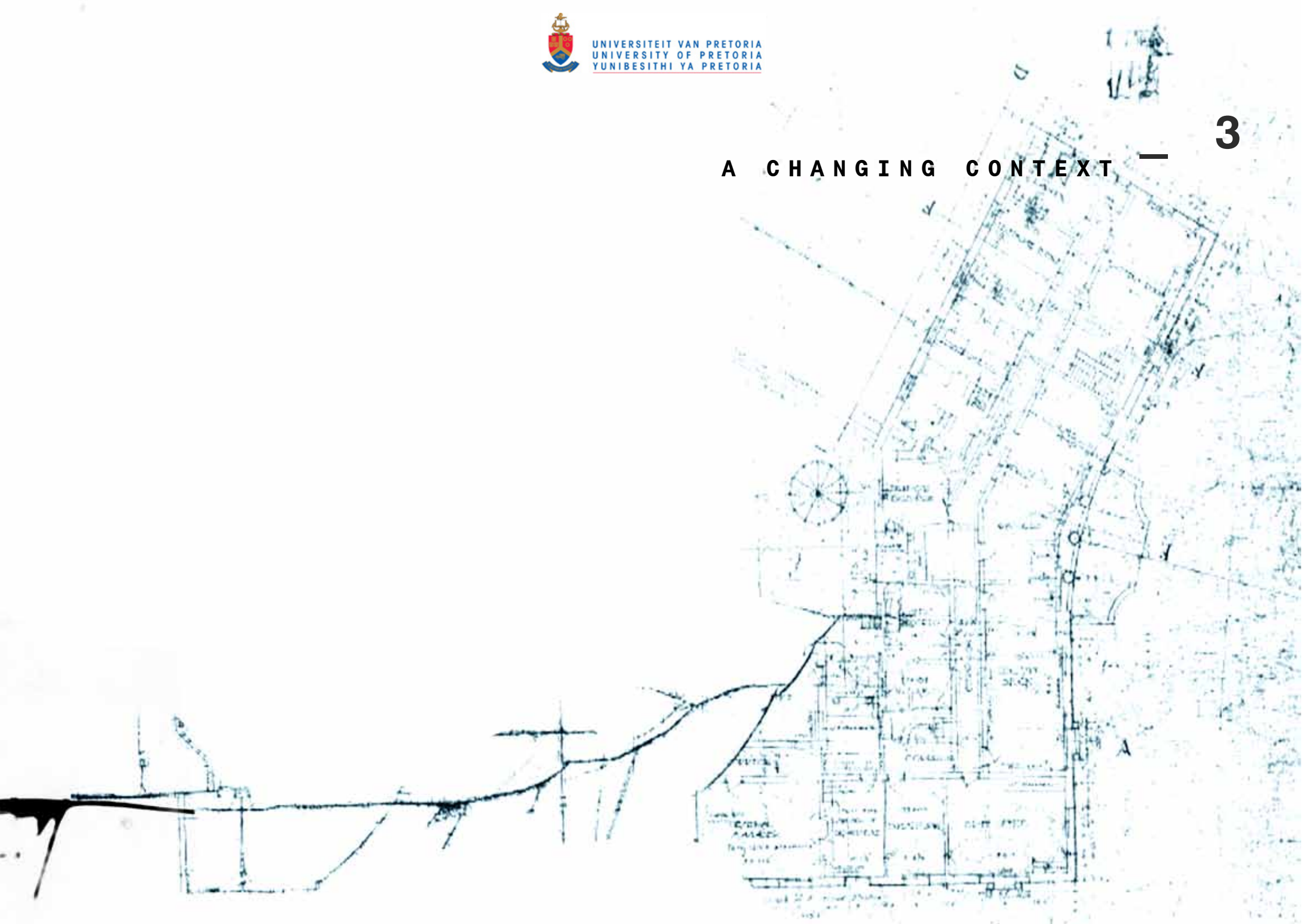




A CHANGING CONTEXT —



| 3.1 SOUTH AFRICA

Many South African cities developed and changed into segregated and isolated cities under the Apartheid regime, isolating these suburbs from town centres. This was deliberately done to segregate the South African population according to race [Du Plessis et al 2003:243].

This process led to unsustainable cities with isolated suburbs. Necessitating a sustainable, affordable and reliable transport system that bridges the gap created during the Apartheid era. The Bus Rapid Transit systems can assist in reconnecting and empowering dislocated communities in South Africa.

