

# Spatial reactions to crime: fortressing or emancipation of public urban space? Potchefstroom as a case study

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Submitted to *Town and Regional Planning*, 16 September 2003;  
revised 30 November 2003.

## Abstract

In both historical, as well as contemporary cities, it was and still is believed that the built environment can play an essential role in the protection of its inhabitants. Today, one of the major challenges facing urban planners, specially in South Africa, is to offer possible spacial solutions to prevent crime in cities. While the traditional city were enclosed by thick walls and incorporate the public spaces, the contemporary city is following a new kind of fortress mentality where various smaller urban spaces (in most cases residential areas), scattered throughout the city, are enclosed by physical barriers with the result of internal spaces, once public spaces, now being privatised. This concept of fortressing – known as 'gated communities' – is multiplying drastically in both metropolitan as well as small and medium sized South African cities. Apart from the responsibility to address crime, urban planners are simultaneously faced here with other responsibilities (in the way they design the physical environment): efforts in reviving a dying public realm in cities and addressing the segregation of urban space, created by the previous political dogm, are some of the major challenges. In this regard the notion of 'gated communities' could spell doom to a possible safe and vibrant urban future. This paper questions the long term consequences of a fortress mentality on the well-being of the public realm of our cities and explore, by means of an analysis of 'gated communities' in Potchefstroom, possible compromises to be made.

## RUIMTELIKE REAKSIES OP MISDAAD: FORTIFISERING OF EMANSIPASIE VAN OPENBARE STEDELIKE RUIMTE? POTCHEFSTROOM AS 'N GEVALLESTUDIE

In beide historiese sowel as kontemporêre stede is dit en word dit steeds aanvaar dat die bou-omgewing 'n essensiële rol kan speel in die beskerming van die inwoners. Een van die groot uitdagings wat stadsbeplanners vandag in die gesig staar, veral in Suid-Afrika, is om moontlike ruimtelike oplossings te bied om misdaad in stede te voorkom. Terwyl die tradisionele stad omsluit is deur dik mure en publieke ruimtes ingesluit het, volg die kontemporêre stad 'n nuwe tipe fortifiseringsmentaliteit waar verskeie kleinere stedelike ruimtes (meestal residensiële areas), verspreid deur die stad, omsluit is deur fisiese versperrings – met die resultaat dat interne ruimtes, eens publieke ruimtes, toenemend geprivatiseer word. Hierdie konsep van fortifisering – bekend as "toegangsbeheerde gemeenskappe" – vermenigvuldig drasties in beide metropolietaanse sowel as kleiner en medium grootte stede. Benewens die verantwoordelikheid om misdaad aan te spreek, staar stadsbeplanners ook terselfdertyd ander verantwoordelikhede (in die wyse waarop hulle die fisiese omgewing vorm) in die gesig: pogings om die 'n kwynende publieke sfeer in stede te laat herleef en om die segregasie van stedelike ruimte, geskep deur die vorige politieke dogma, aan te spreek is van die grootste uitdagings. In hierdie opsig kan die idee van 'toegangsbeheerde gemeenskappe' die ondergang voorspel van 'n moontlike veilige en lewendige stedelike toekoms. Hierdie artikel bevraagteken die langtermyn gevolge van 'n fortifiseringsmentaliteit op die welstand van die publieke sfeer in ons stede en ondersoek, aan die hand van 'n analise van 'toegangsbeheerde gemeenskappe' in Potchefstroom, moontlike kompromieë wat gemaak moet word in die verband.

## 1. INTRODUCTION

Crime remains a very real and prevalent threat to people living in cities. In order to address crime and the fear of crime, physical reactions to crime (for example gates, walls, steel bars and controlled entrances) are becoming increasingly evident in contemporary cities. Most of these are achieved by a greater or lesser degree through the privatisation of public space in order to control the use of urban spaces. 'Gated communities' are probably the most popular international trend in this regard. Unfortunately the manifestation of a fortress mentality is akin to a general retreat from public places in cities, which ultimately threatens the future use of the public realm. The result: cities, custom made for criminal behaviour.

This article questions, by means of an analysis of 'gated communities' in Potchefstroom, the effect of these private 'forts' on the public environment in cities on the long term. It is argued that certain negative trade-offs, like enhancing fear of crime and the consequent avoidance of public spaces, might exceed the advantages of safety and security these developments claim to supply. Alternative planning and design guidelines are suggested here, where private space is not protected at the expense of the survival of the public spaces in cities.

