2.context

Fig. 2.1 A photograph and figure ground map of main campus. View from the West.

Tshwane - Pretoria- University of Pretoria

John Vorster Tower

Reserve Bank

City Hall

Voortrekker Monument

ABSA Building

Church Square

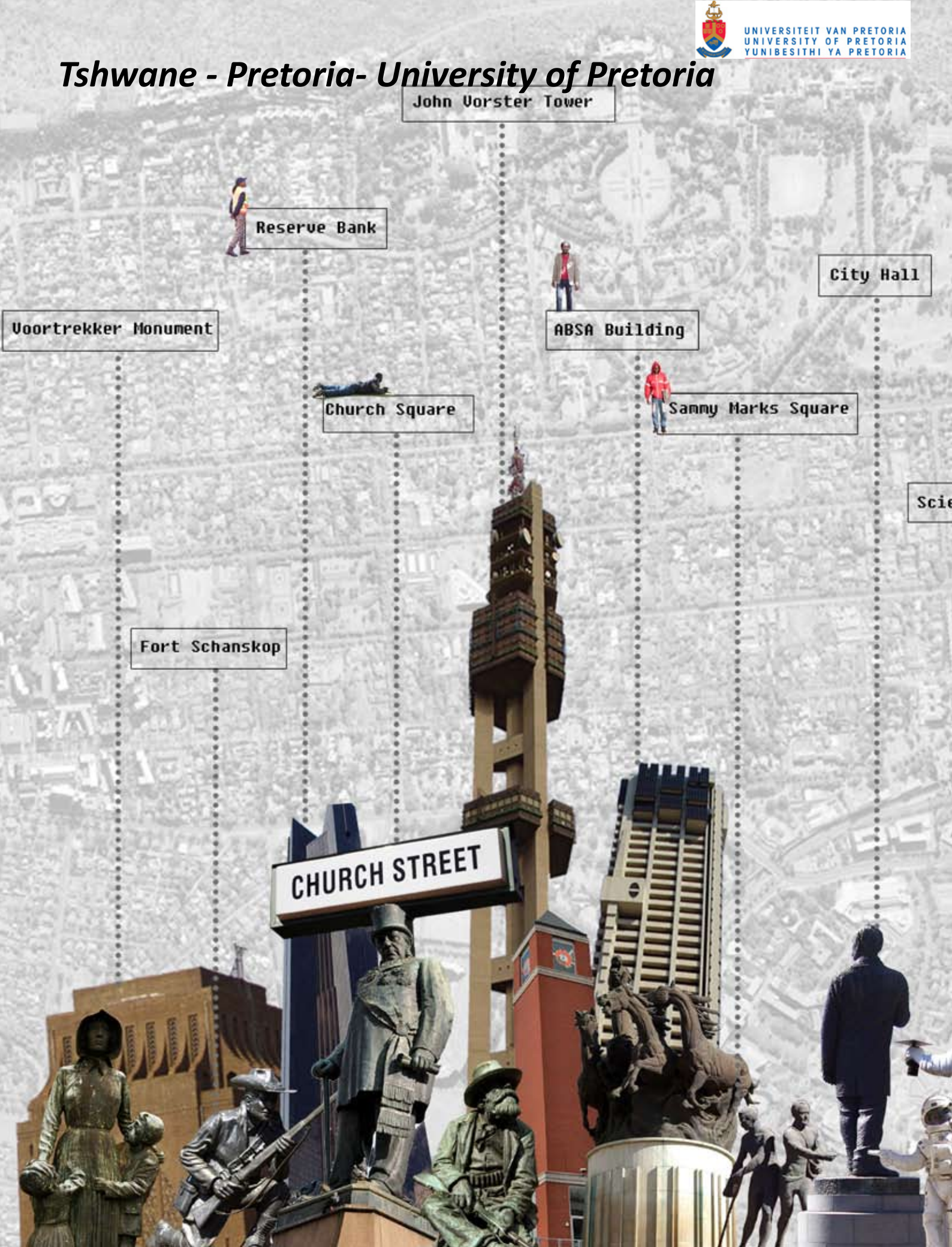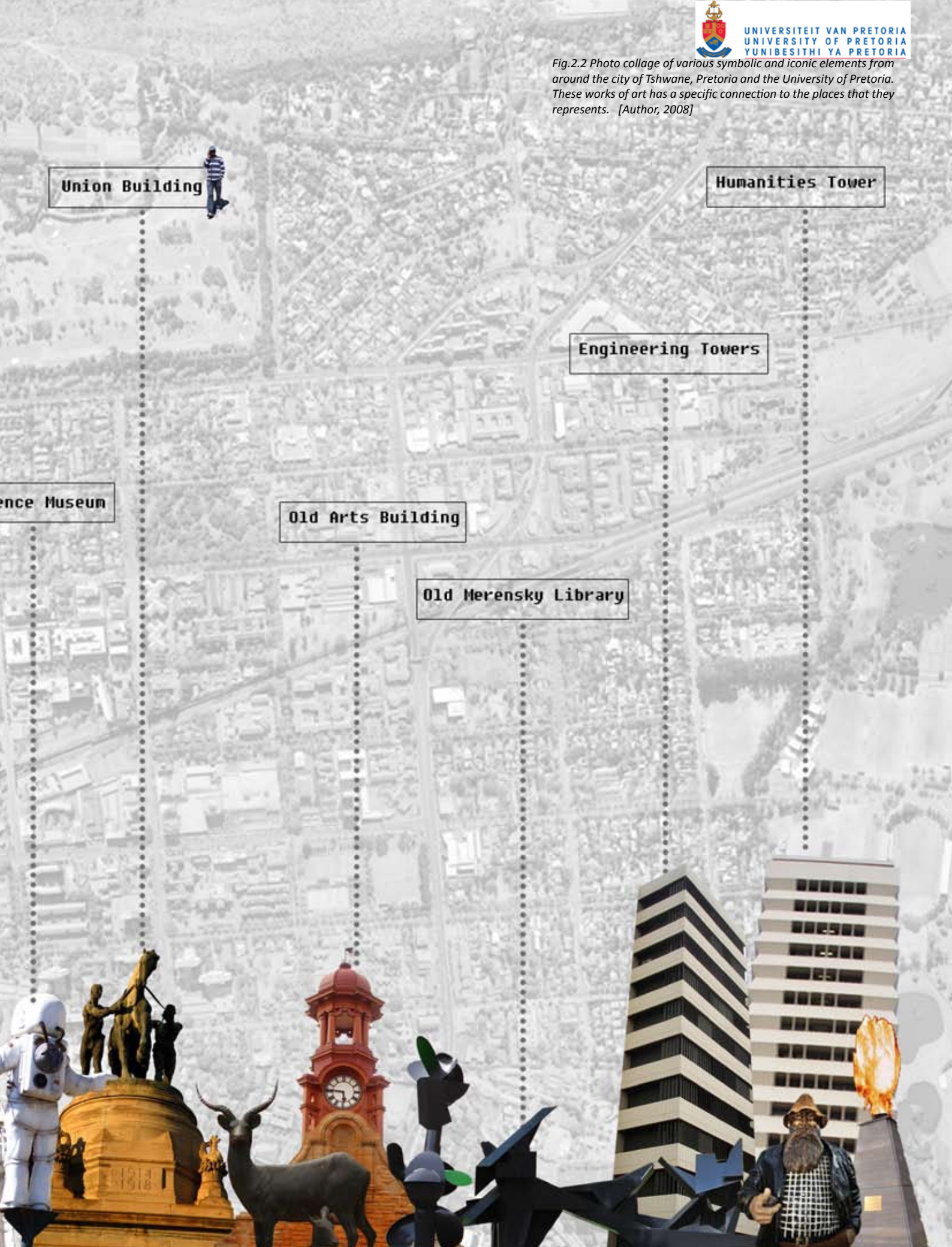Sammy Marks Square

