced off and usually have a security gate or controlled access point, with or without a security guard. The focus of this chapter, however, will be on enclosed neighbourhoods, a phrase that refers to existing neighbourhoods that have been fenced or walled in and where access is controlled or prohibited by means of gates or booms that have been erected across existing public roads. The following section briefly discusses the findings from two case studies on enclosed neighbourhoods, namely Gallo Manor in Johannesburg and Strubenkop in Pretoria, highlighting the process of transformation of public space through gating the streets.

Existing space

Physical context: existing built environment

The neighbourhood of Gallo Manor comprises 260 dwellings within the area, which is surrounded by a major sub-metropolitan road to the west, a country club with a golf course to the north and east, a secure office park to the south-east and a larger neighbourhood road to the south. The neighbourhood had ten accessible streets prior to the closure, which were mainly lower-order residential roads. The roads were laid out in a closed-road network system, with five entrance and exit points. The study area was almost entirely residential, except for a Chabad centre (Jewish place of worship), a community church and the veterinary surgery. There were no shops inside the area. There is a big shopping centre diagonally across the road.

The Strubenkop neighbourhood comprises one enclosed neighbourhood with 122 plots that are accessed from inside the enclosed area. The existing neighbourhood, north of Kings Highway (main access road into the larger residential area), was serviced by six roads. This area is almost entirely residential, except for a few small neighbourhood parks. There are no shops inside the area. There is a small shopping centre and a large sports ground just down the road.

Social context: need and idea

The most dominant need in both case-study areas was for improved safety and security. In the late 1990s, crime escalated significantly in Johannesburg, involving serious crimes such as assault, robbery and car hijackings. The fear of crime played a significant role in the community's drive for neighbourhood closure in Gallo Manor. Many residents were afraid of being hijacked as well, despite extensive target-hardening measures. As one resident explained:

> [E]specially at night, when you reversed out of your driveway and got out to open the gate, there was a certain level of nervousness about reversing into the street … [and getting] mugged … and after dark [if I saw a] car's headlights behind [me] and it would follow me into the area into our street, more than once I would take a drive around the blocks to see how far this car was going to follow me. But … definitely … you had that level of nervousness.

This is clearly indicative of the fear of crime that prevailed in the neighbourhood at that time. Residents systematically upgraded the security measures around their houses, until they came to a point where they felt they had to take additional steps to secure the neighbourhood as well. Gating the streets thus became the 'idea' to curb crime.

Incidents of crime also escalated in Pretoria in the 1990s, along with the fear of crime. There was a general perception that crime had

shifted from Johannesburg to Pretoria. Consequently, the fear of crime also increased. In line with this, the most important reason given by residents for the closure in Strubenkop was safety and security. One of the older residents explained that before the closure, he had been warned not to go jogging in the evenings, since it was unsafe. He also forbade his wife to go for a stroll or even water the garden outside when he was not at home. Another resident also emphasized the crime situation and said that he was ready to move to a secure estate unless the neighbourhood streets were gated.

Apart from safety and security, residents from both case-study areas also indicated that they believed that the neighbourhood closures would benefit property prices and assist with the maintenance of public open spaces, as closing the area would reduce the number of people using the public spaces and therefore the opportunities for loitering and littering. This also reflects a need for security in a broader sense (i.e. in response to a range of insecurities) and control of neighbourhood spaces through access restriction.

Changing space
Establishment and operation
The residents in Gallo Manor made use of a specific process of community mobilization to gain support for the road closure as a means to address crime in the area. A committee was formed to address issues of crime prevention – at first to build a local police station and support the police where it could, and later to close off the roads into the area to control access. The committee prepared a budget and commissioned a traffic-impact study. At the time of the application, 90 per cent of the residents were in favour of the road closures. There were a few dissenting residents. The council received three objections to the road closure from residents staying inside the area. These residents complained about the possible traffic impact, the effectiveness of such a closure for security purposes, pedestrian access, financial obligations and the constitutionality of such an action.