Although the root causes of criminal behaviour are a simultaneous interplay of ideological, biological, psychological, socio-economic, political and physical planning and design forces (Cloete & Stevens 1993; Reid 1997; Siegel 1986), this article focuses on the latter, which is of particular interest to disciplines like urban and regional planning, urban design and architecture. It is acknowledged from the start, that crime is complex and a multi dimensional phenomena that cannot be diminished or reduced by means of a single minded approach. Likewise any theory, which attempts to prevent or reduce crime in practice should be of a multi-dimensional nature – the physical dimension (planning and design) being one of the factors which needs to be recognised in crime prevention strategies.

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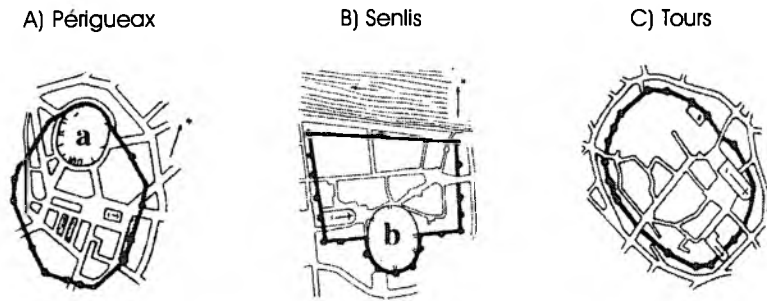


Figure 1: Layout of Medieval cities (300-400 AC) surrounded by walls as safety mechanisms (Source: Benevolo 2000:330)

## 2. HISTORICAL CITIES AS SANCTUARIES

The built environment has historically been adopted and exploited in numerous ways to protect the inhabitants of cities in times of social or political unrest. Gates and walls as design solutions to combat crime are evident throughout the evolution of historical cities. During Medieval times cities like Périgueax, Senlis and Tours (Figure 1) had strong, almost impenetrable walls, made of stones and brick, which defined barriers and enclosed internal urban space. These formed safe refuges against barbaric attacks. Fortification as a means of protection can be singled out as the primary point of departure in Medieval city building – the wall symbolically being a metaphor for sanctuary within society. (Benevolo 2000:330-333).

Another example of physical design as a defense mechanism is the mid 19<sup>th</sup> century design for Paris by Baron Haussman where a pattern of wide boulevards is provided to facilitate the rapid movement of military forces to control civil riots (Poyner 1983:5).

Physical interventions, such as gates and walls for protection is as ever present in contemporary cities as in the cities in the past. But the new international trend of urban fortification, referred to as 'gated communities' differs from these old forts. Public spaces in historical cities were incorporated within the enclosed wall (Figure 1) to form places where people could experience freedom of expression and interaction whether it be socially, politically or economically.

The Greek Agora; the Roman Forum and the streets, market places as well as exterior spaces of public buildings in Medieval cities were all subtly integrated into the city to form

an integral part of city life. In fact, where entire cities were walled off, public spaces were accessible for all in the city and therefore integrated all the urban residents within the urban space.

## 3. FROM HISTORICAL SANCTUARIES TO CONTEMPORARY MORTUARIES

In 'contemporary forts' (or 'gated communities') it seems as if protection is given individually and at a price. These new forts spring up and multiply at the expense of the public environment. They tend not only to exclude public use in the urban environment, but also to privatise public areas. According to a national survey done by the CSIR Building and Construction Technology in 2002, South African metropolitan areas like the Greater Johannesburg already consisted of approximately 300 road closures in 2002 – many of them illegal (Landman 2002:9). The collective influence of these contemporary forts on the city's future is questioned here, especially regarding their influence on the vitality of public urban spaces. If these developments are being implemented at the expense of the well-being of the public environment in cities, it seems as if this age-old city as sanctuary will reincarnate itself here in a new form: the city as a mortuary.

'Gated communities' are furthermore particularly distressful in the South African context where the political dogma of the past resulted in the fragmentation and segregation of our cities. In the light of South African policy and legislation, for example the Development Facilitation Act (SA 1995:17) and the White Paper on Spatial Planning and Land Use Management (SA 2001) where a holistic and integrated approach to

development is propagated, these forts could spell doom for the future of South African cities.

In the meantime the reality of high crime rates confronts South Africans daily. The chance of being a victim of serious crime (murder, rape or assault) in South Africa is estimated at one in ten, while being a victim of property related crime is estimated as seven out of ten (CIAC 2002). No wonder the public take drastic measures to ensure their own security. Many withdraw from daily urban life into their private enclaves protected by walls and gates. Up till now, no fixed solution to crime has been offered and whether this complex phenomena can or will be resolved in future can be questioned.

Notwithstanding numerous futile efforts at combating crime within society, disciplines like urban and regional planning, urban design and architecture, have reflected (and are still reflecting), both in theory and practice, on ways to reduce crime by means of spatial intervention.

