

Chapter 3

U R B A N C O N D I T I O N



INVESTIGATION / EXPLORATION / PROBING THE MALWARE



3.1 INTRODUCTION

Chapter 3 is an investigation of the urban condition of the north-western quadrant of Pretoria CBD, in order to establish the dissertation's broader urban-responsive intentions. It starts out with an overview of the site's history in relation to the rest of the city, thereafter follows the urban problem statement which is summed up in two general themes, and existing frameworks are considered and critiqued by an investigation of relevant theoretical research and case-studies. Finally the chapter concludes with the proposed urban framework in the north-western quadrant for this dissertation. The subject matter discussed in this chapter not only aims to inform the urban framework, but also the precinct plan and the eventual architectural product.

The outline of the chapter is as follows:

3.2 HISTORY OF PRETORIA IN RELATION TO THE N-W-Q

3.3 PROBLEM STATEMENT PART 1:

STAGNANT N-W-Q:

- PRESENT URBAN CONDITION
- EXISTING FRAMEWORKS
- LEARNING FROM THE PAST

3.4 PROBLEM STATEMENT PART 2:

LIMITED SPACE FOR PUBLIC CITY LIFE

- BLOCK STUDIES

3.5 PROPOSED URBAN FRAMEWORK:

'AN ARTERY OF ACTIVITY'

3.2 HISTORY OF PRETORIA IN RELATION TO GPW

It was something about the defining setting inbetween two natural ridges and two waterbodies that attracted the early boer settlers. Around 1840 J. G. S. Bronkhorst settled down alongside a stream in an area known as Fountains Valley (Allen, 1971: 8). In 1854, one of the Voortrekker leaders, Marthinus Wessel Pretorius, bought the farm from Bronkhorst and within no time the growing community petitioned for a 'kerkplaats' (Allen, 1971: 8), where they could congregate for church services and other collective activities such as weddings and baptisms. In 1855 the town of Pretoria was established and named after Martinus Pretorius's father, Andries Pretorius (Allen, 1971: 8) and the establishment of the town can be viewed as that which signified the end of the boers' settlement movements of the 'Grote Trek'. Figure 3.1 illustrates the early development of Pretoria contained within these natural boundary conditions, with the two mountain ranges delineating the northern and southern edges, and the Steenhoven Spruit and Apies River the west and eastern edges.

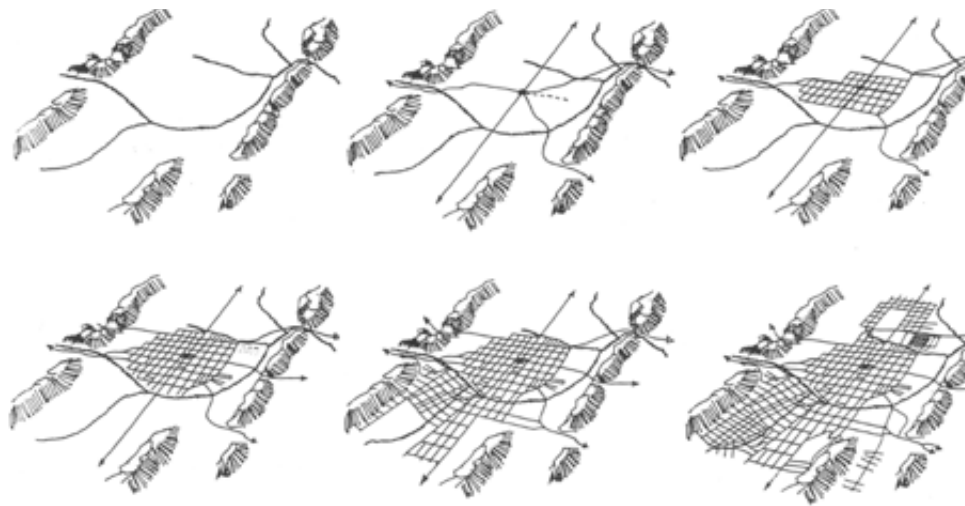


Figure 3.1: Pretoria's development in between natural ridges and water-bodies (Jordaan, 1989:27)

In 1887 Dutch-born Sytze Wopkes Wierda (Fig 3.2) arrived in South Africa and was appointed to the two posts of Chief Engineer and Architect to the Zuid Afrikaansche Republiek; (Bakker, Clarke and Fisher, 2014: 42) thereafter, in 1895 he became Chief of the Department Publieke Werken (Bakker, Clarke and Fisher, 2014: 73). Some of his notable work includes the *Raadzaal* (1889-92) (Fig 3.3) and the Palace of Justice (1896-1900) (Fig 3.4) on Church Square, as well as the *Staatsartillerie* (late 1890s) (Fig 3.5) (Bakker, Clarke and Fisher, 2014: 43). Towards the end of the 19th century it became necessary for the government to have its own Printing Works, where, amongst others, confidential government documents and maps could be produced. In 1895 Wierda was commissioned with this project and work on the Government Printing Works (Fig 3.6) ensued in a variant of the Dutch Renaissance Revival style (Clarke and de Villiers, 2015: 79). The Printing Works gradually expanded into a whole complex over the block between 1927 and 1955.