Scie

Fort Schanskop

CHURCH STREET

Fig.2.2 Photo collage of various symbolic and iconic elements from around the city of Tshwane, Pretoria and the University of Pretoria. These works of art has a specific connection to the places that they represents.   [Author, 2008]

Union Building

Humanities Tower

Engineering Towers

ence Museum

Old Arts Building

Old Merensky Library

2.1 City Context

2.1.1 Background

The district of Tshwane boasts a rich history, a vibrant tourism industry, excellent educational facilities, world-class business nodes, a high number of foreign embassies, as well as a wide variety of cultures and ethnic groupings and housing types. There is an abundance of physical and natural features such as Meintjieskop, the National Botanical Gardens, Hartbeesspruit and its associated open space (Colbyn Valley), and the Witwatersberg. On the eastern periphery of the city natural features such as Strubenkop, Lynnwood Ridge and the Wolwespruit can be found. To the south and south-west Klapperkop, Skanskop, Salvokop and the entire Fountains Valley are form-giving elements that shape the city and give it its character and appeal. The residential population is approximately 85 000 and can mainly be categorised in the middle-income group (City of Tshwane, 2007).

In terms of built form, the inner city (Pretoria) is acknowledged as the primary metropolitan activity node, characterized by mixed land uses ranging from retail, offices, government buildings and high-density residential development. The south-western part of the region is characterized by cultural, historic and recreational elements (the Voortrekker Monument, Fort Skanskop and Fort Klapperkop), whilst land uses in the south and south-east consist mainly of residential areas and open spaces.

Location
Defined by the N1 highway on the EASTERN boundary, Monument Park extensions in SOUTH-WEST Groenkloof plantations and Fountains Valley in the WEST and Boom Street, Belvedere Street, Meintjieskop, Meintjies Ridge and the northern boundary of Colbyn up to the N1, in the NORTH. Heart of Pretoria and of Tshwane as a whole.

Gauteng Universities

University of Pretoria - 5 x campuses
University of South-Africa - 1 x campus
Tshwane Institute of Technology - 3 x campuses
University of Witwatersrand -
University of Johannesburg -
Vaal University of Technology -
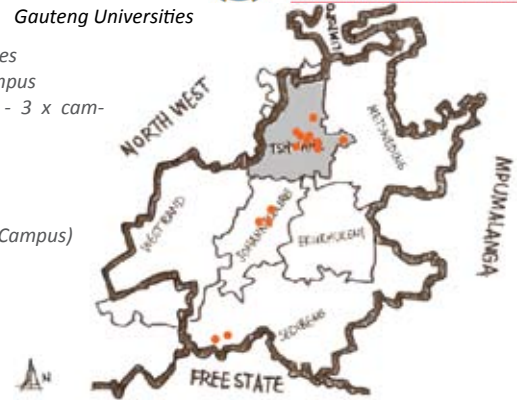*University of the NorthWest (Vaal Campus)*

Fig. 2.3 Map of the Gauteng province municipalities illustrating where all the major Universities are located. [Author, 2008]

Fig. 2.4 Map illustrating the eight districts of the greater city if Tshwane, This region houses the University of of Pretoria's main campus. [Author ,2008]