## 4. COMBATING CRIME SPATIALLY: THE THEORETICAL DISCOURSE

Over the past 30 years various schools of thought can be distinguished with regards to the prevention of crime from the side of the spatial disciplines (for example architecture, urban design and urban planning). This theoretical discourse contributed significantly to the debate on the built environment as a catalyst for the enhancement or prevention of crime within society. The 1960s gave birth to Jane Jacobs' concept of 'eyes on the street' where the vitality of the public spaces in cities are considered to be the key to safer cities (Jacobs 1961). According to Hall (1996:230) this was one of the most influential theories on 20th century city planning.

In the 1970s the principle of 'defensible space' was introduced by Oscar Newman. This implies that certain physical deterministic characteristics in the environment, created through building layout and site planning, can be used to enhance the development of a sense of community and territoriality amongst residents. Spatially this is enforced by means of a visual division of space into the private, semi-private and public domain –

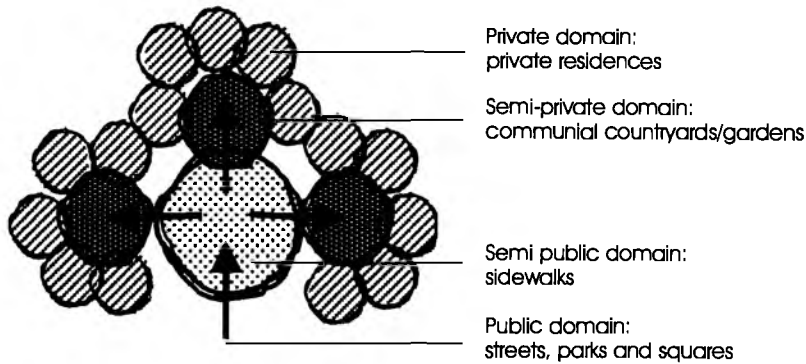


Figure 2: The concept of defensible space where space is divided into zones of influence (Source: Newman 1972:9)

referred to as "zones of influence". In this way a system of natural, passive surveillance over the immediate environment is established. (Newman 1972) (Figure 2).

Building on Newman's ideas, a new school of thought emerged in the 1980's, resulting in a broader approach of "crime prevention through environmental design" – better known as the CPTED-approach. The main principle here is the reinforcement of natural informal processes of crime control through planning and design principles (Jeffery 1977).

Various publications in different countries, from Poyner's "Design against crime" (1983) to Alice Coleman's "Utopia on trial" (1985) and "The Delft checklist" (1990) in the Netherlands, each outlined strategies to reduce crime through means of adapting or exploiting the built environment. Another approach, the 'Safe City-program' moved beyond some of the previous, somewhat narrower, applications of pure design methods or "situational orientated" preventative methods where the latter is combined with an "offender-orientated" approach. This results in a more contextual approach to crime being complex and of a multi-dimensional nature. Essentially this school of thought acknowledges both criminal and environment (physically and socially) as key indicators of crime. Apart from traditional guidelines for opportunity reduction of crime, two new dimensions are added as an integral part of any crime reduction strategy: the management of safe city-programs and community participation. (Oc & Tiesdell 1997; Wekerly & Whitzman 1995.)

Paul Ekblom introduced the ecological approach in 1995 where "intervention is made in mechanisms that cause criminal events" (Ekblom 1995:118). Within this approach an equilibrium is pursued where the level of crime is at its lowest with regard to financial costs and requirements such as freedom and privacy, while at the highest chance for success offenders can achieve if risk and effort to commit the crime are taken into account. (Ekblom 1995:127).

A combination of crime reducing methods, whether offender or situational oriented, is creatively combined in this school of thought to maintain the equilibrium for the longest possible time. While in theory much reaction was consequently evoked on the ways in which urban planning and design can contribute to reduce crime without isolating people and places from the daily functioning of city life. In practice however, reactions to crime are taking a complete opposite direction: the creation of a 'cloister-like' society.

##### 5. FROM THEORY TO PRACTICE: REBIRTH OF THE MEDIEVAL CLOISTER

Although, in literature this movement has not yet been referred to as the 'cloister-theory' the approach here fundamentally centralises around the very essence of the religious cloister: the existence of two clear spatial zones, 'inside' and 'outside'. Everything considered as negative or "bad" is excluded from the inner zone, leaving this area as a retreat from any negative influences within the outer zone.