Johannesburg has implemented the BRT system, while Cape Town and Pretoria are in the process of developing and implementing it. In the long term all major cities in South Africa will employ this system.

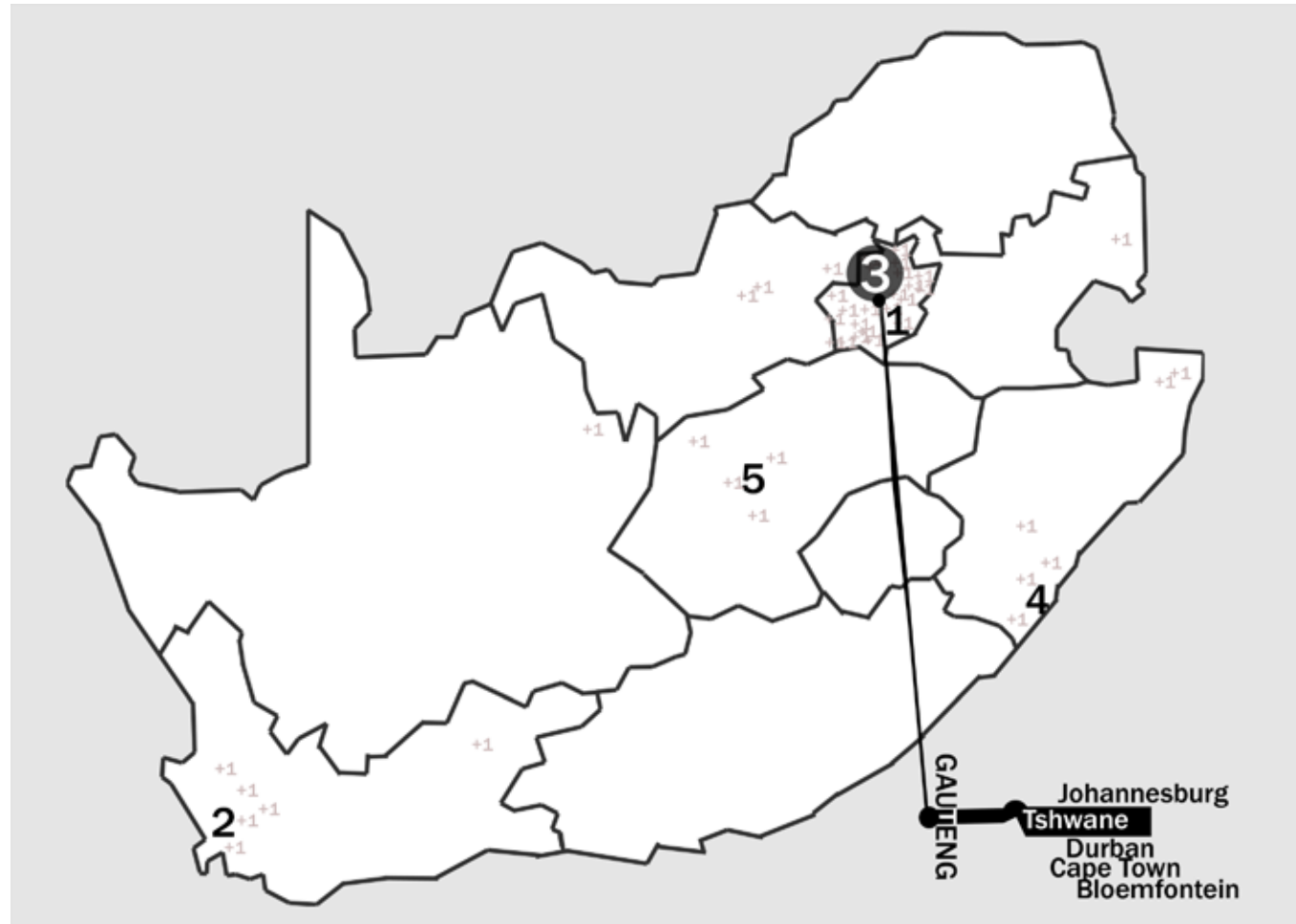


Figure 3-01: BRT systems developing throughout South Africa [Source: Author]

3.2 CHANGING FROM PRETORIA TO TSHWANE

Tshwane has experienced a series of changes throughout its history. It developed from a centralised city to a massive low-density sprawling city.