Fig. 2.5 Map illustrating the main arterials feeding the greater city of Tshwane & routes to nearby and
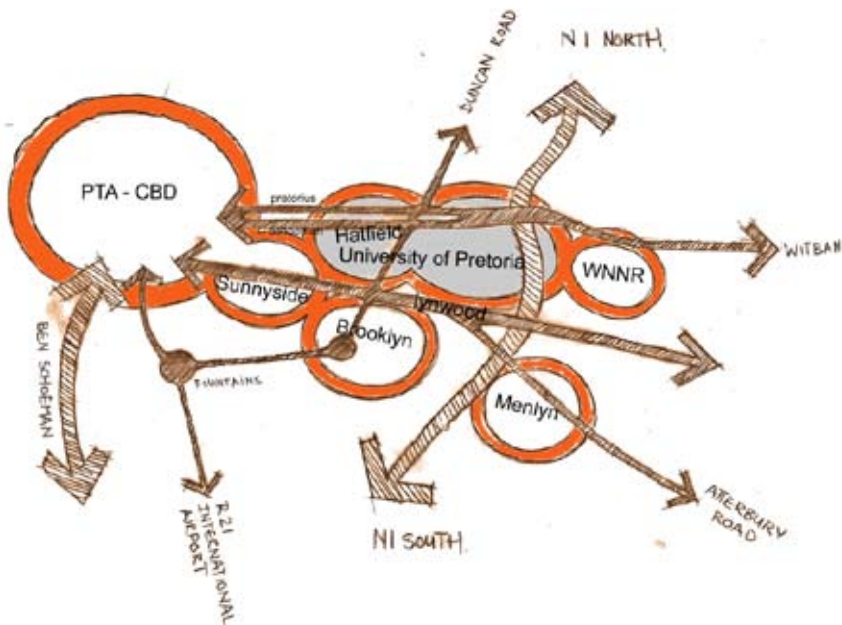
Fig. 2.7 Diagram illustrating all major vehicle axis and the location of the University of Pretoria's main campus in relationship to Pretoria C.B.D and adjacent neighbourhoods. [Author,2008]
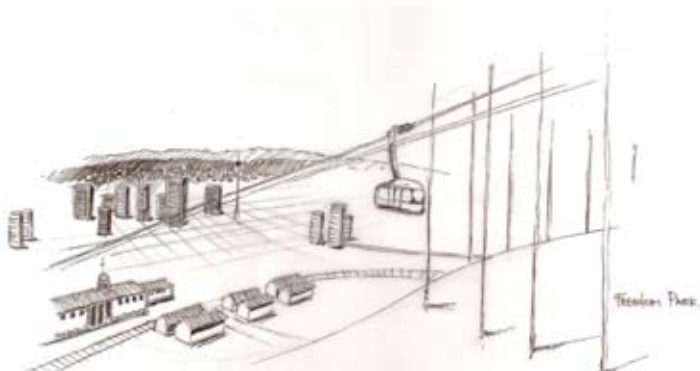

Fig. 2.8 Sketch of Pretoria city centre and train station. View from Freedom. [Author,2008]

Fig. 2.9 Diagram illustrating main arterials feeding University, links to CBD and adjoining areas. [Author,2008]

2.1.2 Development opportunities and potential.

The proposed Gautrain development will affect a large part of the region, namely the Salvokop area, the southern part of the Inner City, the southern part of Sunnyside, the northern part of Muckleneuk, and parts of Hatfield. The implementation of this development should improve the accessibility and development potential of the region. The Innovation Hub, an exciting new proposal for the extension of educational and research facilities in the north-eastern part of the region, could further entrench the area as the 'thinking region' of the city. The region is known for a balanced distribution of excellent medical facilities and hospitals, as well as other specialised nodes.

2.1.3 Trends

City growth and suburban expansion since 1880 has given the region some fine suburbs – both architecturally and environmentally. However, accelerated growth in the northern, eastern and south-eastern directions from the 1950s onwards began to threaten these assets and the current trend is one of changes in land use, resulting in the gradual loss of the suburbs' inherent qualities. The trend of rapid decentralisation may ultimately lead to the decline of the inner city. The role and function of major roads and their immediate environments (such as Lynnwood Road, Charles Street, Duncan Street, and Atterbury and Brooklyn Roads) are constantly changing and non-residential uses are encroaching onto traditionally quiet residential areas.

Fig. 2.6 Panoramic view over Pretoria city centre View from the Union Building. [Author, 2008]

2.2 Re-Thinking the University's Future
2.2.1 Analysis

Edge Condition: Edge conditions are important in architecture on many levels, from the behavioural to the technical. In all senses, and in the real world, they represent places of tension, of intensification and often of conflict. Porter (2004:66) states that edge conditions, in architectural terms, refer to the places where social territories meet. The edge condition requires special attention because it often mediates between very different social and physical conditions, generating complex and often competing priorities (Porter, 2004).

Gateway: A gateway marks boundaries and edges in order to create psychological transitions between 'conscious' and 'unconscious', 'past' and 'future', and physical transitions between 'inner' and 'outer', 'public' and 'private'. It also marks the difference between a sense of 'arriving' and a sense of 'arrival'. Gateways define the intersections of pathways and boundaries. They form an integral part of boundaries, and interface between different kinds of activities. In order to heighten the sense of transition, they often involve changes of topology, light and surface, and can take on various forms (Porter, 2004:87).

Threshold: The threshold is an architectural element with deep social and emotional significance. It is a transition zone that marks the passage between 'outside' and 'inside' – the beginning of dwelling, according to Martin Heidegger. It is at the threshold where one crosses the boundary into a 'place cleared for settlement'. According to Heidegger, the threshold is a place in the most basic sense, in that it is a highly defined 'location'. There is a directional bias associated with the threshold, namely that of moving from a less bounded to a more private, contained space; it expresses the idea of entering. From the earliest human settlements to the present, ritual and specific modes of behaviour have become associated with crossing the threshold – removing one's shoes or hat, paying respect to the protecting deities, exchanging greetings with the host, and more recently, submitting to security checks (Porter, 2004:93).