Internationally these 'cloisters', referred to in literature as 'gated

communities', is defined as: "residential areas with restricted access in which normally public spaces are privatised. They are security developments with designed perimeters, usually walls or fences, and controlled entrances that are intended to prevent penetration by non-residents" (Blakely & Snyder 1999:2). In South Africa a broader definition is adopted by Landman (2000:2) where 'gated communities' are referred to as "any physical area that is fenced or walled-off from their surroundings, either prohibiting or controlling access to these areas by means of gates or booms. In many cases the concept can refer to a residential area with restricted access so that normal public spaces are privatised or use is restricted. Gated communities include both neighbourhoods and security villages".

Although reasons other than the search for security (e.g. the pursuit of particular lifestyles or prestige) exist to explain the emergence of gated communities in society, security communities are of particular interest as a spatial reaction to crime in South Africa, due to the high crime rates and a history where urban space is segregated and fragmented.

Critical reactions to this type of cloister mentality are abundant in theoretical discussions. A serious point of critique raised is that of the effect of these barricaded enclaves on the perception of crime. Fear of crime as a dimension of crime, has for instance been almost ignored in urban planning literature and practice up till now. Ekblom (1995:122) describes fortification as "ugly and fear-inducing security shutters and bars, which spoil the environment and reduce social interaction even further". Accordingly, fear of crime tends to keep people from the street, using the public environment – therefore eradicating participation in urban life: the very death-blow of the survival of public places in the urban environment.

In South Africa where the level of fear of crime is rated extremely high in comparison to the rest of the world, it is no wonder that the perception of crime is considered an even more serious problem than actual crime. A short term solution is offered for those who can afford it: to withdraw from the public life in cities and spend as much time as

possible in private artificial havens, whether it be shopping malls, office parks or suburban capsules. Even when people are moving from one private space to another, movement itself takes place in one of the most famous private havens of all today: the automobile. Unfortunately, this type of life might eventually cause people to live like hermits in society following a lifestyle summarised by Lewis Mumford's as: "... withdraw like a monk and live like a prince" (Mumford 1989:486).

The sustainability of this type of life is questionable considering the social nature of people and cities. For those who cannot afford to withdraw into the comfort of an "all-under-one-roof private sanctuary" the public environment in cities forms a fundamental part of their daily lives. It is needed as extensions of very limited private living spaces, economic markets or as a means of getting to and from work. The unregulated as well as a large-scale implementation of 'cloister' or 'gated' communities in cities might undermine the coexistence of the public spaces – leaving them abandoned and as crime and fear-inducing places in cities.

## 6. CRIME, FEAR OF CRIME AND GATED COMMUNITIES IN POTCHEFSTROOM

Although numerous international studies, where crime data and design principles are researched exist, very little research has been conducted in South Africa in this regard (CSIR 2000).

Research on 'gated communities' in the South African context has focused primarily on metropolitan areas, whilst smaller and medium sized cities have not received much attention up till now. At the same time the visual impact of and rate at which 'gated communities' multiply in smaller cities is evident when driving through cities such as Potchefstroom for instance.

This article investigates the spatial relationship between crime, the perception of crime and the distribution of 'gated communities' in Potchefstroom in order to determine the effect of these developments on the public environment.

### 6.1 RESEARCH AREA

Potchefstroom, capital city of the North West Province, is situated approximately 150 kilometres south west of the Johannesburg inner city. The total population for the Potchefstroom urban area is estimated at 128 352 with 49% males and 51% females. Setswana (44%); Afrikaans (29%); Sesotho (12%); Xhosa (11%) and English (2%) are the main languages spoken (SAS 2001).

A socio-economical profile of Potchefstroom reveals high levels of unemployment (37% of the total labour force) and poverty, where 48% of the households receive less than R1 500 per month (SAS 2001). Poverty levels are high, but remain lower than in the rest of the North West Province. The socio-economic profile could also be significant regarding crime, since high crime

levels and populations where poverty prevails, are synonymous. Research in Potchefstroom as study area was conducted on two levels: The macro study level (Figure 3) includes urban Potchefstroom (excluding Ikageng, Promosa and Mohadin – due to the lack of data available). Studying the occurrence of 'gated communities' on macro level shed light on the collective spatial impact of these communities on the urban landscape.

The micro study area (including Owens, van der Bent and Greyling Street) is located in the south west quadrant of the Central Business District (CBD) and includes a population of 244, with predominantly young (20-30 years of age), female (75%) residents. Because of the demographic profile, together with the location of the area on the verge of the CBD, this area is considered a high risk zone for crime.

Land uses include predominantly high-density (30-40 units per hectare) residential premises, consisting of a total of 17 blocks of flats, three business premises and stands reserved for public open spaces. The area reveals similar characteristics to that of the transitional zone in the concentric zone model of Burgess in 1925: high crime rates, fear of crime and the transition from commercial activities to offices (Burgess 1925).

