

6. Site Analysis of Paul Kruger Street

6.1 Understanding the Urban Condition

6.1.1 Introduction

Before one can propose what an African city should be, urban problems should be defined by re-evaluating current modes of analysing and understanding the urban condition. This shifts toward new methodologies that allow for the understanding of the new socio-spatial relationships in the city. These methods represent and interpret the urban condition, influencing future decisions. Therefore, in order to develop new solutions new ways of understanding are needed.

This document has highlighted particular aspects relating to the urban condition. The first being that the South African City is made up of unique socio-cultural conditions, resulting in its inhabitants evolving into a new type of urbanising agent and thereby creating new social and human landscapes (Kahn, 1995:200). The second that these conditions should involve rethinking what is considered as space. In view of these aspects, new strategies and tactics are required to interpret these conditions should the wish be to restore and reclaim the African City.

At present, analytical models usually involve holding the world still in order to analyse it as an outsider resulting in a systematic overestimation of what already exists, often taking into account the most mediocre aspects (Lootsma, 1999:266). These models have many implications, as they suggest that space is static, with no history, and that we are the “all-seeing eye”. These methods of taming and ordering space are problematic, as they refuse to acknowledge the heterogeneous and temporal qualities of space, denying it of dynamic merits (Massey, 2005: 36,106).

One needs to challenge these blatantly obvious modes of analysis and rather dispute the internal coherence, in order to point to the blind spots within the objective of exposing the city. The aim is not to characterise space as complete, but rather leave possibilities for something new.

6.1.2. Questioning the Validity of the Figure-Ground Study

To date, figure-ground studies have been relied upon greatly, being a prevalent and iconic tool in urban design. The validity of the figure-ground relation that formed the understanding of the urban fabric prior to the twentieth century, should be queried so that new tools, methodologies, and analysis techniques be created to intervene in the complex urban environments (Manau, Ortoneda & Solano, 2005:62). Giambattista Nolli's map of Rome from 1748 was an analytical method that was developed due to specific economic, social, cultural and political circumstances.

Nolli's methods and conventions of mapping the urban landscape can not adequately represent the spatialities and complexity of the twenty-first century city, let alone the African City. This is partly because what makes up the contemporary city has shifted from what was once visible; composition, material and form, to the invisible; processes, attitudes, perceptions and transactions. The figure-ground study is completely divorced from social landscapes in that

it stabilises the complexity of the time-space relationship (Massey, 2005:107,109). Figure-ground studies, imply a clear distinction between form and void, producing the by-product of controlled space which is residual space; an inherent problem in the South African city (Koolhaas, et al. 2000:193). This is not to say that figure-ground studies are void of value in urban design



Fig. 61 Giambattista Nolli (1748) Rome at the time of Benedict XIV: the Plan of Rome, Sector V including the Piazza Navona and the Pantheon. (Leupen, et al.1997:19)

processes as they contribute to the understanding of the spatial qualities of cities. However, this abstract and purely representational approach to understanding the city from an aerial point of view has reduced three-dimensional realities to two-dimensional, graphical imagery of urban spatialities.

6.1.3. New Tools to Analyse the Contemporary City

A new method of understanding and intervening in the contemporary urban fabric involves shifting the way in which cities are viewed, from formal to dynamic systems, so as to understand new relationships that exist between architecture and cities, as well as the juxtapositions, interconnections and distribution of forces they produce (Wall, 1999:234). This also promotes the identification of voids, the unproductive, obsolete and undefined (Simeoforidis, 2000:416).

To propose a new method of analysing the urban condition, is to recognise that human behaviour, expressed through a set of social, political, and economic processes, is shaped by territory and its spatial surroundings. In this context of the socio-spatial dialect, territory is defined as a geographically-organised human activity, or a human landscape that is created by agents operating within a specific social structure (Wolch & Dear, 1989: 3,7). The objective is to diverge from the abstract, reduced method of comprehending the urban condition, to one where the organisation of space is a product of human behaviour and social practices. Space within an urban context cannot be understood as an isolated object, but rather as a social landscape undefined by physical boundaries. It is rather defined by human boundaries, outlining the possibilities and limitations of human behaviour.

Once a legitimate understanding of the city as a human and social landscape exists, then architecture will play a passive role in which it intervenes as a condition and a social negotiator (Koolhaas, et al. 2000:12). Furthermore, architecture, as a product complete in itself, does not play the key role within the urban realm. Although it is only one of many disciplines contributing to a city, architecture is not entirely irrelevant, but needs to be re-evaluated, redefined and reprogrammed, so that architecture becomes a condition holding a social and ethical function.

6.1.4. New Tools to Analyse the African City

These new modes of analysis are particularly important within the African urban condition. Its dynamic qualities should not be pinned down and neither should urban devices and occurrences be seen as absolute and final. African space cannot be understood as a mere horizontality as this idea eliminates the prospect of chance and temporality, two vital aspects of Africa's social landscape. The supposed informality of the African society should be cautiously considered as it is often just a cover up for some form of rebellious reaction against the excessive rationalisation of the modern (Massey, 2005:112).

The criteria used to understand the African City based on a multidisciplinary perspective acknowledges the importance of time and spatial phenomena as a temporal condition. Space is understood as the product of social relations where human beings have some ability to alter space and participate in its continuing production (Massey, 2005:118).



6.1.5. The Methodology

Interpret the Urban Condition of Paul Kruger Street

The analysis of Paul Kruger Street is informed by the focus of discussion which is the question that asks what a valid African urban expression is. From this and the previous theoretical investigation one can extract criteria that inform the methodology of analysis. Due to the focus on social space in an African context, and the aim for an urban condition whose identity is driven by activity and not by form, the analysis will focus on the temporal qualities of the city, in terms of its attitudes, perceptions and transactions, and the social landscape in which these urban processes take place. In other words, the most important outcome of this analysis is to determine what the spaces within Paul Kruger Street do as opposed to what they are.

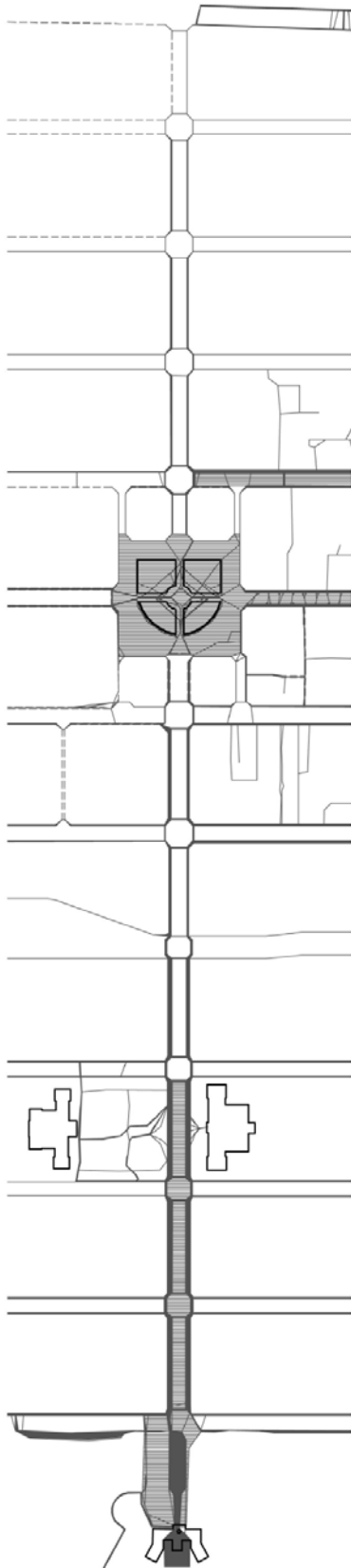
In most cases the social and temporal qualities of any space, specifically within an urban condition, are very difficult to determine as an individual in a short period of time, due to the inconsistency and due to the fact that each individual may understand and perceive certain aspects differently. Therefore the method of analysis involves a process which begins with analysing aspects of Paul Kruger Street that is freely available and can be identified from available information, regular site visits, photographs and interviewing individuals that either use or live in the city.

Once all the known determinants are put together and understood as interdependent factors, one can then extract information from the results of the initial analysis in order to begin to understand the temporal and social condition of Paul Kruger Street. After these first two steps of analysis, one can acquire a clear understanding of the urban condition along the street, and more specifically it would then become clear that specific urban conditions, each with their own identity, problems and opportunities, occur along Paul Kruger Street.

6.1.6. Context Study of Paul Kruger Street

6.1.6.1. Phase 1 - The Identifiable factors

BASE MAP A1: Daytime Pedestrian Activity



Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	Pedestrian Movement & Intensity
	B: Results	
	C: Urban Conditions	
		Tues. 7:30am

Fig. 62 Analysis of pedestrian movement during the day along Paul Kruger Street (Author 2007).