Nodes: Porter (2004:131) argues that the node is one of the 5 elements of a city, an aspect also described by Kevin Lynch in his Image of the City (1960). Nodes usually form part of transportation systems and are often located at the crossing or intersection of 'paths'. Train and bus stations, town centres and complex intersections where a number of different roads come together are all examples of nodes. They can also simply be concentrations, such as a street corner hangout or a small park or plaza. Landmarks often work in conjunction with nodes as points of reference – navigational aids when moving through the city. Louis Hellman states that an architectural node is simply and intersection, a crossing point, a point where different forces meet (Porter, 2004).
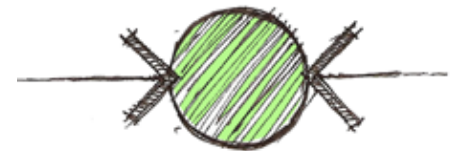
EDGE:

GATEWAY:

THRESHOLD:

NODE:

Fig. 2.10 Diagrams resembling various urban design patterns as mentioned by Lynch (1996). [Author,2008]
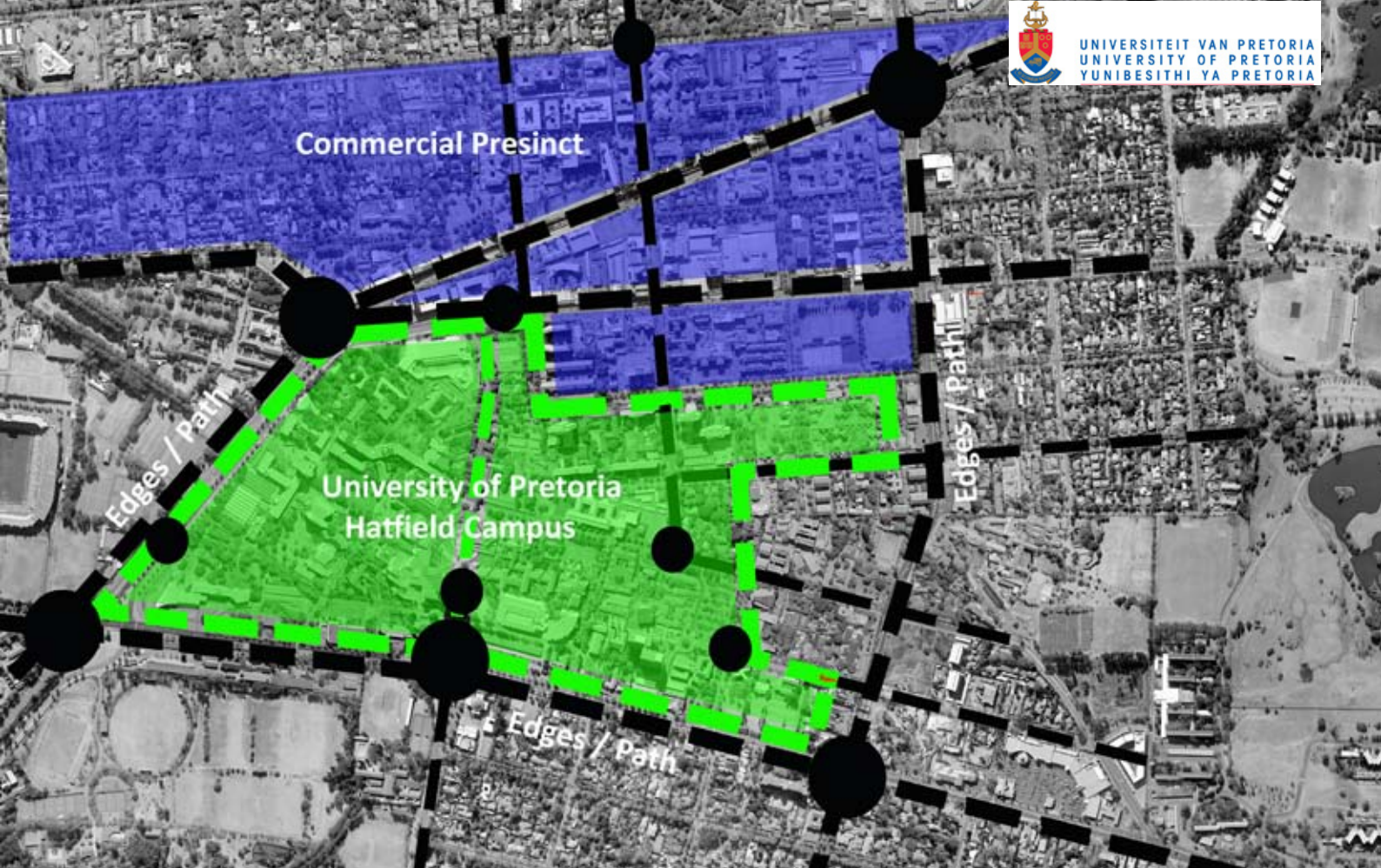
Fig. 2.11 Map indicating the boundaries of the University of Pretoria's main campus intersect all major crossings and interchange
points on the periphery. [Author & I. Coetzee, 2008]

Fig. 2.12 Map identifying the proposed urban pattern of main campus and its adjacent precincts. [Author & I. Coetzee, 2008]

2.2.2 Vision Statement

Regarding the University of Pretoria as a densely developed 'village' is the first step in achieving a vision of future growth within the current set boundaries. The university could become a village where the urban fabric is designed at a human scale, where the buildings become nodes of social and academic interaction, and the exterior spaces act as outdoor rooms for academic discourse and social play; a village that has its own tangible and definable character, identity and vitality; a village that has clarity of circulation dominated by pedestrians; a village that is designed for the night, which has a vibrant and cultural night life. The university village will function as a community, working as an interrelated whole in a symbiotic relationship of allied units. This proposed transformation will strengthen and guide the campus to continue functioning as a holistic entity. [Graduate class of 2008]

2.2.3 "Front Door" of the University

According to Holm (1992:51) first impressions count, whether one refers to people, movies, books, cars, buildings or cities. First impressions determine one's judgments and attitudes, and also how one behaves in future.