TRIBE AND CHURCH

Pretoria was declared a town in 1855. It developed around a central kerkplaats situated on the Elandspoort farm [Bakker 2004:04 & Holm 1998:61]. It developed as a centralised dense city contained within its natural boundaries [Holm 1998:60].

CENTRE AND BOUNDARIES

The original city layout was coordinated between two rivers, the Apies and the Steenhovenspruit acting as boundaries on the eastern and western edges. The northern and southern boundaries were formed by the koppies and hills Thaba Tswane and the Magalies berg. The centre of this area clearly lined up with the natural gateways ["poorte"] formed by the natural landscape [Jordaan 1989:26-28]

URBS QUADRATA

The layout of the town of Pretoria was a "conscience and significant act", a very ordered and Calvinistic approach to understanding human development in the natural landscape [Holm 1998:59+62].

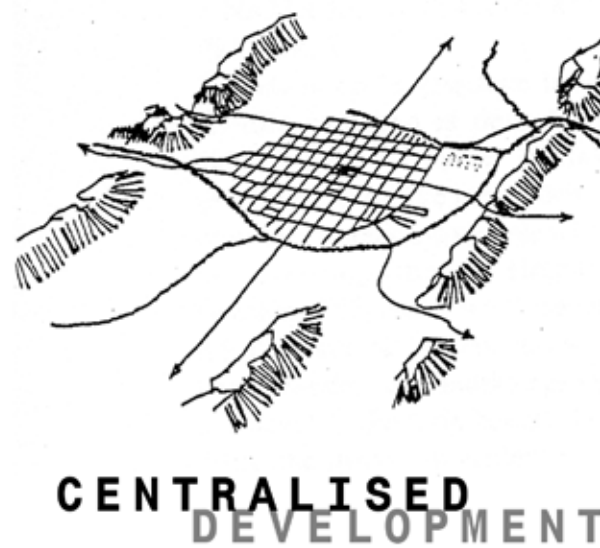
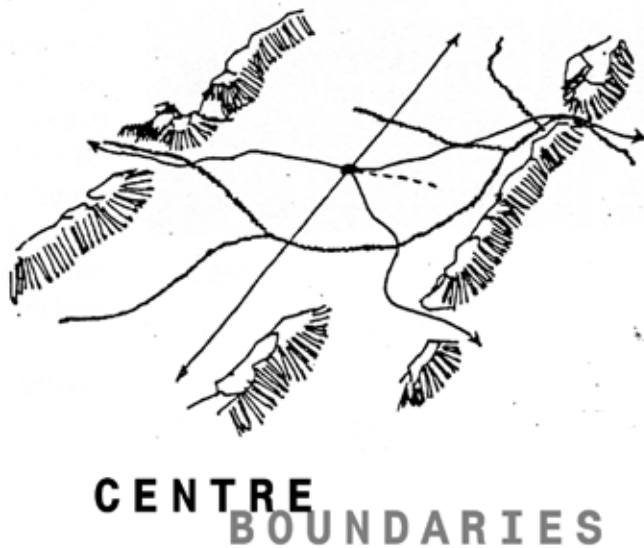
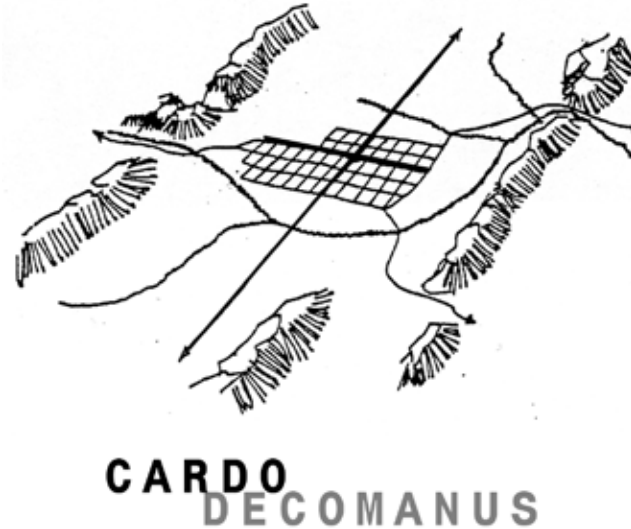
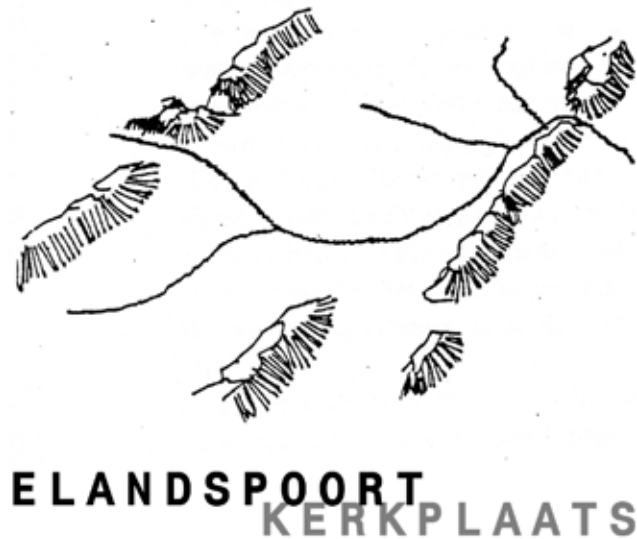