The specific context of the site offers a unique combination of characteristics – the study area therefore being an ideal research sample to study the relationship between crime, perception of and reactions to crime as well as the impact of these on the public domain. Characteristics include a relatively high crime rate; visible level of fear of crime due to the extent of all kinds of added safety measures to the built environment; a deteriorating public environment; site layout and design of buildings that could possibly be conducive to crime; a transition to a more heterogeneous community and the small size of the area.

### 6.2 RESEARCH METHODS

Research methods were chosen to reflect the multi-dimensional nature of the study and include the exploitation of exact phenomena (crime and 'gated communities') as well as non-exact phenomena (perception and impact of crime).

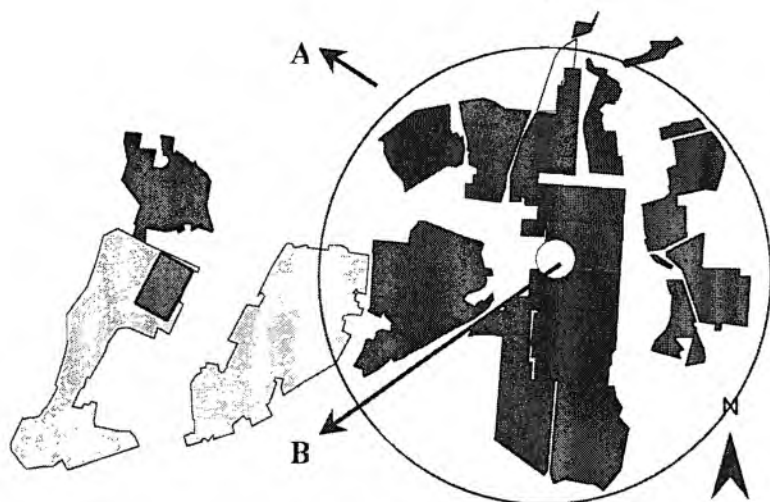


Figure 3: Potchefstroom layout, with (A) the macro level study area and (B) the micro study area

Both qualitative and quantitative research methods were used.

The study area was analysed on the macro level by means of quantitative research methods:

- a) The compilation of a data base of all 'gated communities' erected in Potchefstroom from 1980-2003. Data was extracted from the municipal building registers of approved building plans regarding information on the year of development, type of development and location
- b) The compilation of a systematic GIS-based inventory of the gated communities
- c) An analysis of crime statistics in Potchefstroom, from 1994-2002.

On the micro level both quantitative and qualitative research methods were included for analysis:

- a) A proportional sample of 100% was carried out by means of a structured questionnaire. Out of a total of 259 residents 21 could not be found, leaving a total of 238 questionnaires to be completed. Having obtained a response rate of 95 %, the survey can therefore be accepted as valid and representative. The survey was done weekdays from 17:00-19:00 during July and August 2002

The design of the questionnaire made provision for both open-ended and closed questions with regards to the following topics: demographic information, actual crime patterns in the area, the perception of crime and impact of fear of crime on daily activities within the area.

- b) A detailed analysis of crime statistics for the area from 2000-2002

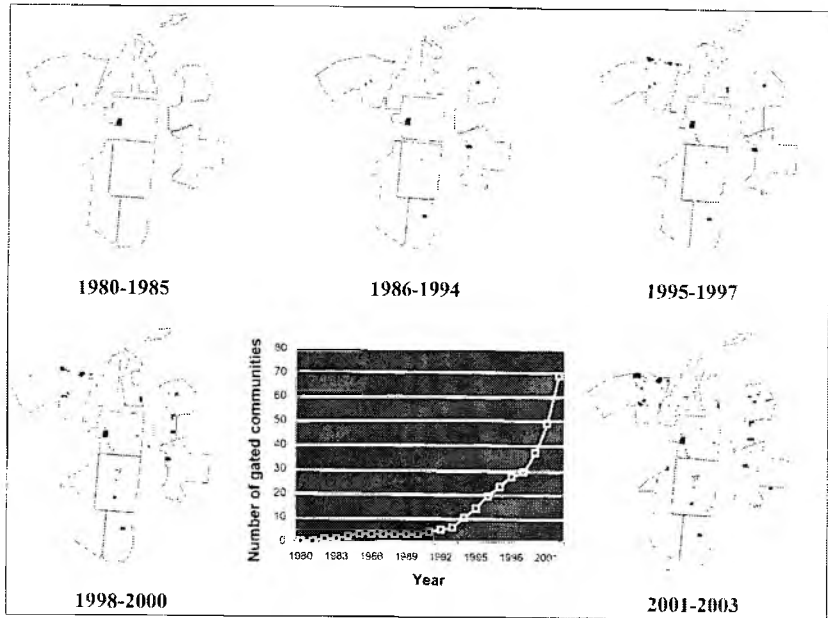


Figure 4: Spatial development of gated communities in Potchefstroom: 1980-2003 (Source: GIS data base compiled by E. Kanselaar 2003)

- c) A qualitative evaluation of the built environment (urban planning, site layout and building design) was made to determine the extent to which the environment could possibly encourage criminal behaviour or induce fear of crime among residents. The evaluation was based on a combination of urban planning and design principles obtained from the different theoretical schools of thought (See 4).