Figure 3.2: Sytze Wopkes Wierda

other prominent
buildings by
Sytze Wierda



Figure 3.3: Raadzaal (1888 - 1892)



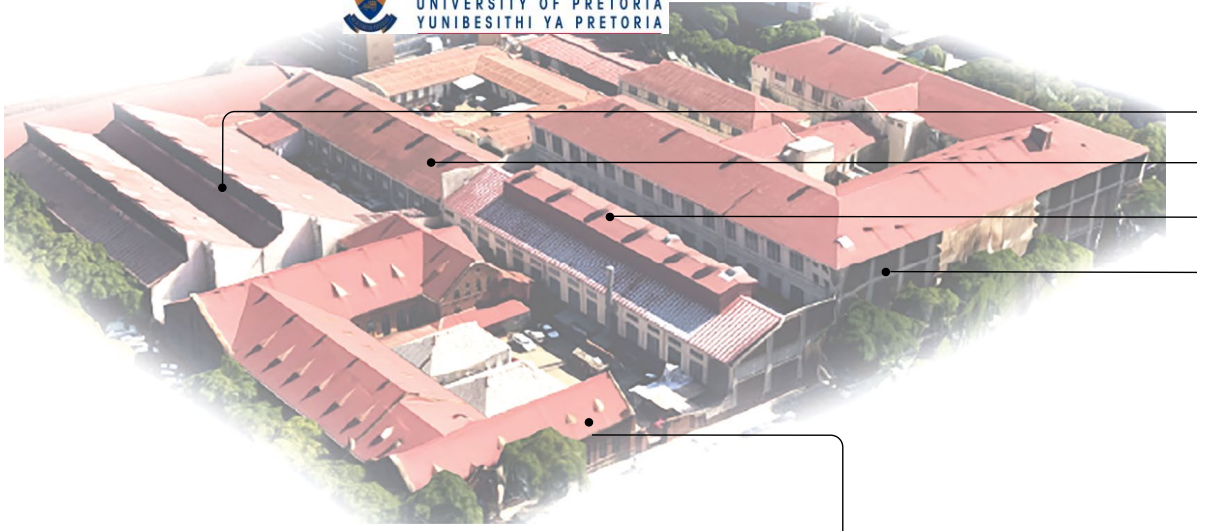
Figure 3.4: Palace of Justice (1896 - 1900)



Figure 3.5: Staatsartillerie (1898)



Figure 3.6 Nieuwe Staatsdrukkerij (1896), (Swart, 2014)