Architects and builders know why they spend so much time on the front door. It represents the extended hand. Entering a building from the back isn't nearly as spectacular as entering the same building through the front door. If one approaches Cape Town from the sea, then one enters via the front door. Think about the unforgettable image presented when one approaches Venice by boat, or the way in which the "white cliffs of Dover" greet one on arrival. Similarly, Pretoria has its own way of greeting visitors via the Fountains Circle (Holm, 1992).

In the same manner, the University of Pretoria has its own "Front Door", represented by the stature of the Humanities Building which greets staff, students and visitors at the Roper Street entrance.

Fig. 2.13 Photograph of the University of Pretoria main campus , taken from the south west corner looking north west. [Ad Destinatum,]
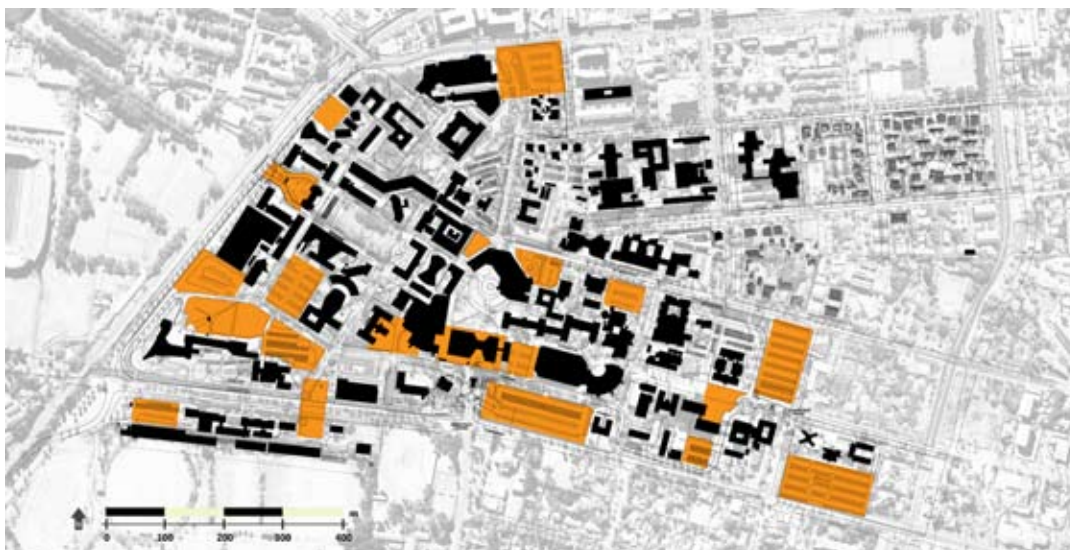

Fig. 2.14 Aerial Photograph of southern part and main entrance (Roper Street) of the University of Pretoria's main campus. [UP, Department of Geography , 2008]
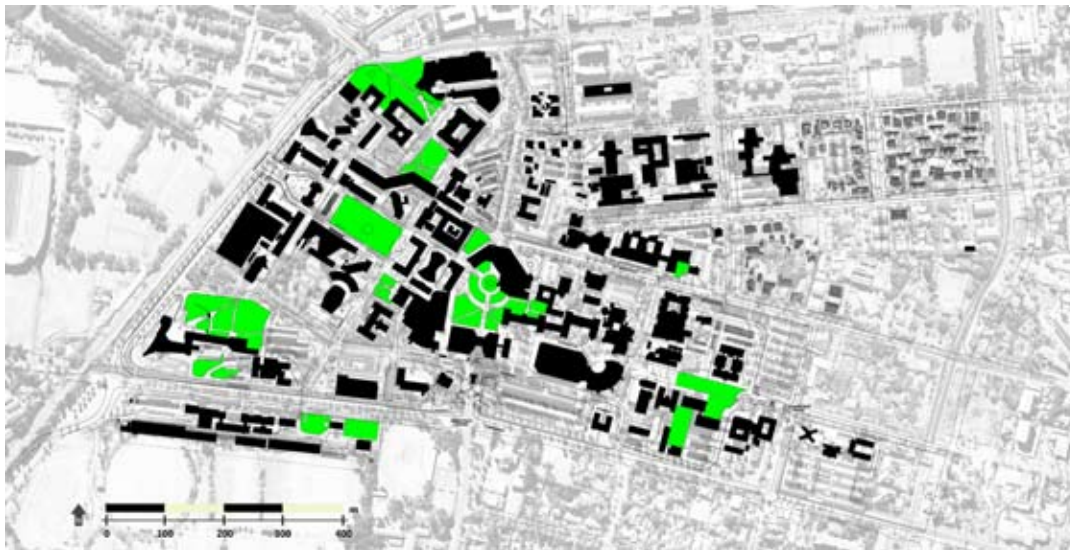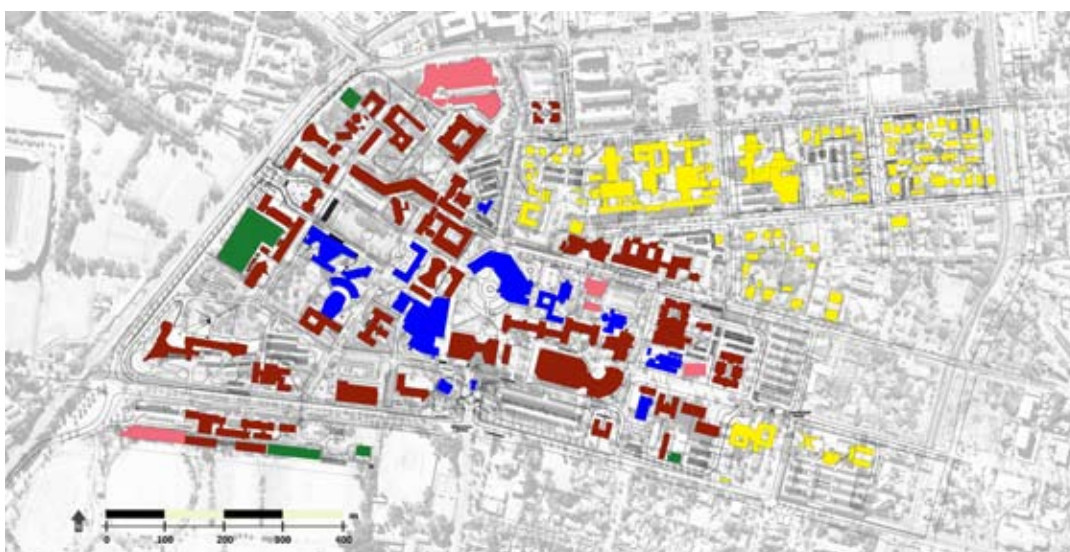
Existing green open space