BASE MAP A2: Night-Time Pedestrian Activity

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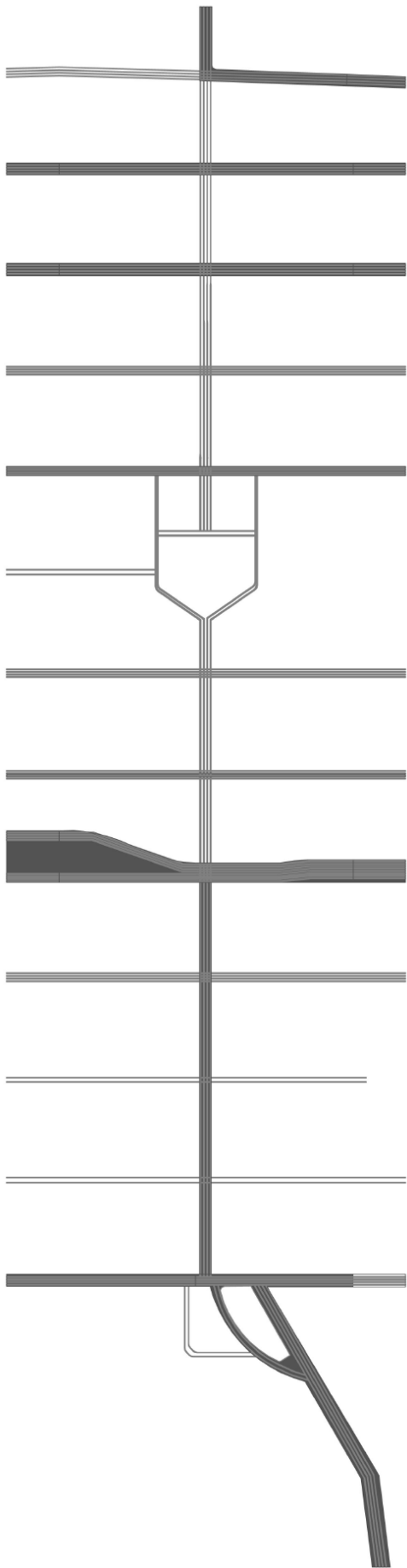
Analysis of Paul Kruger Street			
Phase of Analysis		Description	Fri. 9:00pm
●	A: Identifiable Factors	Pedestrian Movement & Intensity (night)	
	B: Results		
	C: Urban Conditions		



Fig. 63 Analysis of pedestrian movement during the evening along Paul Kruger Street (Author 2007).



BASE MAP A3: Vehicular Activity

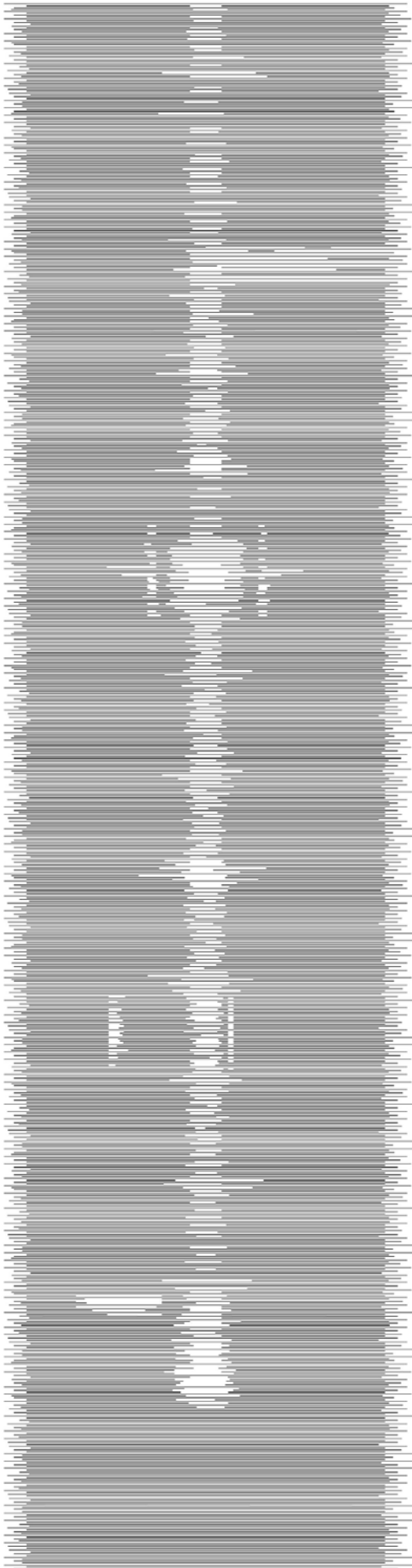


Analysis of Paul Kruger Street			
Phase of Analysis		Description	Tues. 8:30am
●	A: Identifiable Factors	Vehicular Movement & Intensity	
	B: Results		
	C: Urban Conditions		


Fig. 64 Analysis of vehicular movement during the evening along Paul Kruger Street (Author 2007).



BASE MAP A4: Illumination



Analysis of Paul Kruger Street		
Phase of Analysis	Description	
● A: Identifiable Factors	Lighting as a result of street lights, signage and the illumination of some buildings.	Fri. 9:00pm
B: Results		
C: Urban Conditions		

 Moderately high levels of illumination due to street lights.


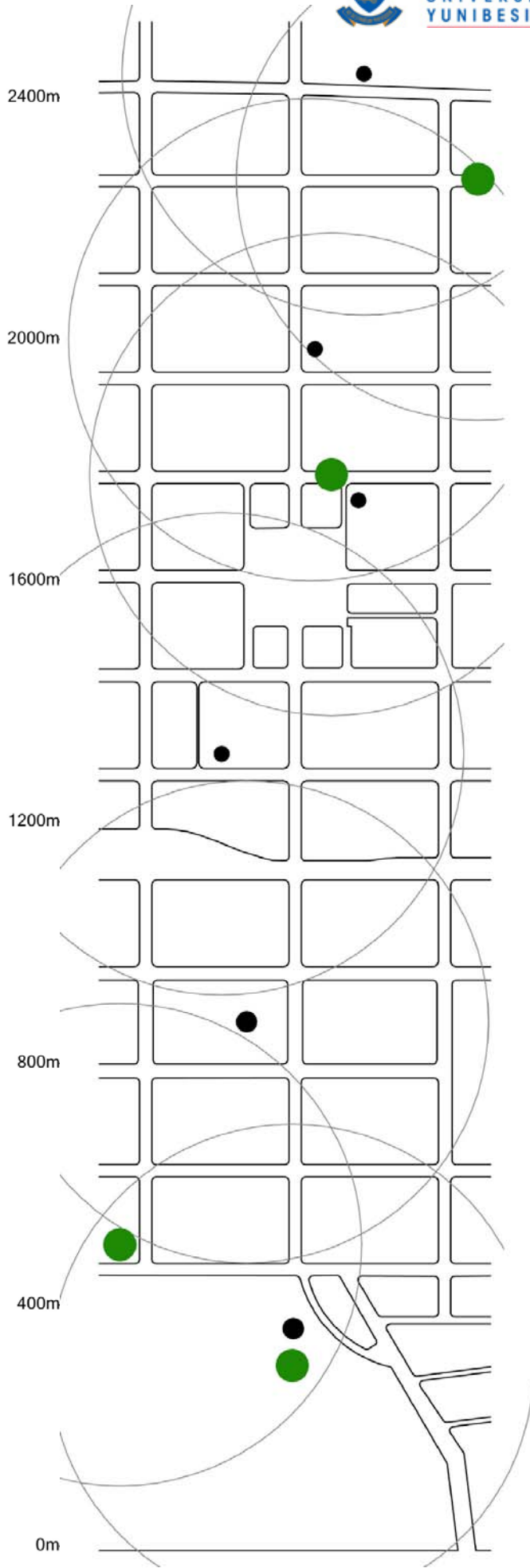
 Very low levels of illumination.

Fig. 65 Analysis of illumination on Paul Kruger Street (Author 2007).



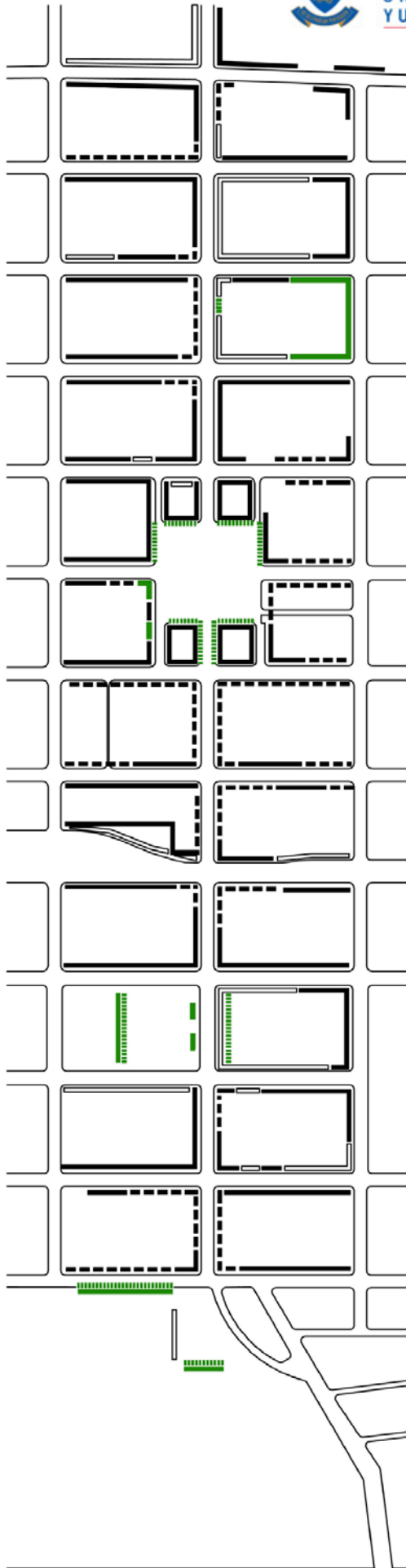
BASE MAP A5: Transport Nodes



Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	Transport facilities and the contribution they make to pedestrian activity and the energy they may result from that.
	B: Results	
	C: Urban Conditions	

Tues. 7:30am

Fig. 66 Transport Nodes on Paul Kruger Street (Author 2007).