Figure 3-02: The development of Pretoria [Source: Jordaan 1989, p27]

The Cartesian town layout with the cardo and decumanus maximus crossing at the town centre links the town centre with the four compass axes and the edges of the town [Jordaan 1989:26].

The town centre, currently Church Square, is situated on the two axes as a very important point within the city.

Moving parts apart

With the discovery of gold in the Transvaal in 1885, Pretoria changed into a thriving capital city [Holm 1998: 59]. Thriving suburbs developed to the east and west leading to significant changes in building types and city size. It also led to the implementation of the railway system in the ZAR to accommodate the new industries and mines [Bakker 2002:12].

This compact and centralised city changed significantly during the Apartheid era, under the Group Areas Act [1923] the city was fragmented into segregated areas [Chipkin 1998:160]. This was aimed at segregating people into racial zones separated with buffer zones [Du Plessis et al 2003:243].

The urban centres were exclusively reserved for white Europeans, while black people were only allowed temporary residence within these areas [Chipkin 1998:152].

This led to displaced, overcrowded urban areas called tribal reserves, which were isolated from the resources of the city [Chipkin 1998:160]. At the moment these districts house the population with the lowest income and is situated the furthest from the city centre [Du Plessis et al 2003:243].

This spatial layout has led to heavily subsidised public bus and rail transport systems, which because of the decentralised low-density nature of the city are highly inefficient and unsustainable [Du Plessis et al 2003:243].

ADDING UP THE PARTS AND PAST

In 2000 the municipal area of Pretoria changed its name to the City of Tshwane effectively doubling the urban area leading to a highly fragmented and divided, low density metropolis [Berstein & Mcharthy s.a:1].

The City of Tshwane is currently developing strategies and putting frameworks in place to address the backlog of development in its northern suburbs. The Tshwane Integrated Development Plan [2006-2011] proposes that the focus should be on developing infrastructure and transport systems in these areas [TIDP 2006:167].

The Bus Rapid Transit system will play a major roll in achieving this aim.