s
i
t
e

NIEUWE STAATSDRUKKERIJ
BY SYTZE WIERDA

1896

c
i
t
y

1855

Pretoria founded by
Marthinus Pretorius



1883

Paul Kruger
President of RSA



1887

Sytze Wopkes Wierda
commissioned to
South Africa



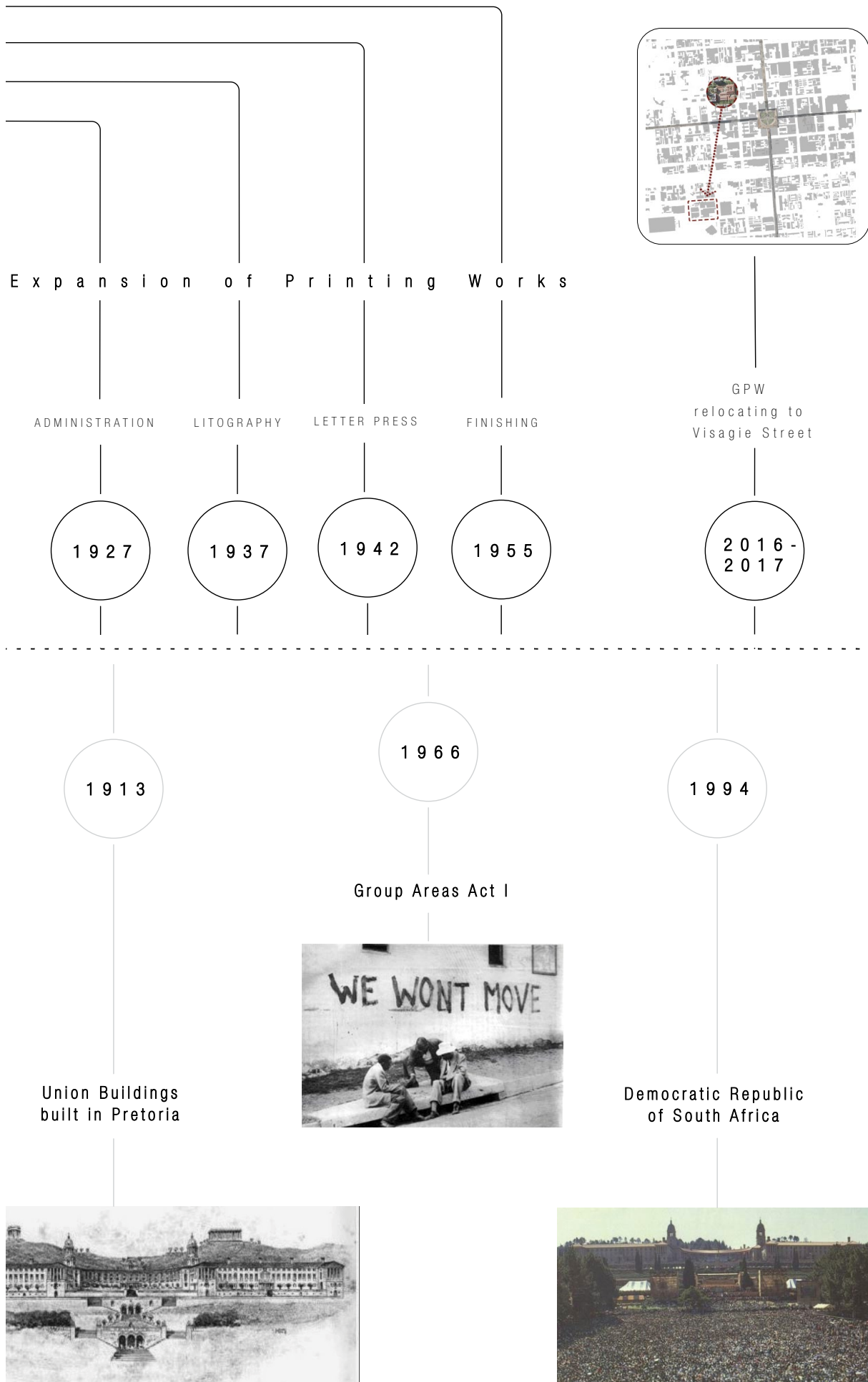
1897

Palace of Justice
cornerstone laid





Figure 3.7: Historical timeline of site in relation to Pretoria (Author)



3.3 PROBLEM STATEMENT[S]:

The urban problem can be summarised in two general assertions and will be discussed alternately. Firstly it is the current stagnant condition of the north-western quadrant as a whole (discussed in 3.3.1), and secondly it is the current divorced condition of city blocks to its surroundings, which will be discussed later in the chapter (3.3.2).