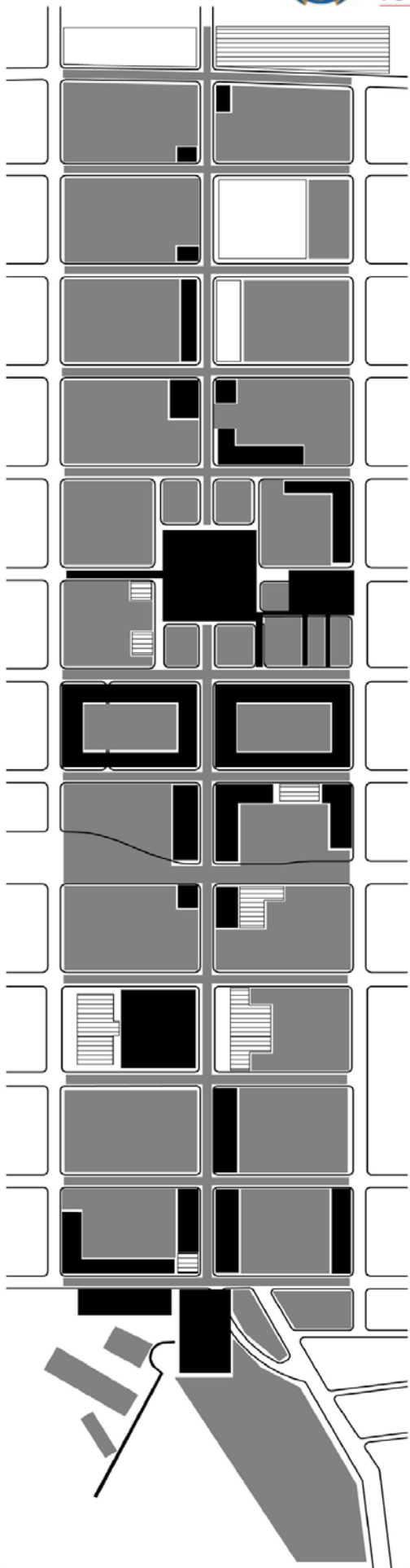


Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	The street and building edge and whether or not it allows for pedestrians to interact with it.
	B: Results	
	C: Urban Conditions	
		Tues. 11:15am

- Building facades with texture.
- Edges in which encounters between building & people occur.
- Solid & monotonous building edges allowing for minimal interaction.
- - - - - Edges that allow access to buildings, usually where trade occurs.
- ▬▬▬▬▬ Edges that are controlled by means of fencing or security guards.

Fig. 67 Analysis of street edge (Author 2007).

BASE MAP A7: Daytime Activities

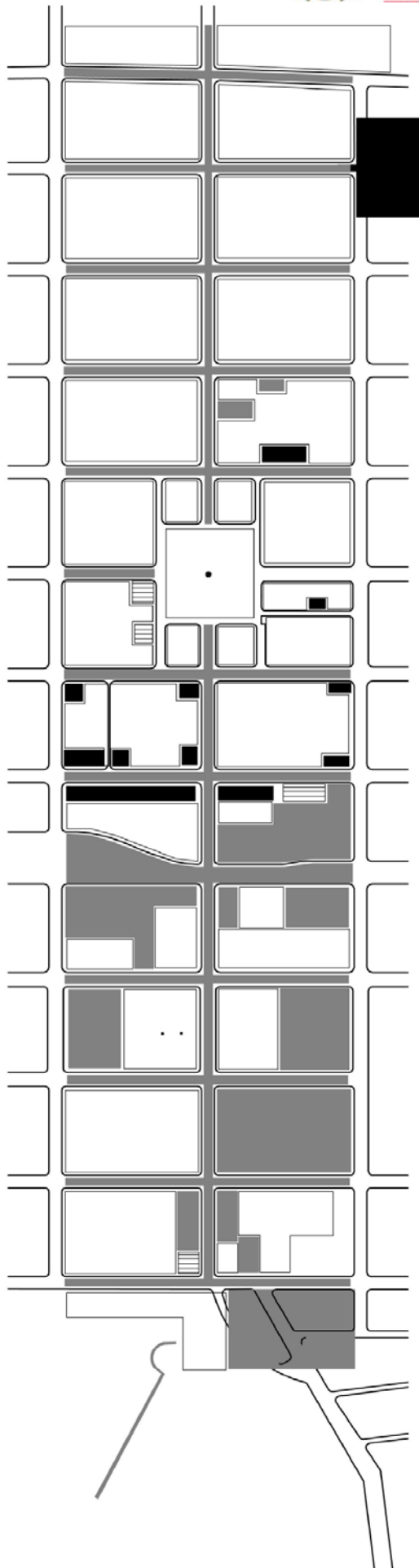


Analysis of Paul Kruger Street		
Phase of Analysis	Description	Wed. 14:00am
● A: Identifiable Factors	Necessary, optional and social activities.	
B: Results		
C: Urban Conditions		

- Optional activities, which usually only take place should the environment be at an optimal condition.
- Necessary activities, that are usually compulsory.
- Social activities where public interaction takes place.
- Minimal activity or human interaction.

Fig. 68 The type of activities that occur along Paul Kruger Street during the day (Author 2007).

BASE MAP A8: Night-Time Activities



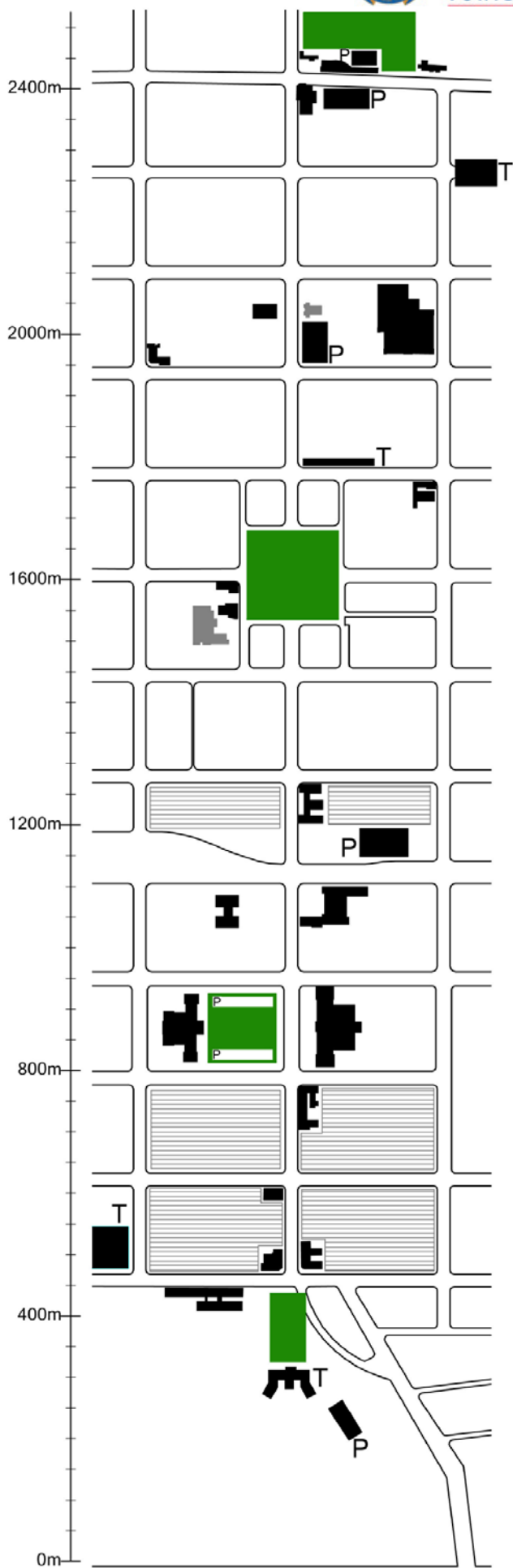
Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	Necessary, optional and social activities.
	B: Results	
	C: Urban Conditions	

Sat. 8:45pm

- Optional activities, which usually only take place should the environment be at an optimal condition.
- Necessary activities, that are usually compulsory.
- Social activities where public interaction takes place.
- Minimal activity or human interaction.

Fig. 69 The type of activities that occur along Paul Kruger Street during the evening (Author 2007).

BASE MAP A9: Daytime Services & Equipment



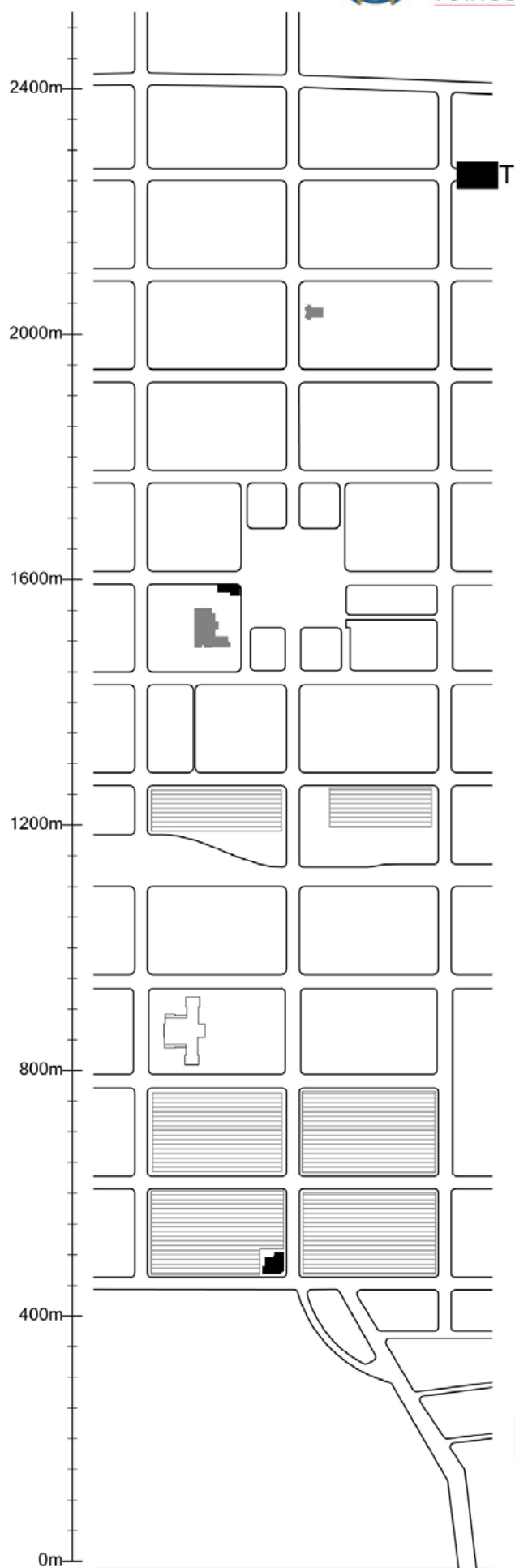
Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	Choice and opportunities based on the 'services and equipment' that are embedded within the urban surface.
	B: Results	
	C: Urban Conditions	

Wed. 14:00am

- Facilities that provide recreation, entertainment, education and multi-purpose facilities. i.e. museums, restaurants, hotels, schools, libraries, halls and places of worship.
- Public transport facilities.
- Parking facilities.
- Open public spaces, squares or gardens.
- Abandoned facilities that are no longer in use.
- Residential component consisting exclusively of blocks of flats.