**6.3 ANALYSIS AND RESEARCH RESULTS**

**6.3.1 Macro analysis**

In analysing the development and spatial distribution of 'gated communities' in Potchefstroom since the 1980s, the impact of these fortress-like developments on the urban landscape is clear, as indicated in Figure 4. Since the mid 1990s an overall dramatic increase

has been experienced. Two areas, that both fall under the newer parts of suburban neighbourhoods, can be distinguished as areas where a concentration of these developments have formed: Dassierand (in the north-western part of the city) and Van der Hoffpark (the north-eastern side).

A typology of 'gated communities' in Potchefstroom can be formulated through the data extracted from the survey, which fall into the following categories:

- a) Fenced townhouse complexes include new types of medium density – low rise complexes e.g. townhouse developments served by a private internal street system.
- b) Security complexes include one or more types of housing and social facilities. Internal roads can be private or public.

Table 1: Crime per category in Potchefstroom: 1994-2002

Crime per category	1994	1995	1996	1997	1998	1999	2000	2001	2002
Crime against person	3 382	2 351	1 735	1 823	1 785	1 902	1 991	1 803	1 804
Crime against property	5 394	6 186	5 518	5 141	5 407	6 047	6 520	5 913	5 738
Other crimes	1 393	1 497	910	1 018	1 069	1 070	1 074	1 179	930
Total	10 169	10 034	8 163	7 982	8 261	9 019	9 585	8 895	8 472

Source: SAPS 2003

- c) Gated apartment blocks. Old or new medium/high density and medium/high rise blocks of flats. Here new apartment blocks are designed with security measures like fencing and/or controlled entrances, while existing ones are retrofitted with it.

In order to draw possible relationships between the occurrence of 'gated communities' and crime, statistics of crime for the period 1994-2002 were analysed (Table 1). In comparison with the total number of reported crimes in Potchefstroom in 1994, 1697 fewer crimes were reported in 2002. When comparing different categories of crime it is seen that crime against persons (e.g. murder, rape and assault) has decreased with more than 10%, while property-related crimes (e.g. theft of and from motor vehicles, theft of bicycles and residential burglary) has increased substantially and amounted to a total of 68% of all crimes committed during 2002. Although it cannot be concluded that 'gated communities' necessarily and exclusively result as a spatial reaction to crime, a comparison between the sudden increase in crime (in this case residential burglary) between the years 1997-2000 and the development of gated communities since 1998- (many to which security measures like controlled entrances were added) reveals a considerably significant relationship. In this case the increase in the types of crime typically associated with high income suburban areas (burglary) runs parallel to a sudden increase in the number of 'gated communities' that emerged during this time.

A more comprehensive analysis and survey of specific reasons for the development of and/or choice to live in 'gated communities' should be conducted in other cities to confirm the notion of fortification as