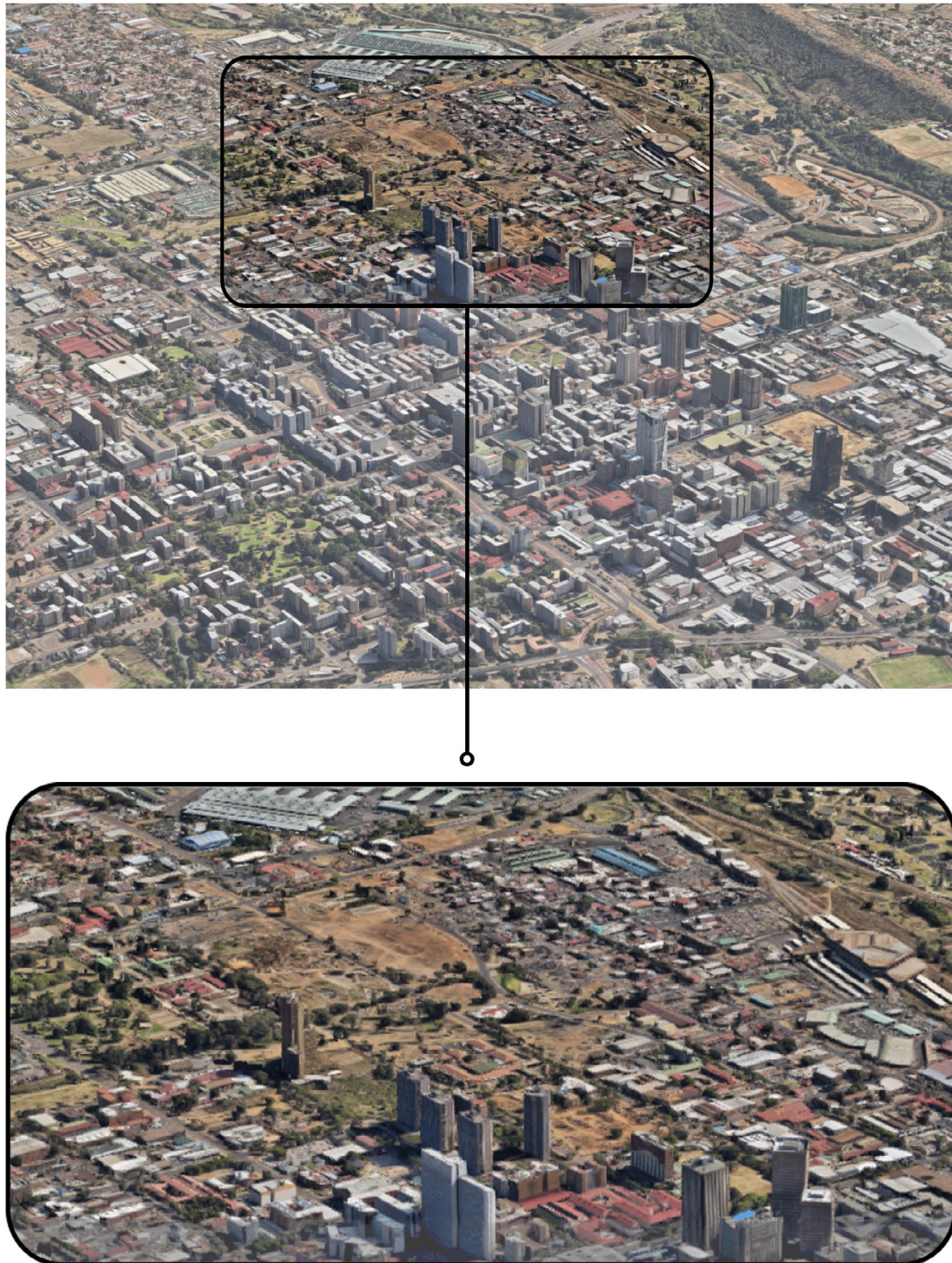


Figure 3.8: North-western quadrant as "Pretoria se 'Brak'" - Naude (Author, 2016)

3.3.1 STAGNANT N - W - Q :

As evident in Figure 3.8, the north-western quadrant of Pretoria has clearly undergone stagnation, when it is related to the rest of the CBD. This is due to a number of socio-political planning policies that transpired during the second half of the twentieth century. Mauritz Naude (1991: 106) describes the area as “Pretoria se eie ‘braak’ of ‘brak’”, translated as something which is ‘fallow’ or ‘dormant’. He states (1991: 106) that the area is a peculiar stretch of undeveloped “no-man’s land” and his connotations to this area are activities of ‘unload, throw-away, store, bury, tailings of goods, vehicles and low-class people’ (1991: 107).

Van Biljon uses the term “smeltkroes” (1991: 109) (translated as ‘crucible’ or ‘melting pot’) to describe this area. He identifies three main incidents that further magnified the area’s “aspoestertjie”-image, firstly the Group Areas Act in 1966 (see timeline in Figure 3.7). Figure 3.9 is a 1902 map of the demarcated racially segregated areas in the historic area of Marabastad at the periphery of the north-western quadrant.