Fig. 70 The services and equipment available on Paul Kruger Street during the day. (Author 2007).

BASE MAP A10: Night-Time Services & Equipment

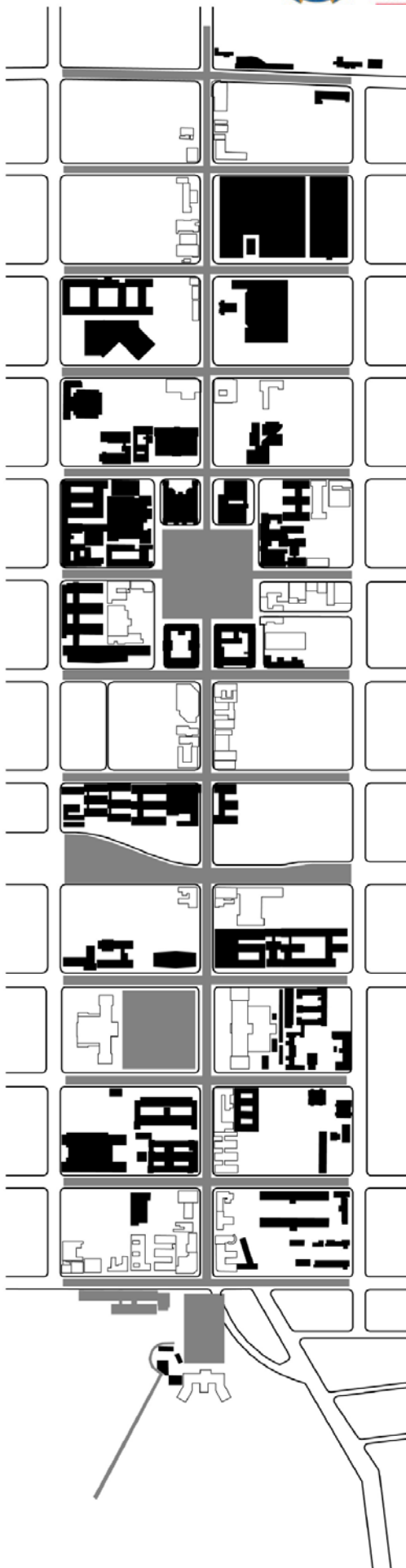


Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	Choice and opportunities based on the 'services and equipment' that are embedded within the urban surface.
	B: Results	
	C: Urban Conditions	
		Sat. 8:45pm

- Facilities that provide recreation, entertainment, education and multi-purpose facilities. i.e. museums, restaurants, hotels, schools, libraries, halls and places of worship.
- Public transport facilities.
- Parking facilities.
- Open public spaces, squares or gardens.
- Abandoned facilities that are no longer in use.
- Areas in which housing facilities i.e. apartment blocks can be found.

Fig. 71 The services and equipment available on Paul Kruger Street during the evening. (Author 2007).

BASE MAP A11: Accessibility



Analysis of Paul Kruger Street		
Phase of Analysis	Description	Wed. 14:00am
● A: Identifiable Factors	Private, semi-public and public space.	
B: Results		
C: Urban Conditions		



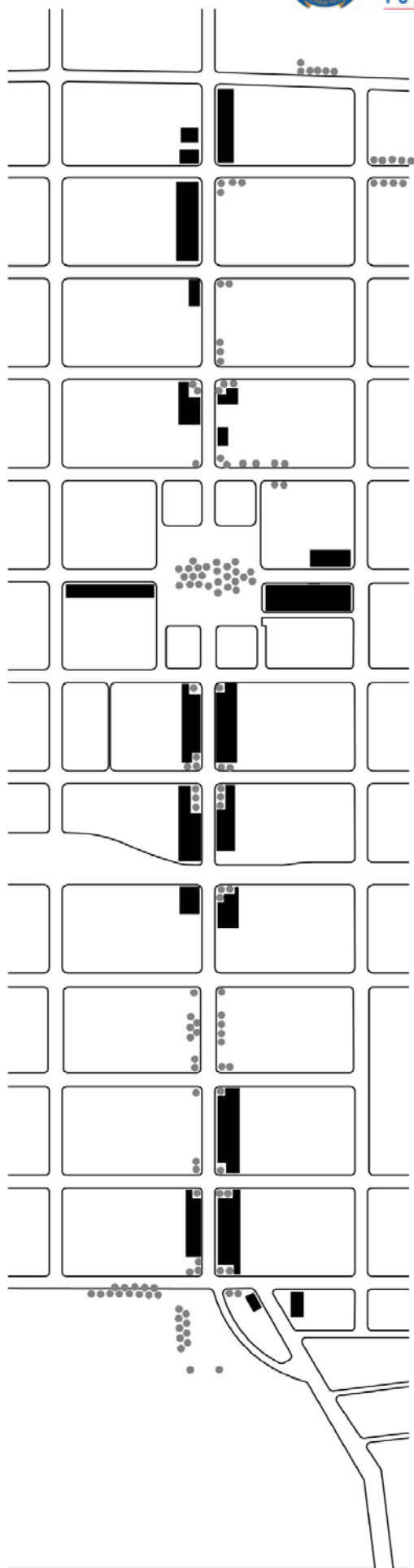
Private spaces, usually being those to which selected individuals have access to, i.e. office and government institutions.

Semi-public space. These being either shops or public facilities like museums and train stations.

Public space. Open public spaces, squares, gardens and streets.

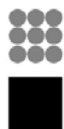
Fig. 72 The analysis of the accessibility to the spaces along Paul Kruger Street (Author 2007)

BASE MAP A12: Formal vs. Informal



Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	Informal commercial activity versus formal commercial activity.
	B: Results	
	C: Urban Conditions	

Tues. 10:00am



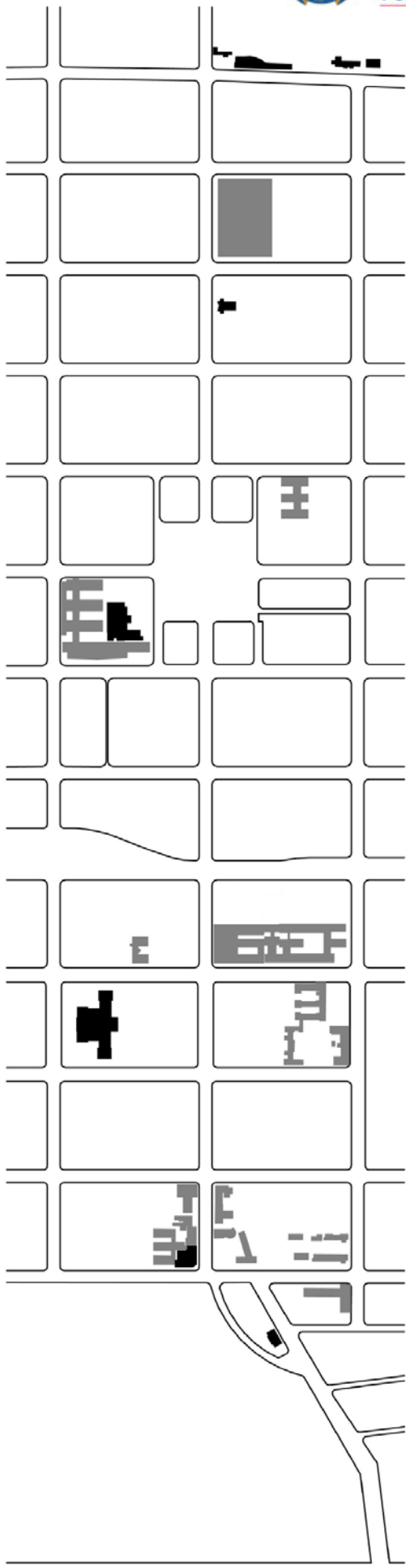
Informal traders

Formal trading facilities, i.e. shops, restaurants, hotels, and second-hand car dealerships.

Fig. 73 The analysis of the commercial activity along Paul Kruger Street (Author 2007).