The enclosed area was formally established in March 1998. In 2001, a Section 21 company was formed called the Zandfontein Farm Owners Association (Pty) Ltd. It has two directors, and the steering committee comprises seven members, each with his or her own portfolio. The committee is responsible for the ongoing management of the area and its interests. This includes financial management, membership building, park maintenance, security (including the management of the security guards) and other, related matters, for which they often have subcommittees in place. In addition, the committee also plays a lobbying role (similar to that of other Section 21 companies in Business or City Improvement Districts) by making the council aware of the needs within the area.

A similar process was followed in Strubenkop. In 1999, a group of residents came together to discuss the closure of a section of Lynnwood for security purposes. These residents registered a Section 21 company on

6 May 1999 under Section 21 of the Companies Act. The main purpose and business of the company was stated as being

> to promote the common interests of the owners and occupants of the land within the boundaries of the residents' association and to ensure the safety of the occupants by fencing and entry control and the maintenance of any electrical and communication equipment.
>
> (Report of Directors 2002: 4)

Two directors manage the company and report back to the Strubenkop Residents' Association. There were many concerns, reservations and uncertainties among the residents during the initial stages. In order to facilitate the process and address these issues, the board of trustees appointed two facilitators, who were not board members, to speak to the concerned residents. The facilitators acted as advisers as well as mediators between the newly established residents' association and the residents who had concerns about becoming members and supporting the application. After careful promotion of the idea and mobilizing community support, the residents' association managed to get 80 per cent support. The enclosed neighbourhood officially came into existence on 1 September 2001. The role of the board of trustees is to oversee the financial management and expenditure of the assets of the residents' association. In both neighbourhoods, the roads within the area are still public and remain the responsibility of the local authority to maintain and upgrade.

Changes in the physical space: fortification and access control

Three of the five entrances to Gallo Manor were closed off by gates, while two roads have controlled access points through the use of booms across the roads, which are manned by private security officers (Figure 7.3). The gates are locked permanently and prohibit entry or exit at these points. The pedestrian gates next to these gates have also been closed off for security purposes, and pedestrians are required to use either of the remaining two accessible roads. The Letaba Road entrance is retrofitted with two booms spanning both sides of the road.

Two security guards are on patrol to manage the booms and control access into the area. Two guardhouses are provided next to the entrances to serve as operational bases for the security guards. The guardhouses at the two manned entrances are temporary wooden structures located next to the road, just inside the booms. The residents' association also closed off access to the river area at both points where it crosses into the case-study area. It has since also taken responsibility for the upgrading and maintenance of the river and the park area immediately adjacent to the river, which is considered a major amenity in the area and extensively used by residents.

As mentioned before, the Strubenkop area comprises one enclosed neighbourhood with 122 plots that are accessed from inside the enclosed area. Three roads are closed off to restrict access into the neighbourhood. The result is that those plots facing inwards are located inside the enclosed area, while those facing outwards fall outside the security neighbourhood. The case-study area is bounded on the north side, where the area is adjacent to undeveloped land belonging to the University of Pretoria. A fence has been erected along the border to keep criminals out, as many incidents of crime have occurred in this area. The roads are laid out on a closed-road network system with a collection of interacting curvilinear roads.

At present, two of the three entrances are closed off by electronic gates, while Elizabeth Grove has a controlled-access point through the use of booms and gates manned by private security officers. The gates can be electronically operated by a remote control and thus prohibit entry and exit at these points. There are no pedestrian gates next to these gates, and pedestrians are required to use the main entrance. Before the closure, Protea Avenue could be accessed from two sides out of Kings Highway, on both sides of a small triangular park situated at this intersection. As part of the road closure, the left entrance and south boundary of the park have been fenced off, and electronic gates have been erected at the entrance on the right-hand side to Protea Avenue (Figure 7.4). This small park now falls within the closed-off area. This is therefore a case of privatization not only of roads but also of other public spaces. Indeed, the concern over congregation in this park seems to have been a key reason for the action in the first place. The side gates have a sign instructing pedestrians to make use of the main entrance further down the road.