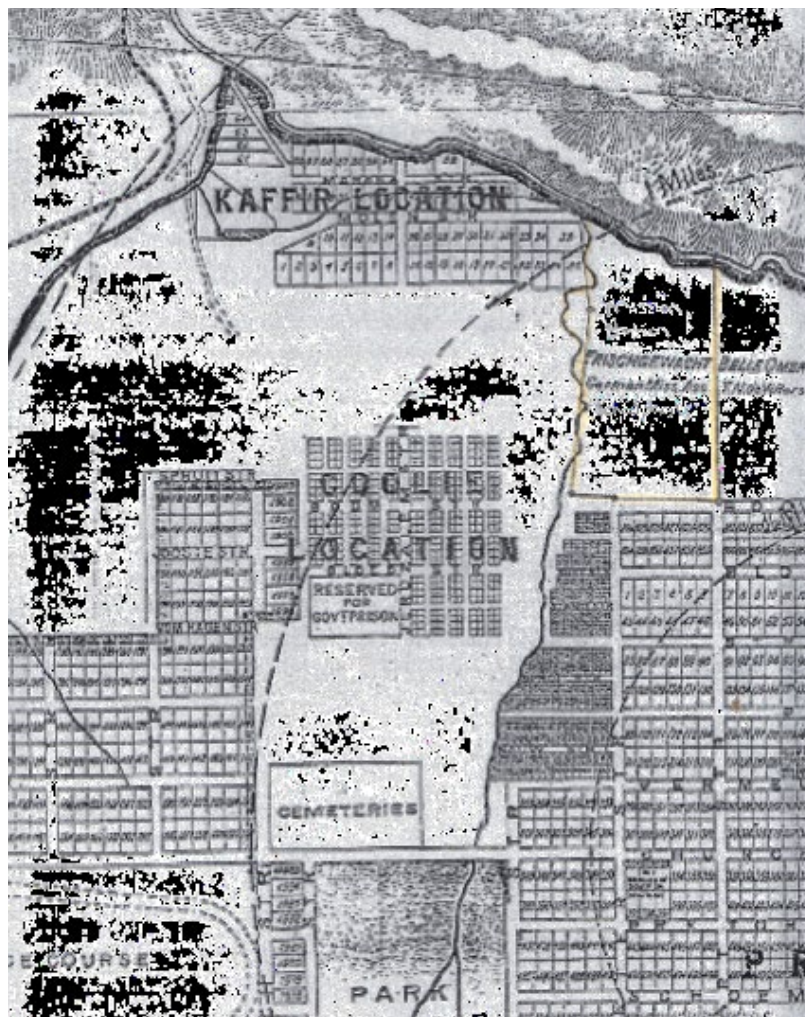


Figure 3.9: 1902 map of the demarcated racially segregated areas in the historic area of Marabastad

From as early as the 1940s the white government grew uneasy with the close proximity of 'non-whites' to the city-centre and the city council started enforcing actions to clean up the 'slums' (1991: 109). Clarke and de Villiers (2015: 67) also note that "due to the historic forced removals undertaken under Apartheid planning policies, the north-western quadrant of the city centre has become a place of desolation". Finally, in 1966 the government implemented the Group Areas Act which constituted the forced removal of non-white races to Eersterust, Atteridgeville and Laudium (Cronje, 2013).

The second incident Van Biljon mentions is the vast freeway development proposal in and around the Pretoria CBD (as illustrated in Figure 3.10). It is clear that this scheme (perhaps reminiscent of Robert Moses's urban planning interventions in New York City during the first half of the 20th century) intended to completely obliterate the fine-grained neighbourhood of Marabastad. Jordaan (1989: 28) describes this scheme as monofunctional roads that shred the existing street layout and city order.