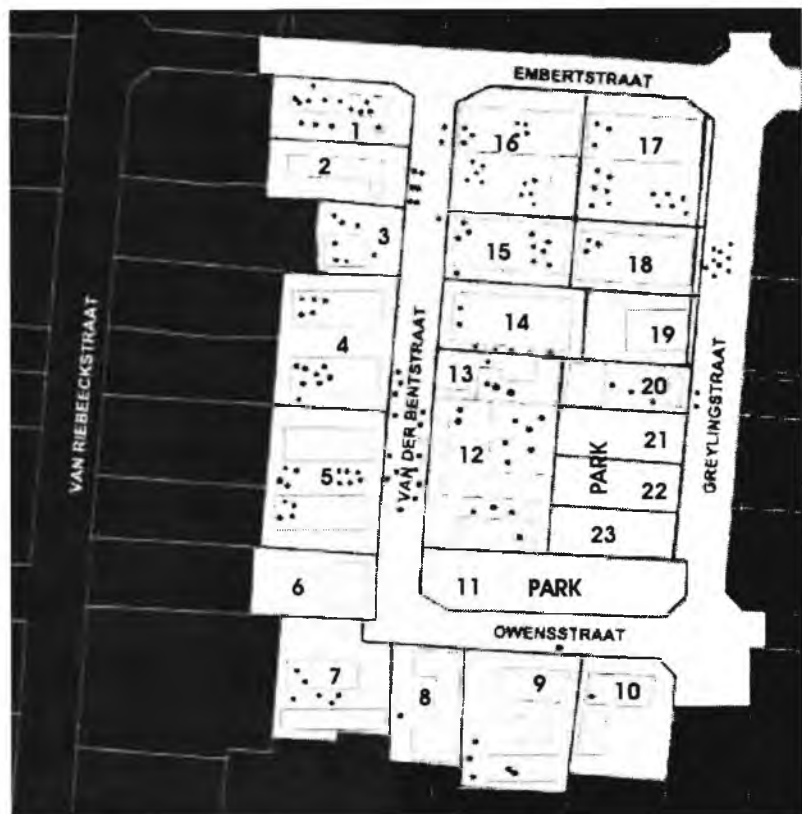
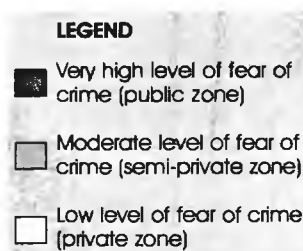


Figure 5: Crime patterns in the study area (2000-2002)  
(Source: Synthesis from SAPS crime statistics, Potchefstroom, 2003 and field survey 2000)



Figure 6: Level of fear of crime in different zones of study in the area  
(Source: Synthesis derived from field study 2002)

a direct spatial reaction to crime. Similar studies, conducted in America by Blakely and Snyder (1999) reveal that other reasons, apart from crime, exist why particular communities choose to fortify residential properties/areas (see 5.3)

What is rather of importance here is the collective impact of these 'gated communities' in the urban environment (for example the amount of public space that is privatised and level of fear of crime in cities) and the consequent well-being (vitality) of the public urban environment in the long run. A more detailed and qualitative orientated research study was conducted on the micro level study area to reflect on this.

### 6.3.2 Micro analysis

Two issues were of considerable importance in the micro study area: the actual crime patterns versus the perception of crime in the area. Actual crime patterns (the type, time of day it occurred and the exact location) were determined by means of the analysis of crime statistics for the area (2000-2002) and data obtained from the questionnaires. Crimes committed in this area during 2000-2002 were predominantly property-related crimes such as theft from motor vehicles, theft of private property and burglary. It is important to notice that crime occurred mostly in those areas that can be referred to as semi-private and private areas (Figure 2), with the exception of two areas in the public domain (Figure 5) where crime is concentrated. Apart from stands 3, 6, 8, 15, 16, 17 & 19 all the apartment blocks in the study area are 'gated communities'.

It is interesting to note that despite the number of gated communities, overall crime rates have still increased during the past 2 years. Concerning the second important issue in the micro study area, the perception of crime, the following results were derived from the questionnaire: on the question of how residents would estimate their chance of being a victim of crime in the study area, 60% of the respondents considered it high to very high. Accordingly 62% of the respondents, therefore, indicated their level of fear of crime as high. Levels of fear is further regarded as the highest among females who fall within the age group 16-30.

On the question regarding the impact of fear of crime has on residents, 80% responded that it has a definite impact in some way or another on daily activities within the area. An open-ended question in this regard confirmed that social activities (for example, walking to and from the central business area as well as walking for relaxation) in the study area are limited as a result of the fear of crime. Public areas (streets and parks) are those areas, which are considered as more dangerous than others, resulting in avoidance of these areas as far as possible.

Figure 6 shows the response to the question on an indication of the zones where fear of crime is experienced from least to most intense. In this case it is evident that the more public the zone, the higher the level of fear. In the private domain the level of fear of crime is experienced as relatively low. In the semi-private domain the level of fear of crime is experienced as moderate while in the public domain (streets and open spaces) very high levels of fear of crime are experienced.

In comparing the results (Figure 5 & 6), it is evident that in this case, two opposite dimensions of crime exist: actual crime and the perception of crime – which do not necessarily correlate as illustrated in this case. From Figure 6 it is evident that most

of the crimes took place in the semi-private to private zones, while the public domain is the zone to be perceived as the area where crime flourishes, although the research indicated only two small areas in Van der Bent Street that could possibly be unsafe due to the concentration of crime. These two dimensions of crime each have a particular impact on the reaction to crime in the physical urban environment – the area in which built environment disciplines like urban planners, intervene in terms of layout and design in order to reduce (or enhance) crime and fear of crime.