Fig. 2.15 Figure ground study identifying all existing green open spaces on the main campus. [Author ,2008]

Areas with potential for development

Fig. 2.16 Figure ground study identifying spaces on main campus that has a good potential for future development. [Author ,2008]

Academic & Academic Administration

Laboratories

Accommodation

Technical, Storage etc.

Undercover Parking

Academic Support

Fig. 2.17 Land use map of main campus. [Author ,2008]

29

2.3 Development time-line

1921 ·············· main campus
ROPER

1943 ·············· main campus
ROPER

1960 ·············· west campus
ROPER
east campus

1970 ·············· west campus
ROPER
east campus

1982 ·············· west campus
ROPER
east campus
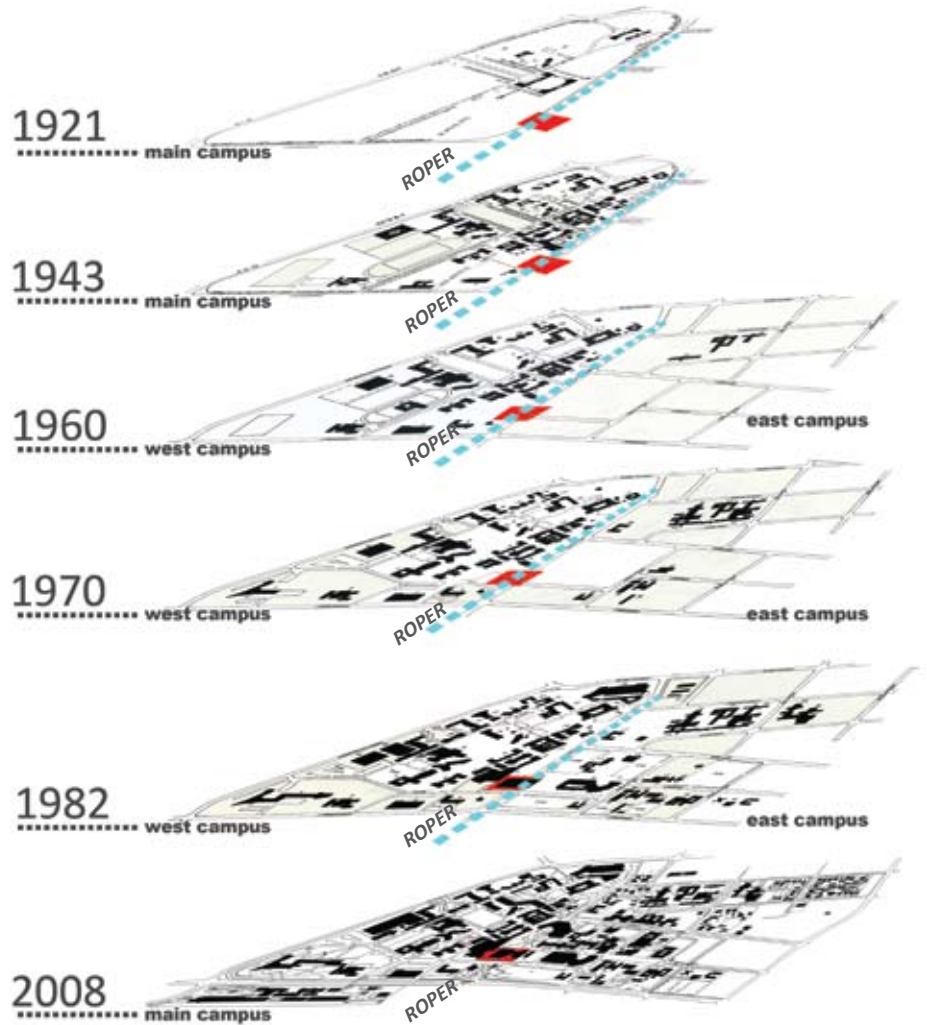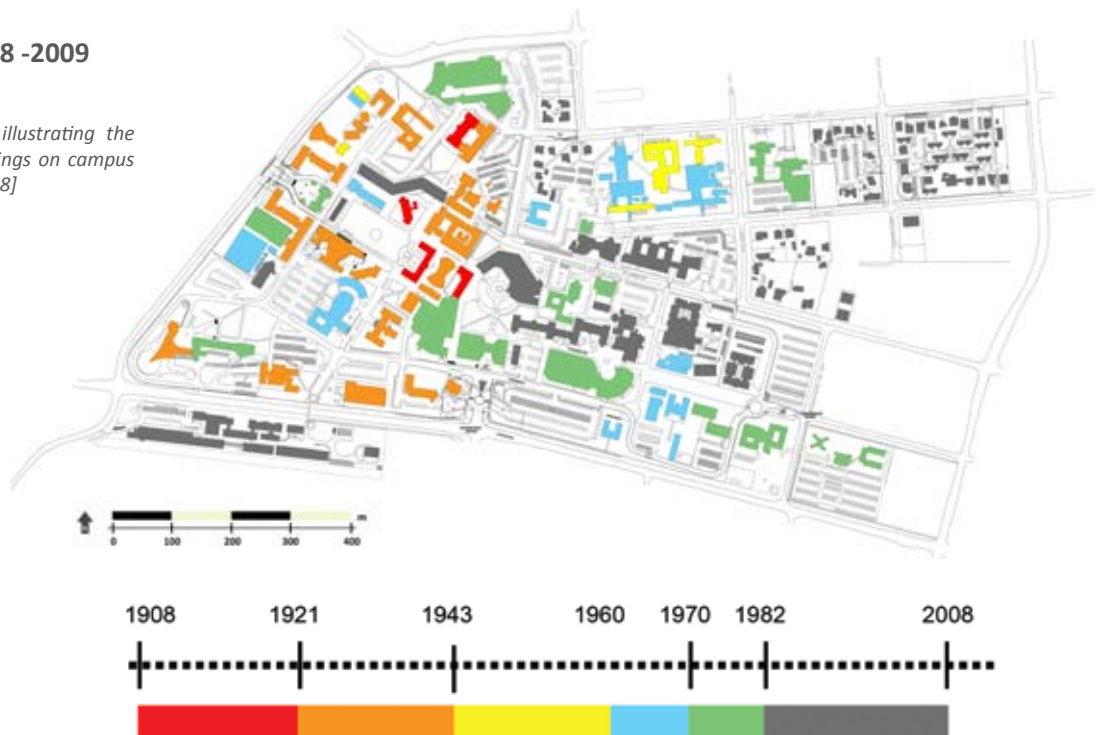
2008 ·············· main campus
ROPER