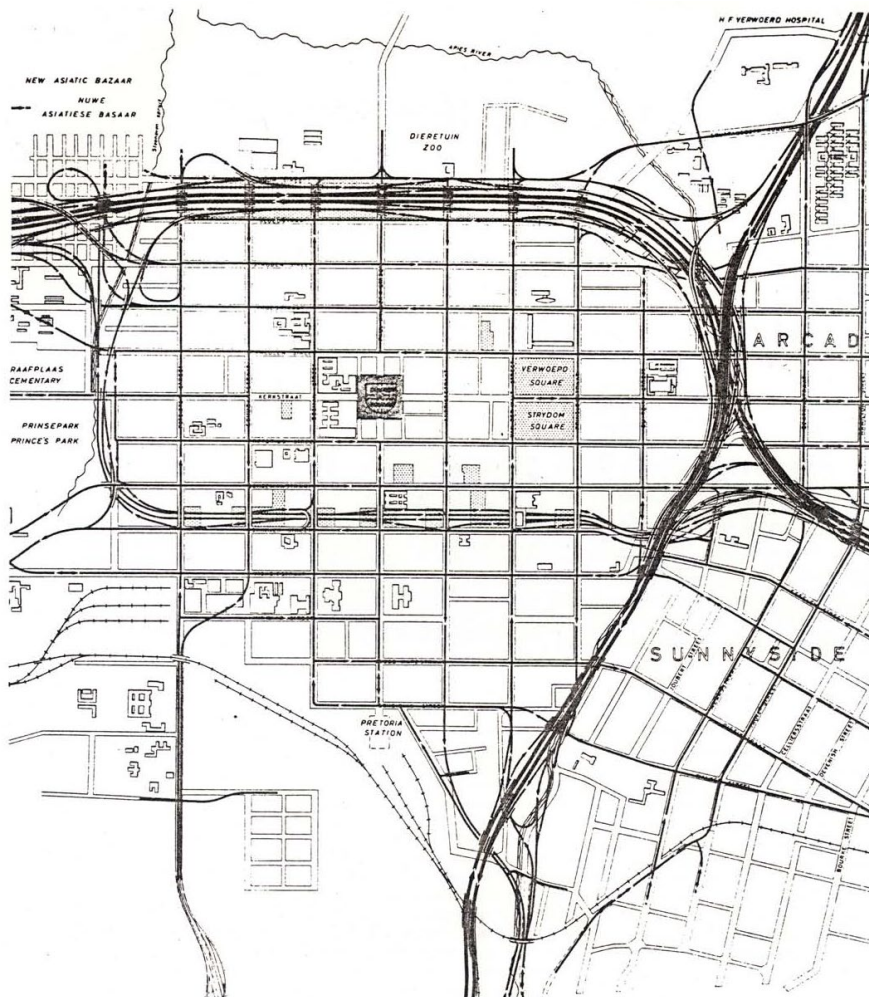


Figure 3.10: Freeway proposal for Pretoria (Jordaan, 1989)

The third incident that Van Biljon mentions is the 24-block development freeze (1991: 109) that occurred in the Goedehoop redevelopment scheme (Fig 3.11, also see Figure 3.12 - an impression of the freeway scheme and Goedehoop towers together, done by Jacques Mouton, 2014). With the intention of increased densities for the innercity, this scheme constituted the development of modernist-inspired residential towers for this area; only the four blocks at Schubart Park and the one at Kruger Park (Fig 3.8) were eventually realised and since 1969 no further development occurred in this regard (Van Biljon, 1991: 109).

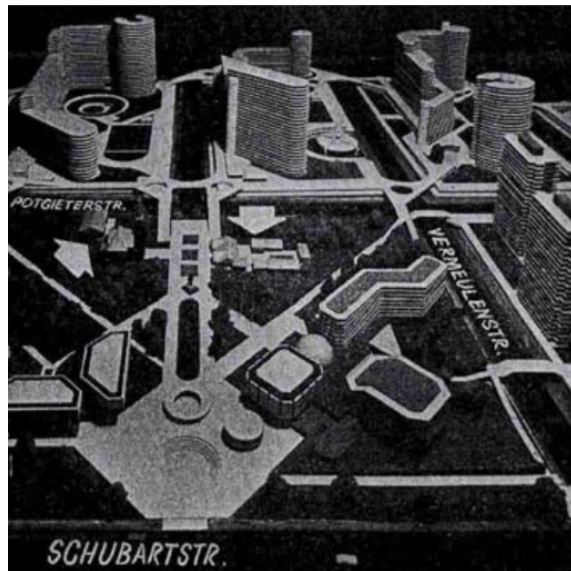


Figure 3.11: Goedehoop redevelopment scheme, (Swart, 2010)

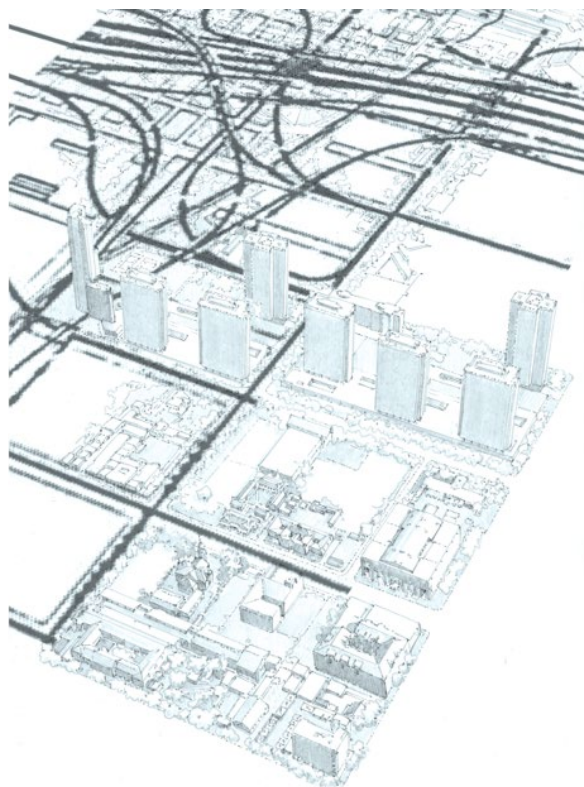


Figure 3.12: An impression of the 1967 urban scheme (freeways and Goedehoop residential blocks) for the north-west quadrant of Pretoria done by Mouton, (2014: 25) who notes that the scheme, "with its modernist inspired residential blocks dotting the urban grid, the spaghetti weave of thoroughfares obliterates Marabastad."