In this study area the perception of safety in the private places could possibly be attributed to the belief in the 'cloister' syndrome, implying that places are regarded as safe if located behind gates and bars. In the meantime the very isolation of the private domain could enhance fear of crime in the public domain. This in itself causes public places to be, from the perspective of the criminal, as ideal opportunities for criminal behaviour. Fortressing in this case (and most likely in other parts of the city) is therefore a reaction to crime at the expense of the well-being of the public environment.

On the qualitative evaluation of the study area in terms of the planning and design principles propagated in the theory to reduce crime, three main comments need to be made:



a) The orientation of residential blocks away from the public realm (in this case the street) inhibits passive surveillance over the street



b) Public spaces are visually segregated from the residential area without any surveillance



c) The domination of cloister-orientated visual elements like gates and steel bars enhance the perception of the areas as being unsafe



Figure 7: Possible visual qualities that could enhance fear of crime and criminal behaviour (Photos: Karen Puren)

in the first place site design could play an important role in enhancing crime and fear of crime due to the absence of 'eyes on the street'. No indirect control exists over the public environment. (Figure 7a). Secondly, defensible space is not created. No clear transition from public to semi-public to private space can be distinguished – public spaces like the park are left unattended, without identity or sufficient natural surveillance (Figure 7b). Thirdly, visible evidence of the 'cloister' mentality, like steel bars, gates and controlled access devices, dominates the area (Figure 7c). Collectively then, this area is most likely to exacerbate crime and fear of crime, rather than reducing it – leaving public areas as mortuaries instead of sanctuaries in the city.

## 7. LESSONS LEARNT FROM THE STUDY

There are at least three main lessons to learn from this study: Firstly, it seems, from the macro scale study in Potchefstroom, that an increase in the manifestation of cloister-like residential developments ('gated communities') run parallel to an increase in crime, specifically residential burglaries. This is distressful when taken into account that public space increasingly make way for more and more private space which, on the long run could challenge the existence of the public realm. It is not necessarily the direct transformation of public into private space (for example the closing of streets in order to form enclosed neighbourhood with access control) which should be noticed here but also the way in which public spaces are isolated from private spaces – creating desolated and dangerous spaces in cities – especially for pedestrians.

On the micro scale study area the notion to fortify the built environment as a spatial reaction to high crime rates in the area is confirmed. The response by residents as to reasons why the so called 'hard architecture' mechanisms is increasingly implemented in the study areas boils down to the same: crime and fear thereof.

Secondly, fortifying urban space, whether public or private, leads to another second important lesson that 'gated communities' tend to have a negative influence on the well-being of

the public environment in contemporary urban space:

- The micro study indicated that residents avoid public places due to a feeling of isolation experienced in these spaces (streets and public open spaces) – visual isolation, in turn is being exacerbated by turning the built environment into private 'forts'. (Figure 7).
- The main reasons for visual isolation in this particular area being the domination of the 'cloister mentality' in the built environment, together with the basic principles of defensible space (in this case passive surveillance over the public environment) being ignored.

Lastly, there are two dimensions of crime that need to be addressed when spatial reactions to crime is researched: firstly, actual crime patterns – this includes the amount, category and exact location of the crime, and secondly, the perception of crime – including the level of fear of crime and specific locations where fear of crime is experienced. In order to draw closer connections between specific crime patterns, the development of 'gated communities' and fear of crime in cities, more intensive research should be conducted.

## 8. THE IMPLICATION FOR URBAN- AND REGIONAL PLANNERS

Planners should take into account the effect of decisions about 'gated communities' on the longterm as well as the possible implication on the public urban landscape.

Urban planners are designers of public space – even more than of private space – and therefore need to realise their responsibility towards maintaining a healthy, vital public environment. We cannot desire vital public places and integrated cities, and at the same time support the implementation of a 'cloister mentality' in cities at the expense of the public environment.

The 'other' dimension in crime, perception of crime (fear of crime) can no longer be ignored when it comes to spatially combating crime – urban planners (in close partnership with other design professionals e.g. urban designers and architects, as well as local authorities and the community) should integrate perceptions of

crime into a safe-city programme for cities. These programmes should rather include alternative guidelines for 'cloister-like' developments. It should rather focus on more subtle passive ways in which, the built environment can become safer – especially in terms of perception. The clear demarcation of zones of influence as well as of the strengthening of a particular identity or character of the area are probably better ways to address crime than hard architecture like gates and steel bars. This could promote more vitality and the better use of public spaces like the street and park. In this way the public environment could become more user-friendly and eventually contribute to a safer living environment.

## NOTE

Recognition is given to E. Kanselaar from the NHTV in Breda, The Netherlands, for data gathering and compilation of the GIS data base on the spatial development of gated communities in Potchefstroom.

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