Fig. 2.18 A range of figure ground studies representing the layout and growth of main campus over the past 80 years. The study also indicates the location of the selected study area between the original west, and later developed east campus. East and west campus used to be divided by Roper Street running in a north south direction before the road was closed and pedestrianized in 1999. [Author ,2008]

Buildings on campus 1908 -2009

Fig. 2.19 Map of main campus illustrating the growth and development of buildings on campus over the past century. [Author ,2008]


1908   1921   1943   1960   1970   1982   2008

30

Primary vehicular routes

Primary pedestrian routes

Secondary vehicular routes

Railway Line

Fig. 2.20 Figure ground study with most major movement axis on and around the main campus of the University of Pretoria. [Author, 2008]
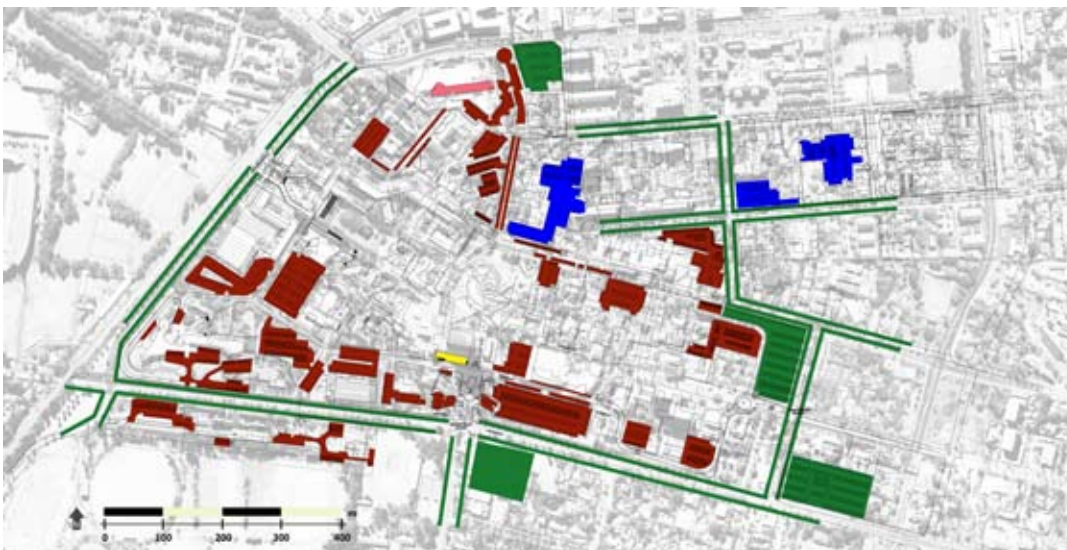
Staff & Visitors Parking

Student & Open Parking

Motorcycle & Bicycles

Residence Parking

Other

Fig. 2.21 Map illustrating all allocated parking areas on and around the main campus of the University of Pretoria. [Author, 2008]
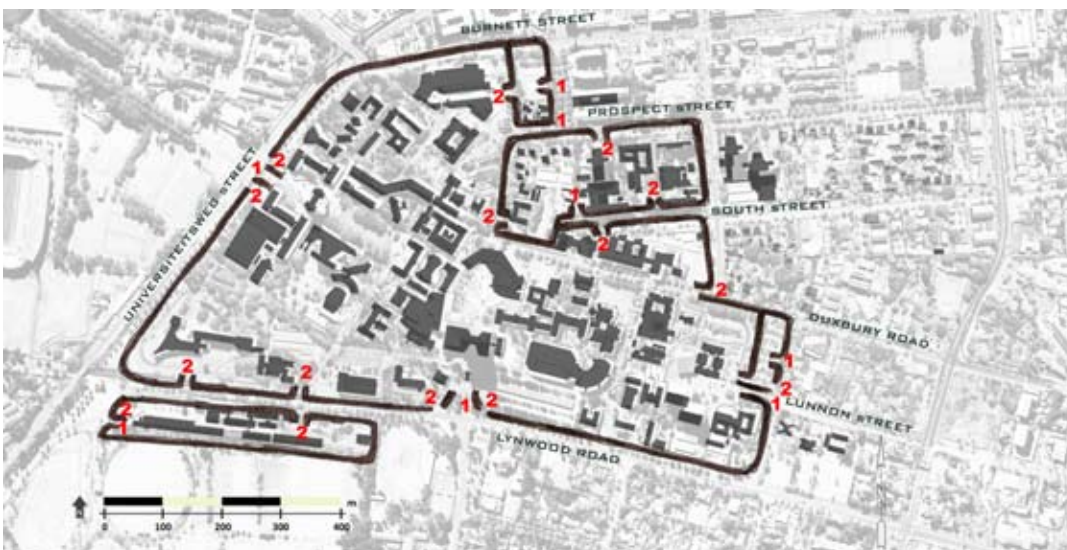
1 Vehicular Valve