BASE MAP A13: Declining Services



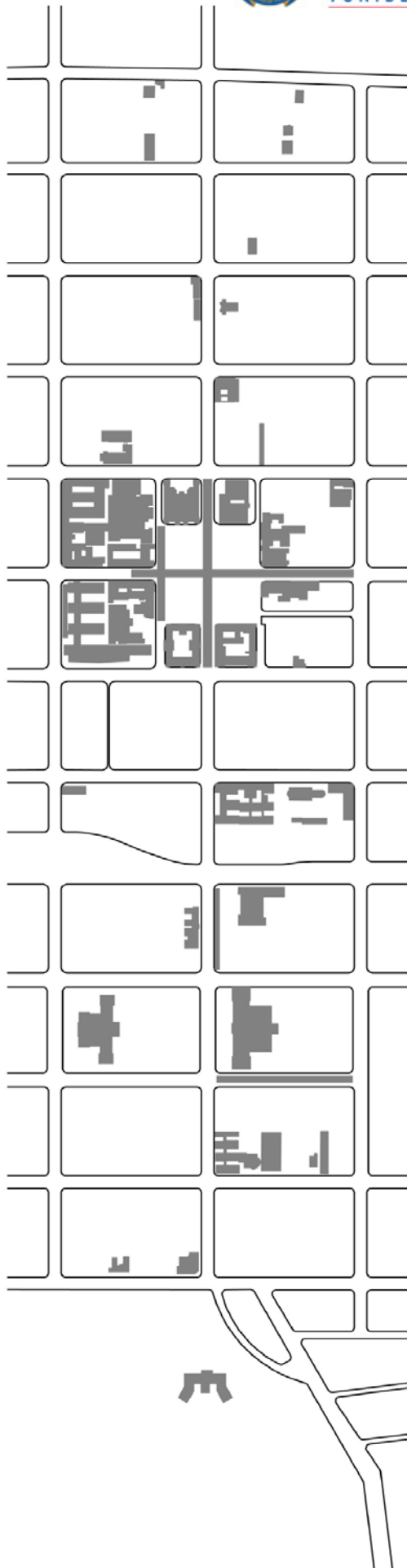
Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	Facilities and services that are in a state of decline.
	B: Results	
	C: Urban Conditions	

- Blocks of flats or office blocks that are either in a state of deterioration or partly abandoned.
- Public facilities that are either in a state of deterioration or rarely used or completely abandoned.

Fig. 74 Facilities along Paul Kruger Street that are in a state of decline (Author 2007).



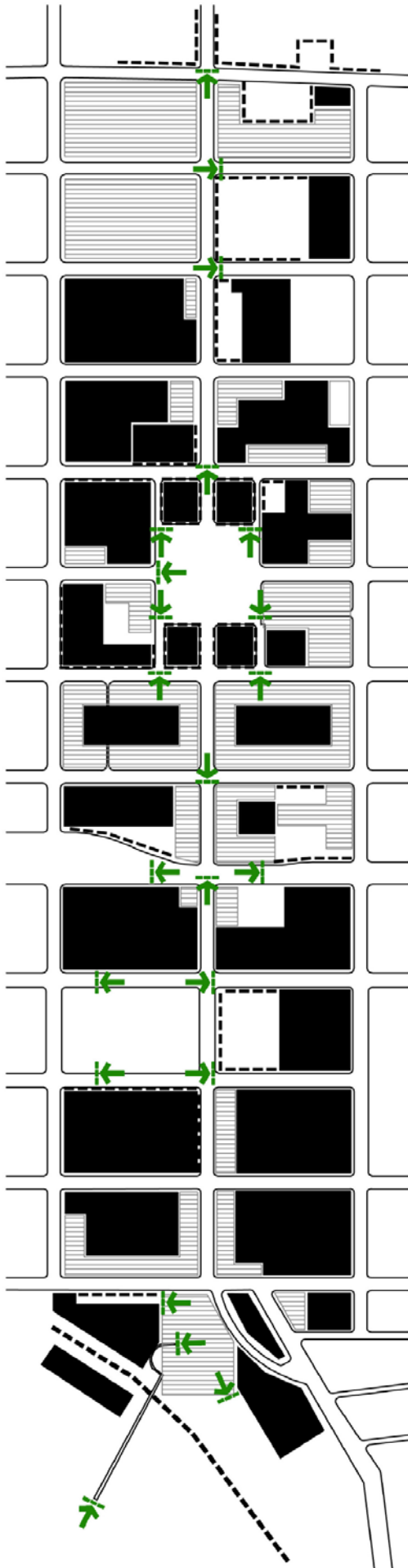
BASE MAP A14: Heritage



Analysis of Paul Kruger Street		
Phase of Analysis		Description
●	A: Identifiable Factors	Buildings and spaces of heritage value.
	B: Results	
	C: Urban Conditions	

Fig. 75 Buildings of heritage value along Paul Kruger Street (Author 2007).

BASE MAP B1: Territory



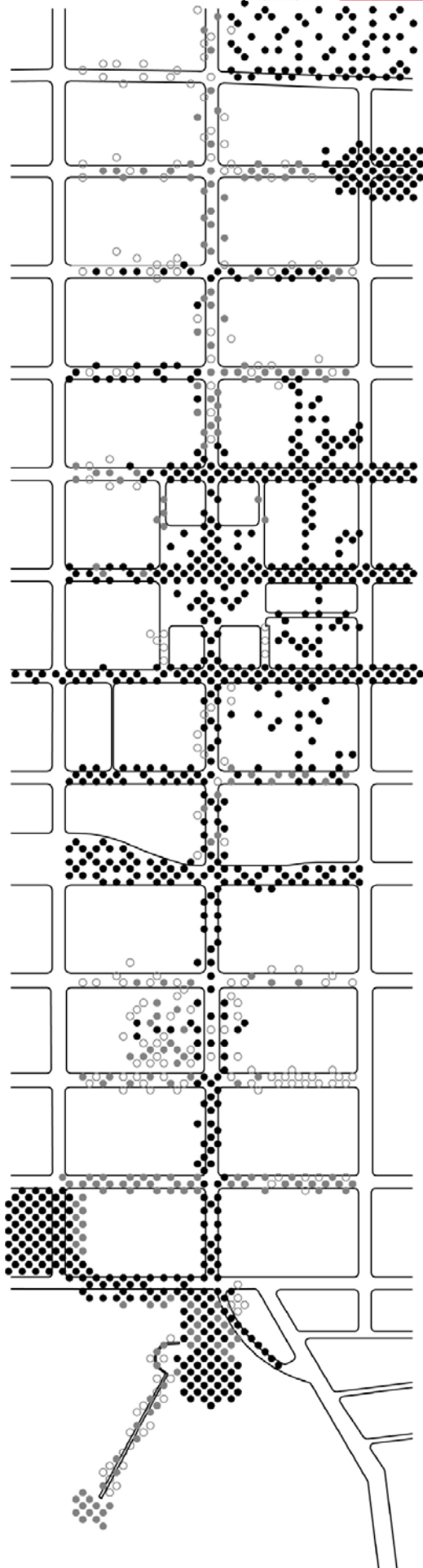
Analysis of Paul Kruger Street	
Phase of Analysis	Description
A: Identifiable Factors	Controlled space and residual space as a result of both physical and psychological boundaries.
● B: Results	
C: Urban Conditions	

Contributing Identifiable Factors	Base Maps - Phase 1
●	A1. Daytime Pedestrian Activity
●	A2. Night-Time Pedestrian Activity
●	A3. Vehicular Activity
●	A4. Illumination
●	A5. Transport Nodes
●	A6. Edge Condition
●	A7. Daytime Activities
●	A8. Night-Time Activities
●	A9. Daytime Services & Equipment
●	A10. Night-Time Services & Equipment
●	A11. Accessibility
●	A12. Formal vs. Informal
●	A13. Declining Services
●	A14. Heritage

- Private sector to which only certain individuals have access.
- ▨ Accessible to the public.
- - - Physical boundary.
- ↑ Psychological boundary, therefore 'blocking' areas.

Fig. 76 The analysis of the physical and psychological boundaries along Paul Kruger Street (Author 2007).

BASE MAP B2: Human Density

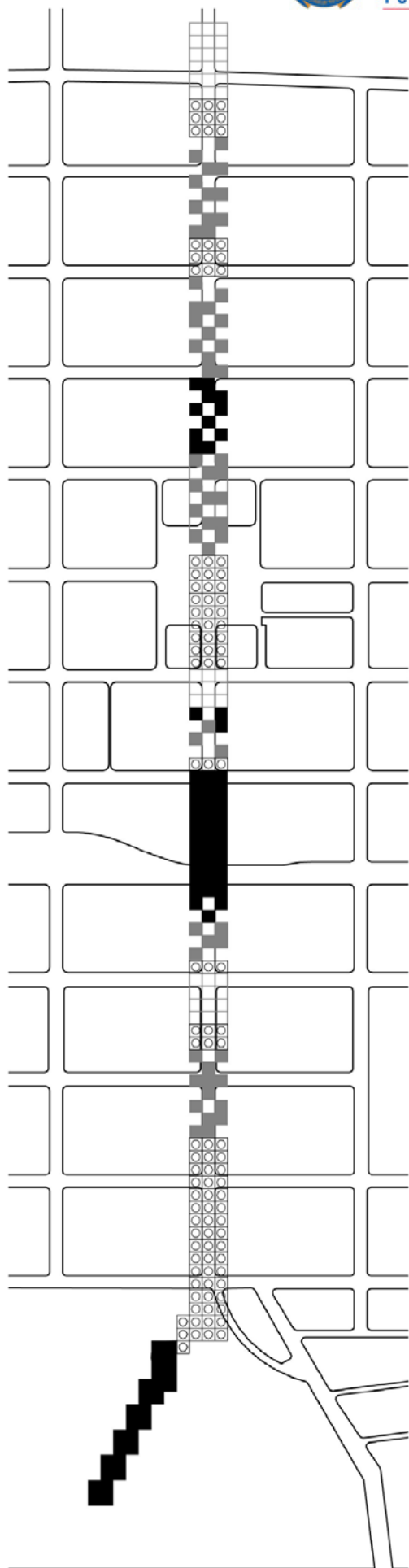


Analysis of Paul Kruger Street	
Phase of Analysis	Description
A: Identifiable Factors	The areas that generally attract more people, and as result are perceived to have more energy and experiential quality.
B: Results	
C: Urban Conditions	

Contributing Identifiable Factors	Base Maps - Phase 1
●	A1. Daytime Pedestrian Activity
●	A2. Night-Time Pedestrian Activity
●	A3. Vehicular Activity
	A4. Illumination
●	A5. Transport Nodes
	A6. Edge Condition
	A7. Daytime Activities
	A8. Night-Time Activities
●	A9. Daytime Services & Equipment
●	A10. Night-Time Services & Equipment
	A11. Accessibility
	A12. Formal vs. Informal
●	A13. Declining Services
	A14. Heritage

Fig. 77 The analysis of the areas that generally attract more people (Author 2007).