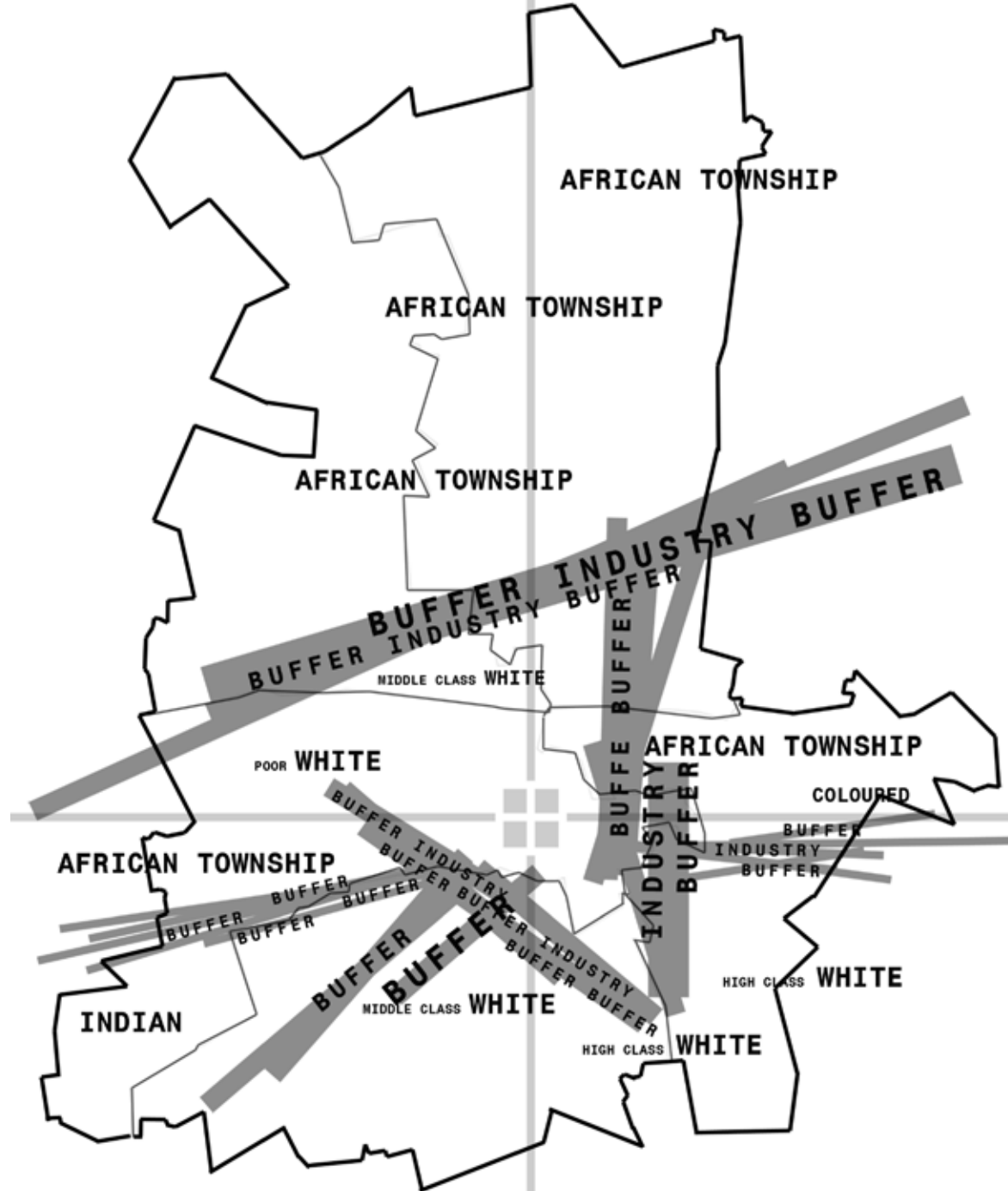


Figure 3-03: Fragmented, decentralised city after Apartheid urban planning [Source: Author]