Since the nineties, according to du Toit, the housing complex at Schubart Park suffered degradation, and in 2011, over 3000 people were forcibly removed (Figure 3.13) from their homes due to the buildings being declared unfit for occupancy (Bilchitz, 2011). Since the evictions, the giant concrete structures have towered silently over the city with the occasional delinquent trespasser or photography student as visitors (Figures 3.14). These now dormant complexes have had a very stagnant effect on their environment since the evictions.

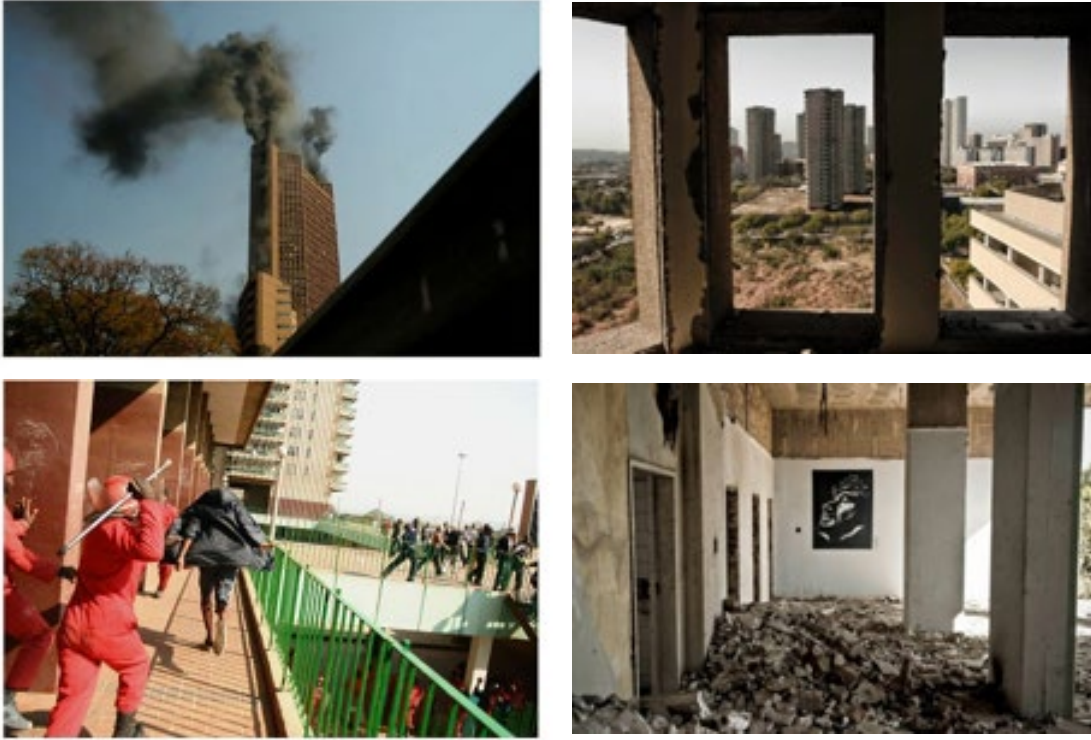


Figure 3.13 & 3.14: 2008 Kruger Park fire during attempted evictions & 2011 Schubart Park evictions