BASE MAP B3: Daytime Crime Indicator



Analysis of Paul Kruger Street	
Phase of Analysis	Description
A: Identifiable Factors	This is an indication of actual crime and perceived crime along the street. This information is based on information extracted from statistics and research conducted for the <i>Paul Kruger Street Spine Urban Design Framework for the Improvement of Environmental Conditions on Paul Kruger Street</i> by (Schoonraad, Steenkamp, Young, Roodt and Velaytham, 2000:37).
B: Results	
C: Urban Conditions	

Contributing Identifiable Factors	Base Maps - Phase 1
●	A1. Daytime Pedestrian Activity A2. Night-Time Pedestrian Activity A3. Vehicular Activity A4. Illumination A5. Transport Nodes A6. Edge Condition
●	A7. Daytime Activities A8. Night-Time Activities A9. Daytime Services & Equipment A10. Night-Time Services & Equipment A11. Accessibility A12. Formal vs. Informal
●	A13. Declining Services A14. Heritage

Fig. 78 The analysis of perceived and actual criminal activity along Paul Kruger Street during the day (Author 2007).

BASE MAP B4: Night-Time Crime Indicator

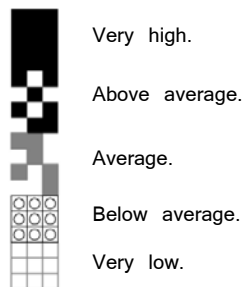
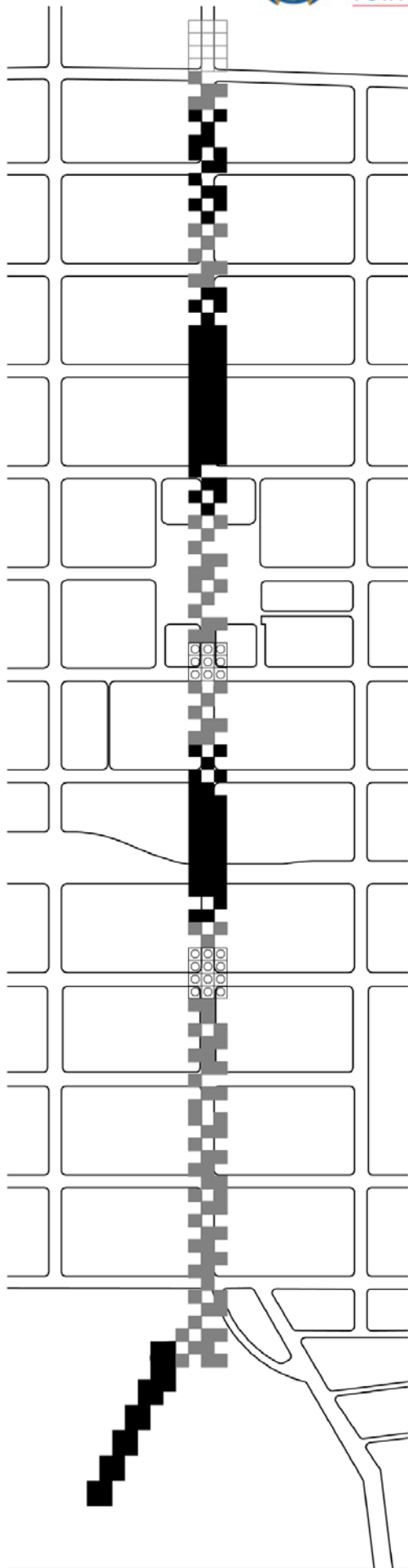


Fig. 79 The analysis of perceived and actual criminal activity along Paul Kruger Street during the evening (Author 2007).

Analysis of Paul Kruger Street	
Phase of Analysis	Description
A: Identifiable Factors	This is an indication of actual crime and perceived crime along the street. This information is based on information extracted from statistics and research conducted for the <i>Paul Kruger Street Spine Urban Design Framework for the Improvement of Environmental Conditions on Paul Kruger Street</i> by (Schoonraad, et al. 2000:37).
● B: Results	
C: Urban Conditions	

Contributing Identifiable Factors	Base Maps - Phase 1
●	A1. Daytime Pedestrian Activity
●	A2. Night-Time Pedestrian Activity
	A3. Vehicular Activity
●	A4. Illumination
	A5. Transport Nodes
	A6. Edge Condition
	A7. Daytime Activities
●	A8. Night-Time Activities
	A9. Daytime Services & Equipment
	A10. Night-Time Services & Equipment
	A11. Accessibility
	A12. Formal vs. Informal
●	A13. Declining Services
	A14. Heritage

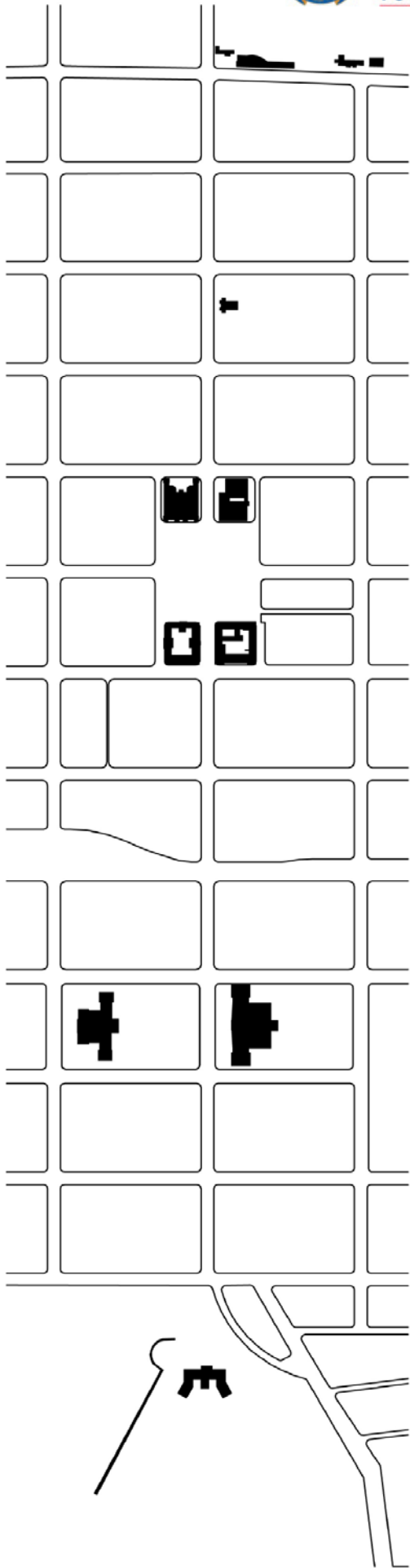


Fig. 80 Key building and structures along Paul Kruger Street (Author 2007).

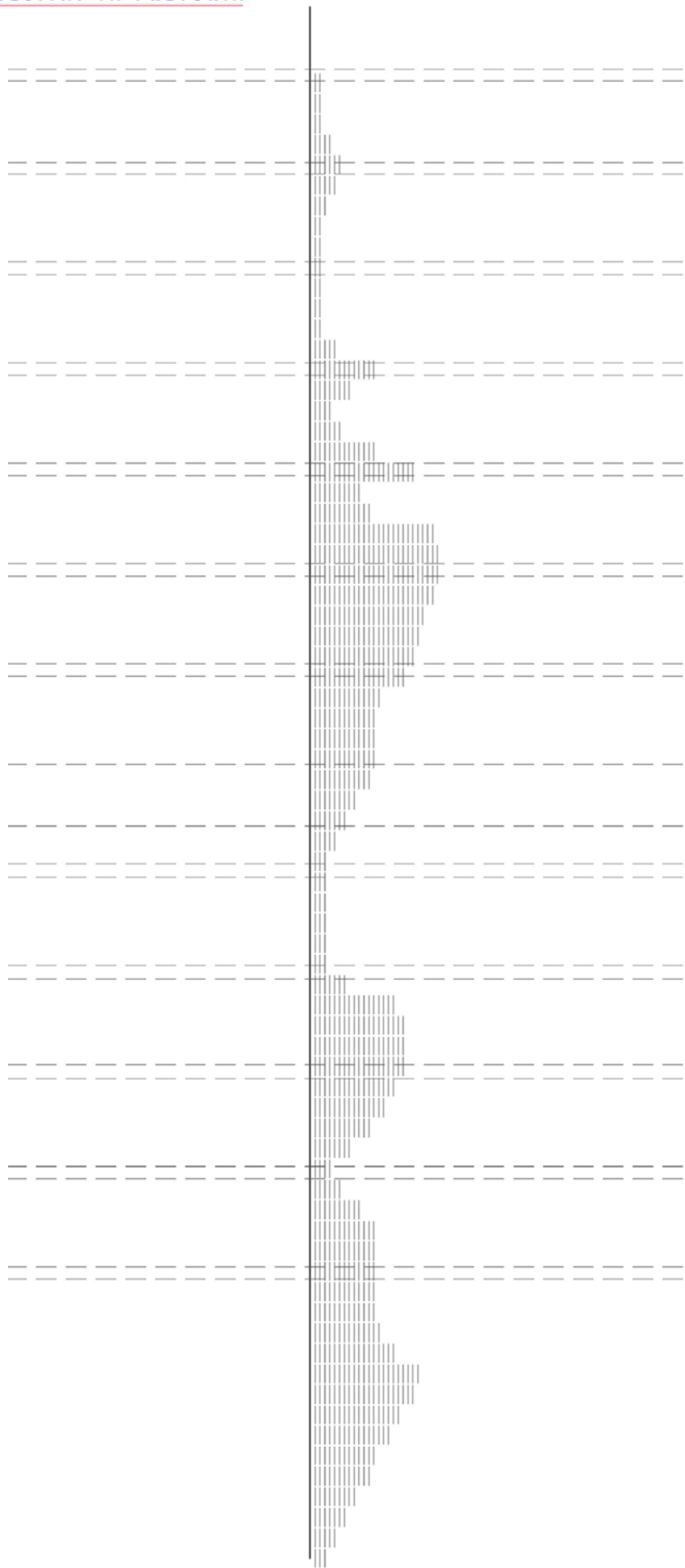


Fig. 81 A graph indicating emotions and sensations that one may experience during the day along Paul Kruger Street (Author 2007).