7.3
Gated street (Jukskei Road) in Gallo Manor.

Changed space
Change in access to and use of neighbourhood space

Since the neighbourhood closure in Gallo Manor, a team of five security guards works in the area at any specific time to ensure the safety of the residents in the neighbourhood. The one entrance in Satara Road is closed during the night. The area is also serviced by a twenty-four-hour armed patrol or reaction vehicle operated by a security guard from the security company that mans the boomed entrances. The company also monitors and responds to alarms at individual residences, as well as at the boom gates. In the case of visitors, the only details recorded by the guards are the registration number, the colour and make of the car and the number of people in the car. The reason for this is that this information can be used to provide some independent data that the police can use in the event of a problem.

Following the neighbourhood closure, the feeling of safety appears to be generally improved and is leading to increasing use of urban space inside the area. Most residents agree that the neighbourhood closure has had a positive impact on the neighbourhood's character and on the increased use of its public spaces, as illustrated by the following remarks made by a resident:

> The street closures and booms that were put up have made a tremendous difference to the use of the open public space. Before that you didn't see many people walking in the streets. You didn't see many couples or people [walking] with dogs. You very rarely saw kids playing in the street and now you see a lot of that. You

see lots of little groups of children playing in the street. In fact, about 15 metres up the road from our gate the kids are always there, and they have got little ramps for their skateboards. So there are lots more children playing, [and] you see lots more people walking around just casually.

This person stated that almost all those he referred to as using the public space were from inside the area. This meant that very few outsiders used the public space inside the neighbourhood enclosure, despite the fact that these areas officially remain public space. It indicates the extent to which one group can 'territorialize' a public area and create what is perceived as a safe environment. The closure encouraged the residents to take ownership of the common space and feel free to intervene in the management and maintenance of the spaces to some extent.

Similar trends were found in Strubenkop. Since the neighbourhood closure, the area is serviced by two security guards twenty-four hours a day. They are stationed at the main entrance and are responsible for controlling access by facilitating the entrance and exit of vehicles and pedestrians. The security guards also serve as a reaction unit and patrol the area from time to time. A patrol vehicle is stationed at the main gate for this purpose.

Residents and visitors enter the area through two different gates. Residents are issued with access discs that activate the boom at the 'residents' gate'. All visitors must complete the visitors' book unless the guard at the main gate has been notified beforehand, either in writing or by telephone, and visitors identified. Visitors are requested to complete and sign a form requiring details of the car, registration number, destination, aim of visit (i.e. 'private', 'business', 'visit', etc.). Residents are also required to make special arrangements for employees. This 'identification' takes the form of an identity card with a photograph of the employee displayed on it, as well as the details of the employer. This is despite the fact that it violates their right to freedom of access to public roads, stated in the South African Constitution. There are also strict rules regarding the removal of equipment, such as furniture, through the main gate.

Subsequent to gating the streets, the urban spaces are generally well used, even the streets, as confirmed by the residents. One resident said that he and his wife go for a walk every evening. Another resident pointed out that her children often go out into the street alone and that many children make use of the streets as extended play spaces. The transformation of the urban spaces in the neighbourhood, therefore, allows for greater use of these spaces by the residents of the neighbourhood at the expense of excluding everyone else. The neighbourhood experienced a number of changes, both in atmosphere and image, after the security access-control restrictions were implemented. One interviewee remarked, 'It is almost like a small street in the old-world countryside again. Children can really roller-skate and play ball games in the street.'
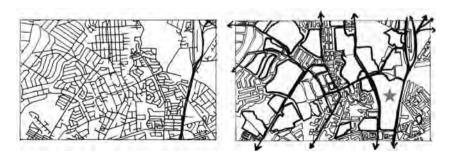
This raises the issue of the creation of a neighbourhood that reflects the characteristics of the countryside as experienced in the past. It therefore indicates the search for the creation of a rural lifestyle within the urban environment, where the community can be closer and safely gather in the streets again – a new idealization of village life within the city. Another interviewee remarked on the cleanliness of the urban spaces, and compared them to their condition before the closure, when people would leave rubbish on the pavements.