2 Pedestrian Valve

Fig. 2.22 Permeability map indicating the location of all vehicular and pedestrian security/access points to the enclosed environment of main campus. [Author, 2008]
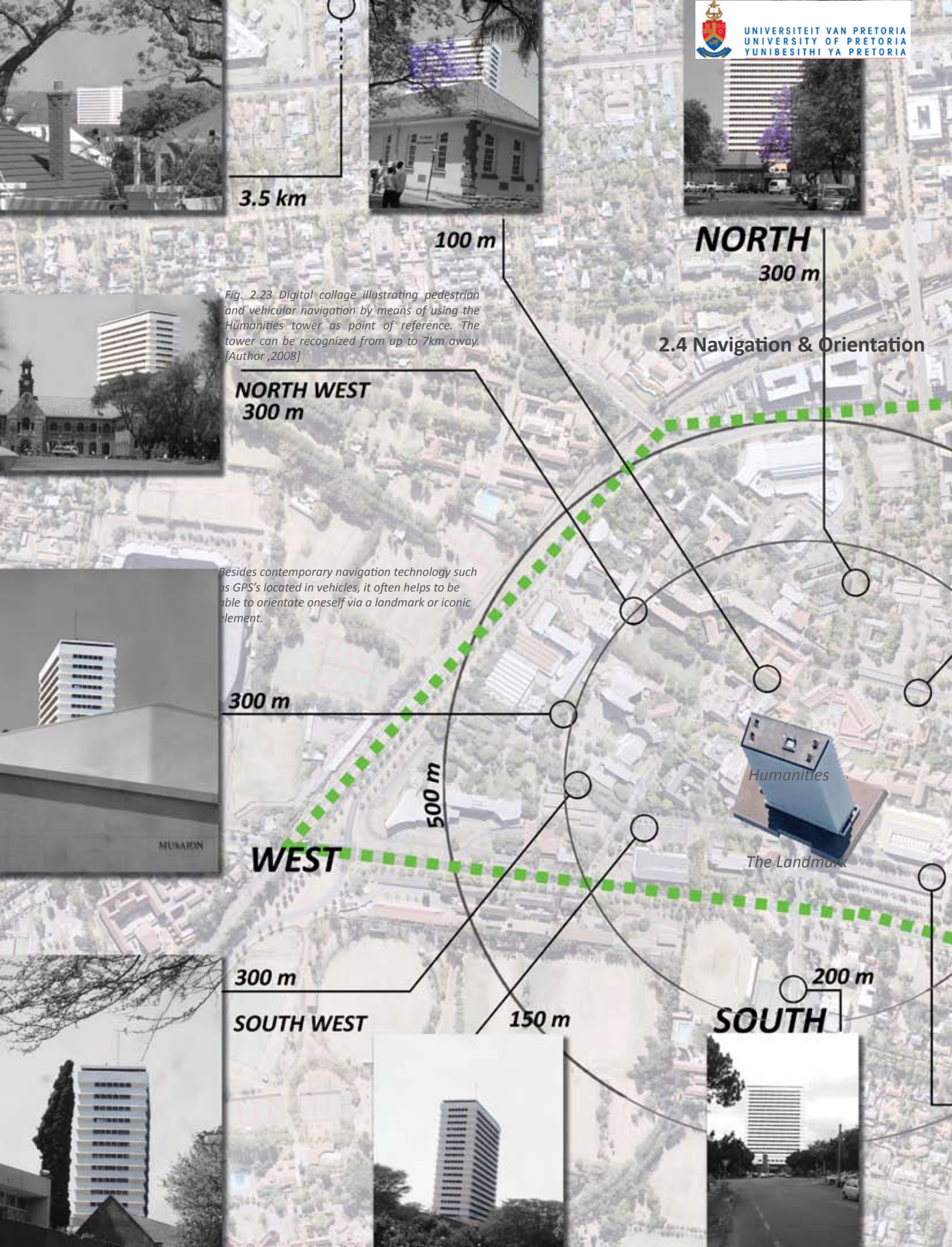
3.5 km

100 m

NORTH
300 m

Fig. 2.23 Digital collage illustrating pedestrian and vehicular navigation by means of using the Humanities tower as point of reference. The tower can be recognized from up to 7km away. [Author ,2008]

2.4 Navigation & Orientation

NORTH WEST
300 m

Besides contemporary navigation technology such as GPS's located in vehicles, it often helps to be able to orientate oneself via a landmark or iconic element.

300 m

500 m

MUSAION

WEST

Humanities

The Landmark

300 m

SOUTH WEST

150 m

200 m

SOUTH

200 m

250 m

7.0 km

NORTH WEST

Lynch (1981:4) explains that when we navigate we are supported by the presence of others and by special wayfinding devices such as maps, street numbers, route signs and bus placards. However, once we get disorientated we are often overcome with a sense of anxiety and even terror. He goes on to state that the very word 'lost' means much more than simple geographical uncertainty; it carries overtones of utter disaster. In the process of wayfinding the strategic link is the environmental image, the generalized mental picture of the exterior physical world that is held by an individual. The image is the product of both immediate sensation and the memory of past experiences, and it is used to interpret information and to guide action (Lynch, 1981:4).

3.5 km

500 m

N

EAST

'Google-Earth' has shifted back the focus on monumentality from verticality to horizontality. In contemporary urbanism, the image is more real than reality itself: the image is how we navigate the city.

200 m

SOUTH EAST 700 m

50 m