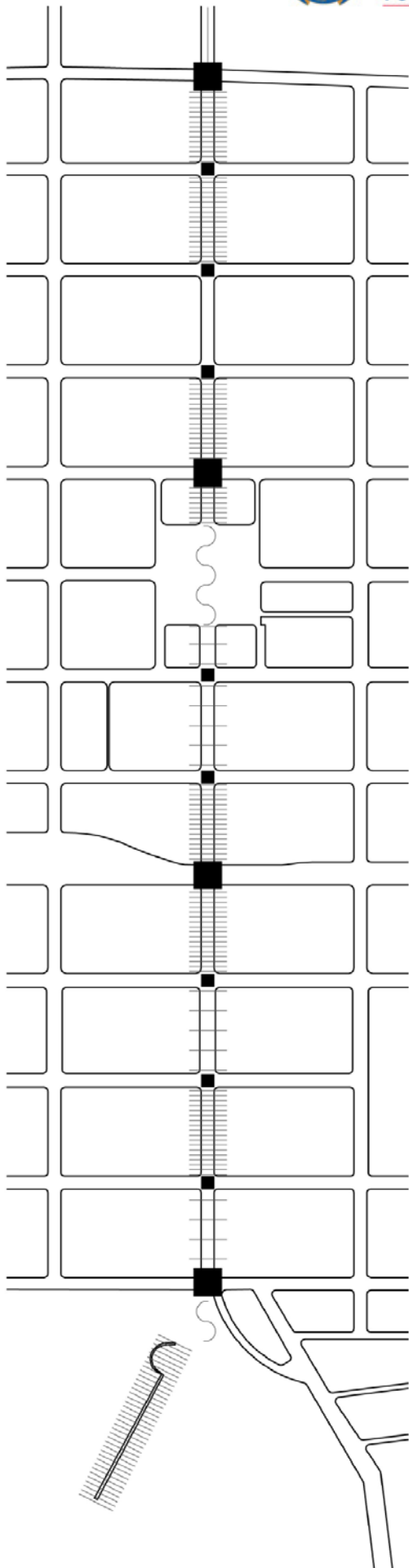
BASE MAP B5: Emotions & Sensations

Analysis of Paul Kruger Street		
Phase of Analysis		Description
	A: Identifiable Factors	A comparison of the experiential quality along the street during the day and at night. It is based on energy, activity, processes and transactions.
●	B: Results	
	C: Urban Conditions	

Contributing Identifiable Factors	Base Maps - Phase 1
●	A1. Daytime Pedestrian Activity
●	A2. Night-Time Pedestrian Activity
	A3. Vehicular Activity
	A4. Illumination
	A5. Transport Nodes
●	A6. Edge Condition
●	A7. Daytime Activities
●	A8. Night-Time Activities
	A9. Daytime Services & Equipment
	A10. Night-Time Services & Equipment
	A11. Accessibility
●	A12. Formal vs. Informal
●	A13. Declining Services
●	A14. Heritage

Fig. 81 A graph indicating emotions and sensations that one may experience during the evening along Paul Kruger Street (Author 2007).

BASE MAP B6: Pace of Pedestrian Movement



- Interruption to pedestrian movement due to a traffic intersection with high levels of vehicular activity.
- Interruption to pedestrian movement due to a traffic intersection with moderate levels of vehicular activity.
- Walking at a fast pace.
- Walking a moderate pace.
- Leisurely walk.

Analysis of Paul Kruger Street	
Phase of Analysis	Description
A: Identifiable Factors	The rate at which pedestrians walk along the street.
● B: Results	
C: Urban Conditions	

Contributing Identifiable Factors	Base Maps - Phase 1
●	A1. Daytime Pedestrian Activity
●	A2. Night-Time Pedestrian Activity
●	A3. Vehicular Activity
●	A4. Illumination
●	A5. Transport Nodes
●	A6. Edge Condition
●	A7. Daytime Activities
●	A8. Night-Time Activities
●	A9. Daytime Services & Equipment
●	A10. Night-Time Services & Equipment
●	A11. Accessibility
●	A12. Formal vs. Informal
●	A13. Declining Services
●	A14. Heritage

Fig. 82 The rate at which pedestrians move along Paul Kruger Street Street (Author 2007).



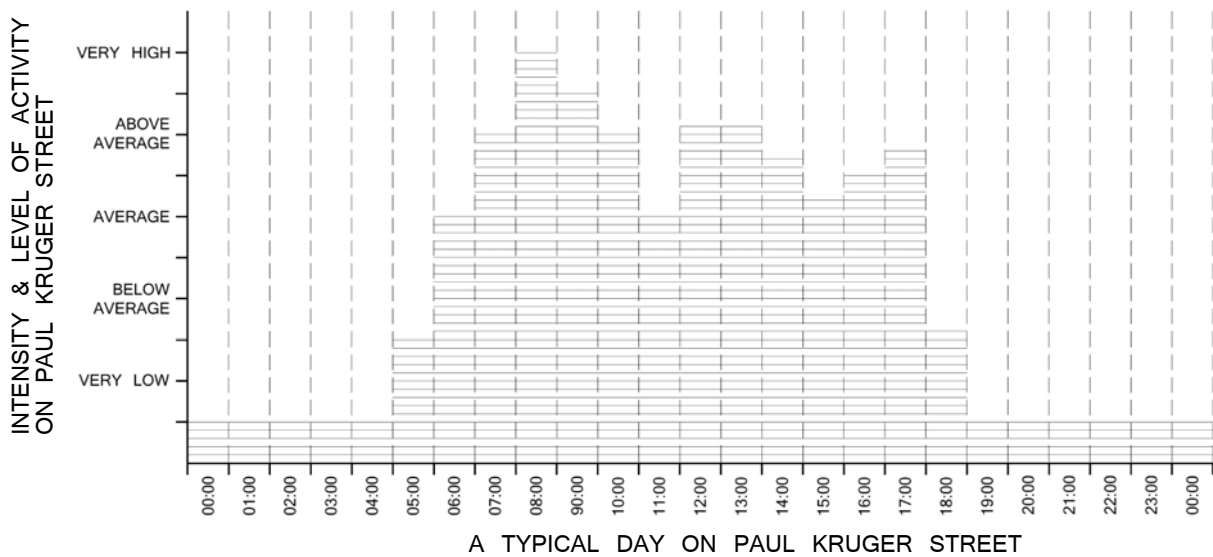
6.1.6. Context Study

6.1.6.3. Conclusion to the Analysis of Paul Kruger Street

This analysis clearly illustrates that Paul Kruger Street is characterised by the domination of *physical space* over the *social space*. It lacks both a temporal condition and overlapping conditions, therefore allowing a limited number of programmes to occur over a short period of time, for that reason it is a street that can only provide an insignificant amount of choice and opportunity. Unfortunately it is a street that is only able to identify itself with routine and a limited number of processes and transactions and not with more desirable characteristics such as spontaneity, surprise and sensation.

It is also clear that Paul Kruger Street lacks a social landscape that is able to support social exchange and relations; therefore it is a closed system in which it becomes a place of necessity and does not open itself to the possibilities of new and indeterminate outcomes.

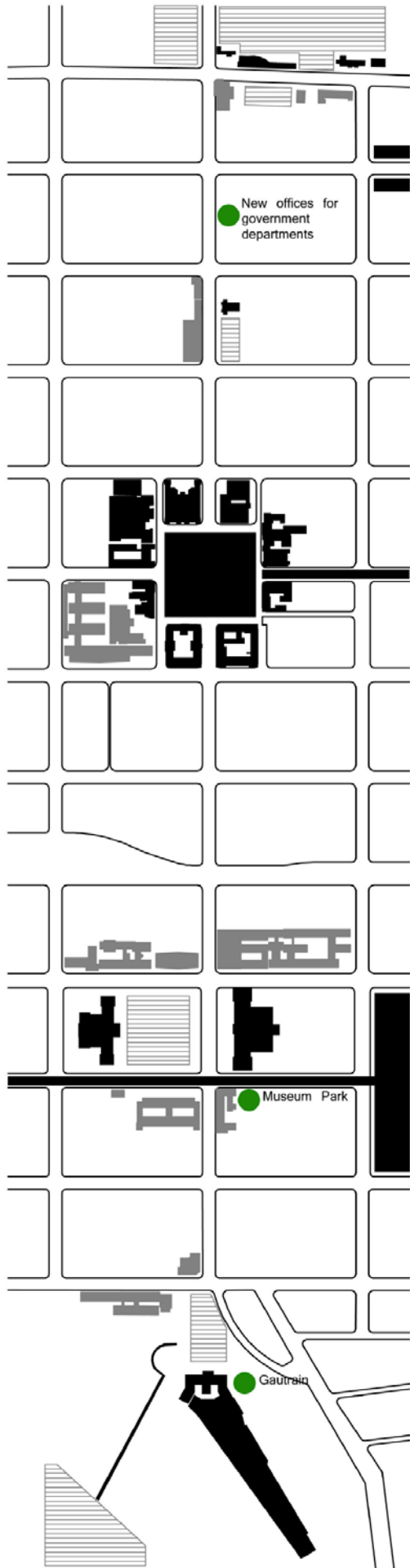
As a final point, it is defined by a fixed territory with non-elastic edges resulting in controlled space and residual space, the latter being where the symptoms of the city are played out. The entire street is a space in which one can easily identify a clear distinction between street, sidewalk and building and where the boundaries are never blurred.