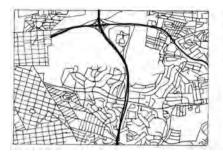*Change in urban form and function: impact on the broader environment*

Gating the streets also had an impact on the broader environment. While one neighbourhood enclosure may not have a significant impact on traffic patterns, several may have, because of the ripple effect, as well as the fact that many neighbourhoods are not suited to road closure because of their layout and position within the road network system. This is evident when one considers a number of enclosed neighbourhoods in close proximity to each other. Closing off a number of neighbourhoods means that the existing urban form and road network are severely affected and transformed. Large areas are now changed into isolated and inaccessible super-blocks, with little resemblance to the original fine-grained urban form. This is evident from the case-study areas in both Johannesburg and Pretoria (Figures 7.5 and 7.6). Through traffic is also limited to a few major arterials.

Implications of spatial transformation

The previous discussion highlighted how gating urban streets in South Africa has changed the shape or form of what were previously accessible and public spaces. What also became clear is that there is a close relationship between form, function and meaning, and that changes in the form of public spaces also have direct implications for their function and meaning (Figure 7.7). This will be discussed briefly.

7.5
The impact of neighbourhood closures on the broader environment in northern Johannesburg (including the case-study area, marked with a star), indicating the original street pattern (left) and new urban form (right).
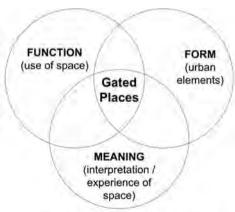
7.6

The impact of neighbourhood closures on the broader environment in eastern Pretoria (including the case-study area, marked with a star), indicating the existing street pattern (left) and new urban form (right).

Form

In South Africa, particular types of physical spaces were perceived to be unsafe and not suitable to a particular lifestyle, contributing to the development of new abstract concepts or ideas of what constitutes ideal space and how this would be translated to the physical realm, for example through the concept of 'gated communities'. There are various types of gated communities in South Africa, but broadly they comprise closed-off physical spaces, for example enclosed neighbourhoods created through the gating of existing streets. A number of physical elements characterize these neighbourhoods, including gates and booms, fences and walls, guardhouses and warning signs. These physical elements serve to change the existing shape of the city and transform the nature of public space on two levels related to the function (use) and meaning (visual interpretation of physical elements).

7.7

Characteristics and identity of gated places in South Africa.

Restricted land uses
Changed use patterns
Limited / congested pedestrian and vehicular flows
Local community events
Restricted accessibility

FUNCTION (use of space)

FORM (urban elements)

Gated Places

Townscape: fortified and privatized spaces
Built form / elements: gates & booms, fences & walls, guard houses, warning signs

MEANING (interpretation / experience of space)

Symbolism: segregated space and restricted access / use
Memory: apartheid planning / spaces
Perceived functions: exclusive use
Psychological association: 'insiders / outsiders'
Sensory experience: exclusion and fear

145

Function

As a result of the increasing number of enclosed neighbourhoods, the physical space of the city is transformed through the creation of a series of isolated, fragmented neighbourhoods that restrict access through gated streets and limited access points, in combination with physical elements such as fences, gates and booms. This has a direct impact on use patterns for a range of affected parties. The case studies have shown that this has a severe impact on pedestrians and cyclists, as well as on traffic patterns and road maintenance. Through traffic is limited to a few major arterials, and this often leads to increased congestion and travel times. The study also indicated that pedestrian movement is often seriously affected by road closures, as not all roads provide for pedestrian movement and access (contrary to the council's policy requirements). This causes delays and increases walking distances. Gating the streets can also adversely affect access to public facilities or home-based businesses inside closed communities. The impact on pedestrians and the social impact on the larger society both raise many concerns related to the creation of more inclusive spaces for tomorrow. It also challenges the nature of the interior public space as 'free access' (a characteristic of public space, according to Tibbalds) when it is in effect hindered in practice.