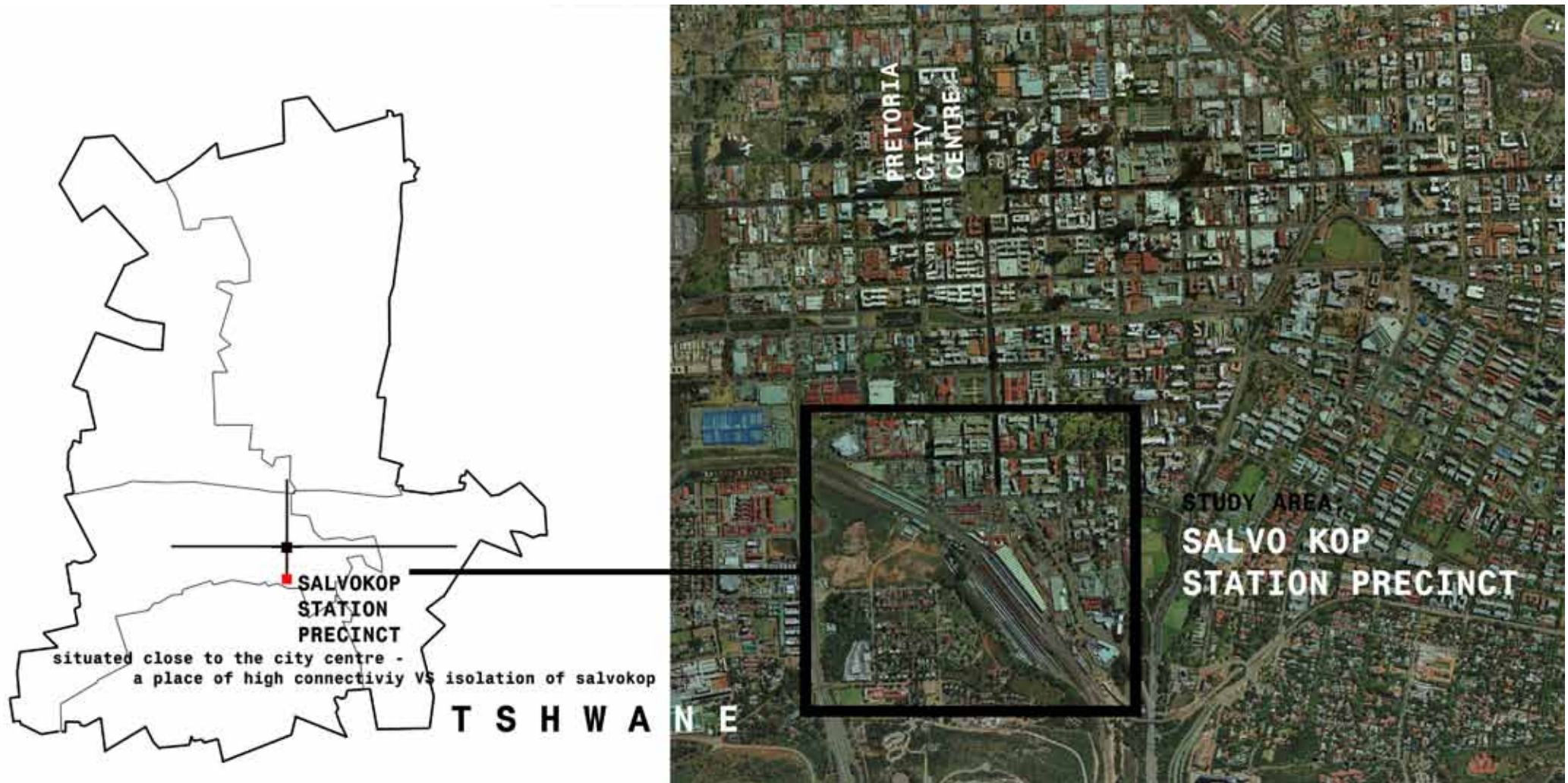


Figure 3-04: Position of precinct within city of Tshwane [Source: Author]

3.3 SALVOKOP – STATION PRECINCT



BRIDGE
CONNECTION

Salvokop and Station precincts are located close to the city centre of Tshwane. Even though the Salvokop precinct borders Pretoria Main Station, which is a major transport node in the city, the area itself is very isolated.

The precinct has the potential of developing as a residential and mixed use area close to the city, and can at a later stage accommodate high-density office developments.



EASTERN
VIEW

Currently the whole of Salvokop is owned by Department of Public Works and is zoned as farmland. All the current residents rent their houses from the owner, while there are many illegal subletting and residents also living within the area [Labuschagne 2010].

The site historical value which can impede development and needs to be dealt with through a sensitive yet growth orientated mind set.



NORTHERN
VIEW

With the increase in transport systems and connectivity in the area, substantial development can be expected over the next 30 years.

Figure 3-05: Panoramas of site and precinct [Source: Link framework, 2010]

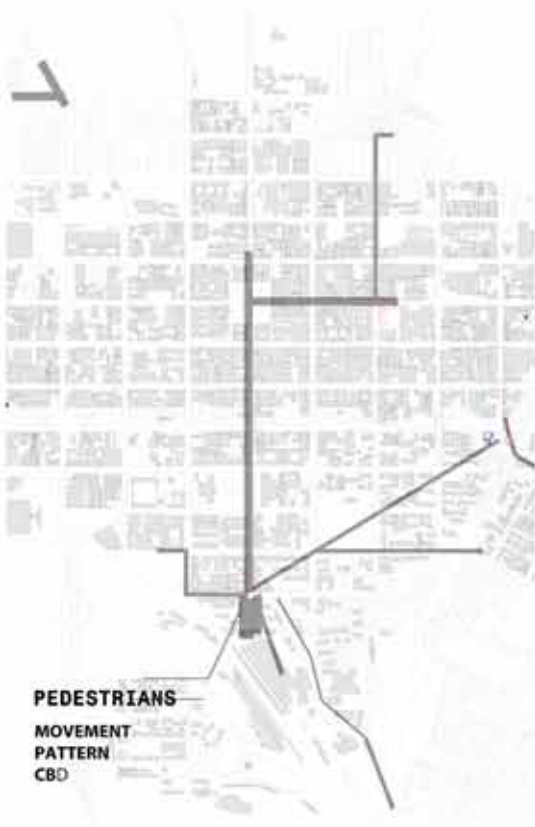




Figure 3-06: Mapping of movement patterns within the city [Source: Author]