- ACTIVITIES:
- Gather
 - View
 - Meet
 - Visit
 - Eat
 - Drink
 - Walk
 - Talk
 - Shop
 - Drive
 - Get on a bus
 - Catch a train
 - Play
 - Sit
 - Relax
 - Party
 - Visit a museum

Fig. 83 A graph indicating the conclusion that was reached after analysing Paul Kruger Street (Author 2007).

BASE MAP C1: Assets



Analysis of Paul Kruger Street	
Phase of Analysis	Description
A: Identifiable Factors	Buildings, structures and open spaces considered to be assets based on historical, cultural, social, economic and recreational value.
B: Results	
C: Urban Conditions	

64 Fig. 84 Significant buildings, structures and spaces along Paul Kruger Street (Author 2007).

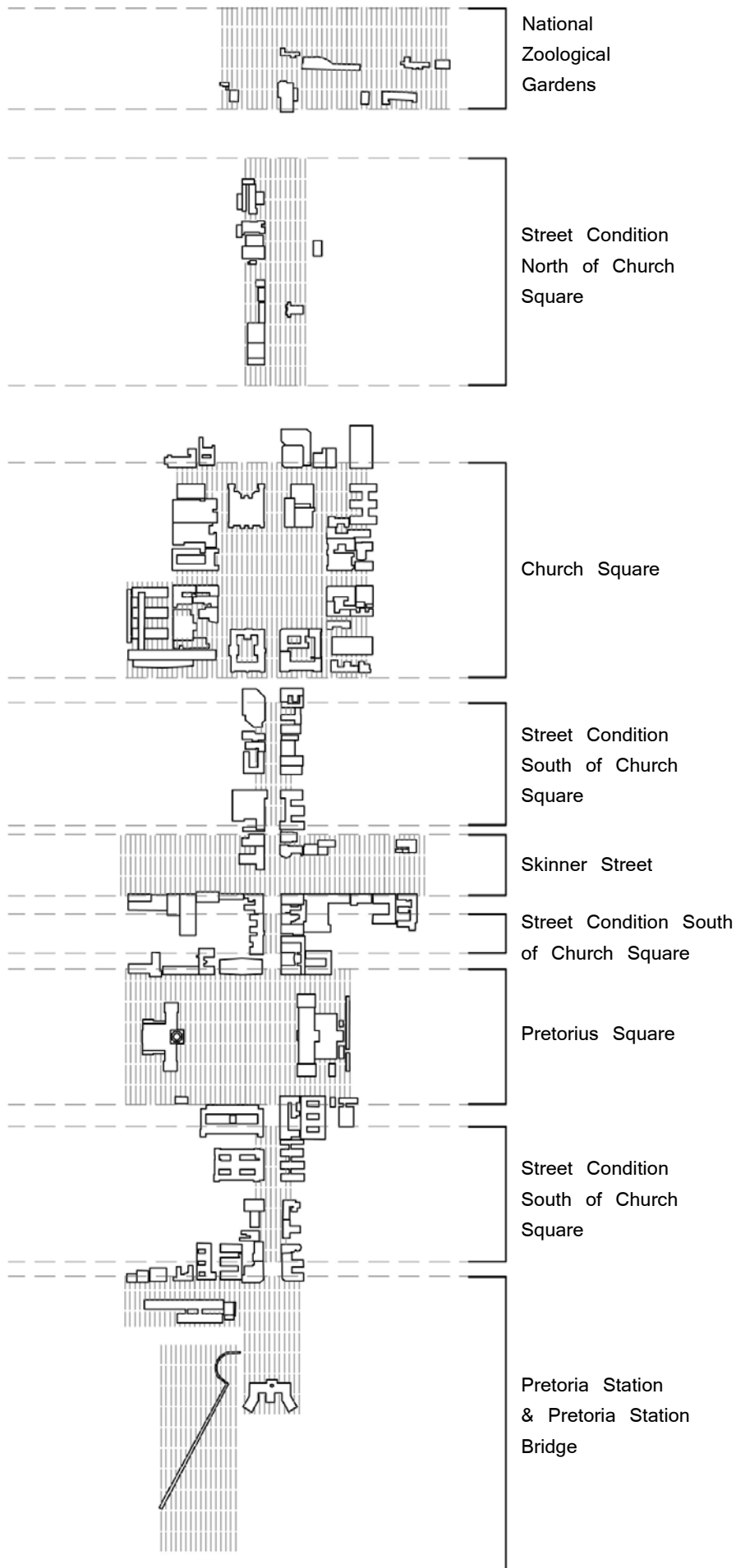


Fig. 85 Significant urban conditions along Paul Kruger Street (Author 2007).

Paul Kruger Street

Phase of Analysis		Description
A: Identifiable Factors		Three-dimensional representation of the built-form along Paul Kruger Street.
B: Results		
C: Urban Conditions	●	

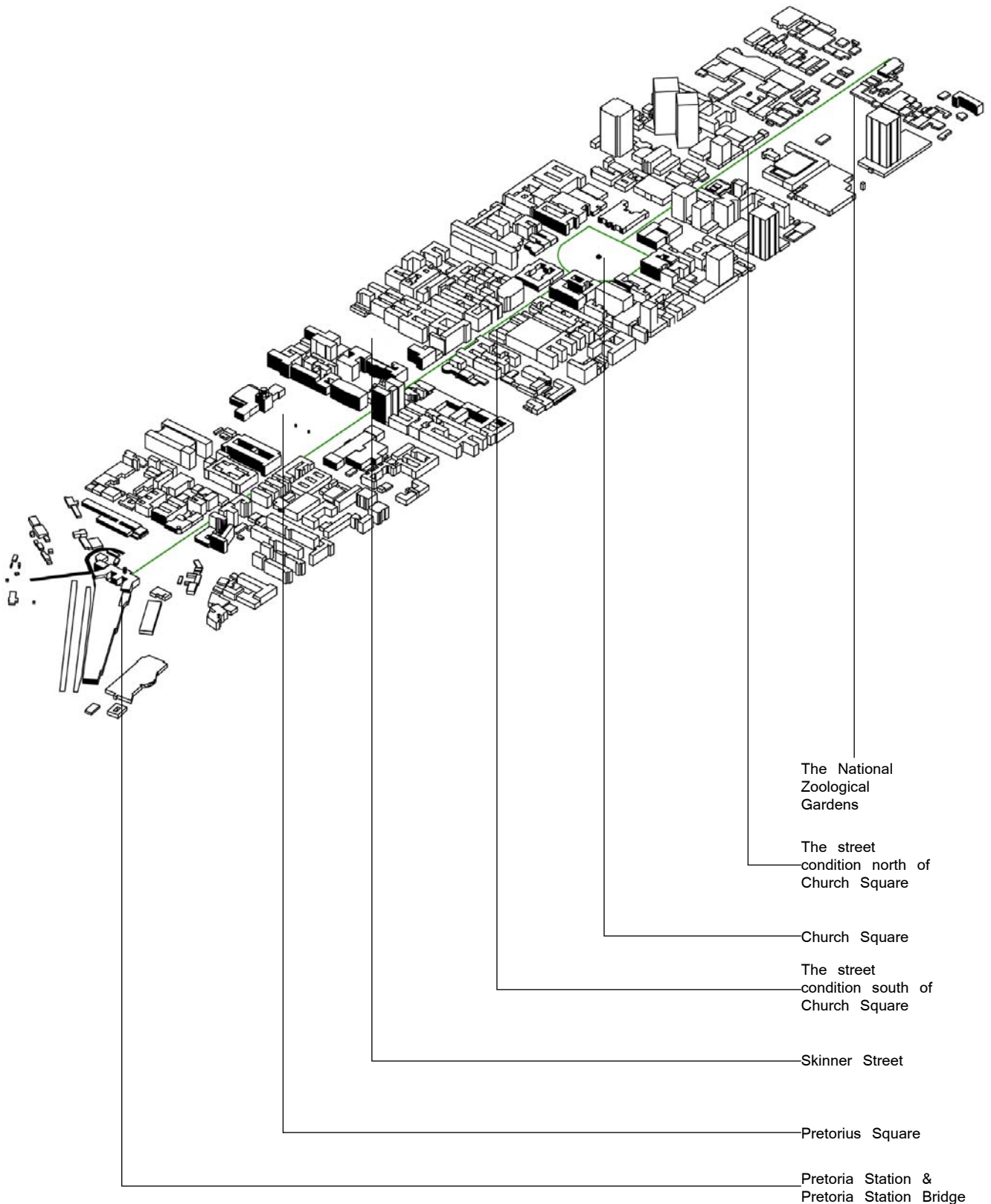


Fig. 86 A three-dimensional representation of Paul Kruger Street (Author 2007).