In addition, larger gated neighbourhoods also contribute to problems with service delivery and the maintenance of public spaces and infrastructure inside the neighbourhood. These problems are often the result of physical changes in the road network linked to road closures, as well as difficulties in obtaining access to neighbourhoods owing to locked and unmanned gates and/or gates operated by remote control. In many instances, 'open' roads were not designed to carry the large volumes of traffic now forced onto them, which not only influences planning cycles (roads needing repairs sooner than originally planned) but also increases the maintenance cost for the city. At this stage, no provision exists for the applicants of road closures to pay the costs of the impact on the entire road network. There is also a detrimental impact on the roads within the security-restricted area, as the roads are less frequently used. Underutilized roads tend to deteriorate more rapidly, breaking up when the tar surface is not constantly compacted.

Meaning

Meaning is linked to the actual urban elements and changes in the physical space defined by order and form in the built environment. These objects emphasize perceptions or signs and significations allowing material objects to be spoken about (Lefebvre 1991). As such, they become part of the 'text' (Short 1996; Ellin 1997) of the city, allowing a multitude of readings and interpretations within the urban context. The specific physical elements associated with enclosed neighbourhoods, including the fences, gates, booms, CCTV cameras and exclusive facilities and amenities behind physical boundaries, contribute to a 'text' of exclusion within the fortress city. In this way, the 'text' refers to a series of symbols that mean something, highlighting the relationship between form, use and meaning.

Apart from the physical implications related to reduced accessibility to what legally remain public spaces, meaning also relates to the perceptions and value of places and specific typologies, such as gated neighbourhoods. It is linked to images and memory of similar applications or types in the past, representations of particular regimes, groups or actions, and even abstract perceptions of Utopia. With regard to enclosed neighbourhoods, it therefore explains the notions of 'spaces of inclusion and exclusion', 'spaces of the rich and the poor', 'new apartheid spaces' and 'idealized places' that were elicited from the responses at the public hearings on road closures that took place in both Johannesburg (in 2003) and Pretoria (in 2004). It also highlights the dilemma facing local authorities and built environment professionals regarding the appropriateness of these types of responses in contemporary South African cities.

Conclusion

The case studies have indicated that crime and insecurity give rise to increased fortification through gated streets, which in turn undermines attempts towards greater integration through the privatization of public spaces, and apparently raises the original challenge of segregation in South African cities. In this way, South African cities strongly reflect the statement by Judd (1995: 164) that 'segregation and isolation impelled by fear and anxiety are becoming fixed in urban culture'. This clearly indicates the relationship between society and physical space, as well as how various needs and ideas contribute to changes in the urban form which subsequently have different levels of meaning.

One of the main objections to enclosed neighbourhoods in South Africa is that they effectively privatize urban space and restrict access to what legally remains public space. Enclosed neighbourhoods that are based on the public approach, where streets and other facilities that are public have been enclosed, create a number of tensions in practice. The South African Constitution guarantees freedom of movement in all public space. However, it also entrenches the right to safety and security. This raises many issues around the limitations of rights of all urban residents to ensure the safety of a few within a selected geographical area. This debate remains to be challenged in the Constitutional Court, and various legal opinions have been offered, arguing both sides of the debate. Meanwhile, those whose rights are limited as a result of the changing shape of public spaces and restricted access continue to oppose the establishment of enclosed neighbourhoods in South African cities and maintain that they are changing the social space in the cities through the creation of fragmented and socially exclusive communities, as was evident from the outcry at the public hearings in both Johannesburg and Pretoria.

In summary, two issues that need consideration arise. The first debate concerns the specific persons who have suffered from gating, while the second relates to the integrity of the city as a whole and the relevance of public space that has been challenged.