3.4 SITE - PRETORIA MAIN STATION

The site for the project is the Pretoria Main Station. It is a very busy modal interchange that is planned to accommodate a wide range of different modes of transport such as the Gautrain, long distance busses, taxi's, Metro Rail and the future BRT systems.

The site is on a very prominent location and is the termination point of the cardus maximus that links the site with heart of the city [Holm 1998:61]

The site has rich architectural and historical value and forms part of the living heritage of the city. The precinct has been used for rail transport since 1894 [Bakker 2004:04]. The station building itself is the first public building by Sir Herbert Baker and was constructed in 1912 [Lindeque 2001:04].

The development following the construction of the station building was never coordinated leading to an illegible, over congested and fragmented site [Seabrook 2009:38]. The station building has not been adapted to the new changes in transport systems and will have to be adressed.



Figure 3-07: The site [Source: Author]



Figure 3-08: Entrance front of Pretoria Main Station [Source: Author]

Large number of pedestrians move through the site every day, but the Station Square does not accommodate them and acts as a barrier to cross movement. The landscaping is very uncomfortable and not user friendly. Excessive heat is generated on the site by the large amounts of dark, hard surfaces and little green landscaping.

The bridge connection to Salvokop is very dangerous at night, even though it provides the only pedestrian access to the area.

Currently Bosman Station is being used as a stop; yet it is a very dangerous station without safe pedestrian access. This station is proposed to be closed and moved to the main station by the LINK framework.

Three new transport systems will soon be added to the site: the BRT, Gautrain and Gautrain feeder system. According to a traffic impact study done in 2002 [Gauteng Provincial Government 2002:08] there will be an initial increase of 2113 commuters per hour during peak time utilising the Gautrain.

If the BRT users are added to this equation the number of people will increase to 6000 per hour

The Gautrain system plans to use its own feeder system to facilitate commuters. It will use low-floor busses, 35 and 55 seater Euro III busses. This service will run from 06:00 – 21:00 at a frequency of 18 min [Gautrain Website].

The author proposes that a series BRT express lines be developed as a feeder system for the Gautrain leading to a more integrated transport and efficient system.

With the addition of the transport systems the number of passengers moving through the Pretoria Main Station would increase significantly, building on its legacy as a gateway into the city and as a site connected to the rest of Africa and the world.



Figure 3-09: Entrance to Gautrain and Old Accounting building [Source: Author]



3.4.1. Perception and social context

Currently the station is mostly used by low-income commuters who travel up to 90 km a day. The perception exists that the station only accommodates the lower income groups. Safety and comfort as well as the reliability of the transport systems will have to be addressed to change this perception and ensure that the BRT system and Gautrain are utilised by a wider range of users.

The metrorail starts at 3 am in the morning and the last train runs at 19:30. Thus the site is busy for a large period of the day. The BRT system is also proposed to run until 21:00 at night [Laubser 2010]. There are currently very few 24 hour amenities for commuters during the very early and late hours.

There is a rich diversity of small commercial enterprises on site. With the development of the area the danger exists that this small grained diversity will be lost.

The quality of the station and station square will have to be improved to ensure the sustainability of the site and transport system.



Figure 3-10: Commuters waiting for the train [Source: Author]



3.5 PHOTOGRAPHIC ANALYSIS



Figure 3-11: Current users of the public transport system [Source: Author]



Figure 3-12: Existing vendor stalls, Old Tavern and empty regional bus station [Source: Author]





Figure 3-13: Views of station building, garden square, Victoria Hotel and bridge entrance [Source: Author]



| 3.6 CONCLUSION

Pretoria Main Station: a place of connectivity that has declined into a disconnected series of systems. An integrative intervention that links parts and systems on site is needed to harness the potential and enhance the value of this gateway into Tshwane.



Figure 3-14: View of the station Station and Station Square [Source: Author]