3.3.2 PRESENT URBAN CONDITION

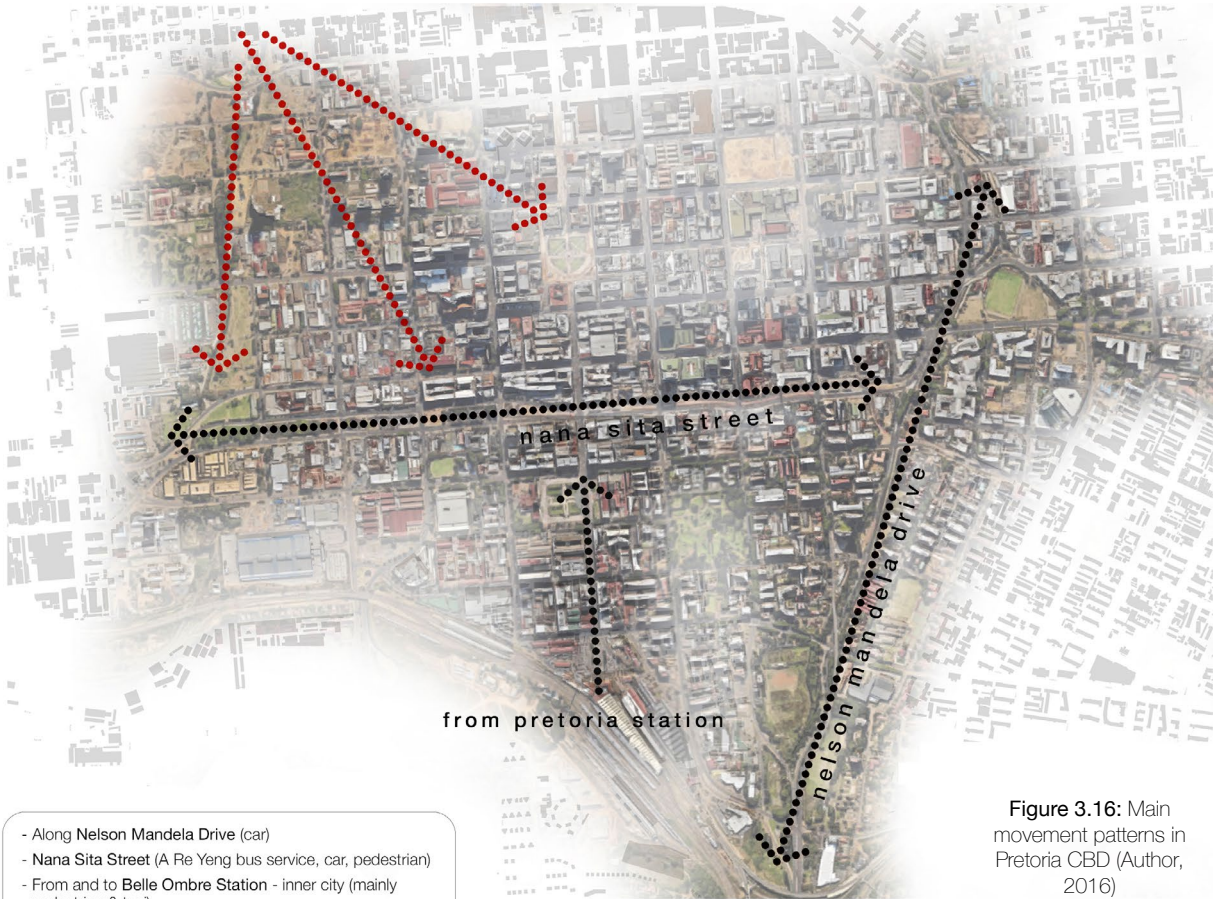
In section 3.2 it is established what occurrences led to the general stagnant urban condition of the north-western quadrant. As a further result of this, Figure 3.15 illustrates the socio-economic growth and/or decline in the Pretoria CBD over the past two decades, which indicates that there has been no recent development to rectify this situation. When one considers the main movement patterns in the city (Figure 3.16), this mutated stretch of land is home to one of the strongest pedestrian movement lines, but presents nothing beyond car-dominated roads and fairly narrow sidewalks (which are also dominated by parked cars) to accommodate this.



Figure 3.15: Socio-economic growth and/or decline in Pretoria CBD over the past two decades.

Furthermore, it can be said that Church Square is the heart of the Pretoria CBD: it is imbued with a lot of heritage value being the original center from which the city expanded. The built fabric surrounding such an important civic square should reinforce it as such and therefore add value to further centralize it. Currently the north-western quadrant does not fulfil this role and there have been numerous urban frameworks that attempt (amongst other things) to rectify this situation and create a stronger connection between this area and the rest of the CBD - a few of which will now be discussed. Afterwards, a critique (informed by relevant case studies and urban theorists) of them follows which will eventually inform the eventual urban framework.

from belle ombre station



from pretoria station

- Along Nelson Mandela Drive (car)
- Nana Sita Street (A Re Yeng bus service, car, pedestrian)
- From and to Belle Ombre Station - inner city (mainly pedestrian & taxi)
- From Pretoria Station

Figure 3.16: Main movement patterns in Pretoria CBD (Author, 2016)

The Department of Public Works has implemented an inner-city regeneration programme as of 2009, namely Re Kgabisa Tshwane, with a specific focus on the western area of the Pretoria CBD (Department of Public Works. 2009), to promote growth and development in this stagnant stretch of land (illustrated in Figures 3.17 - 3.18 A-C).

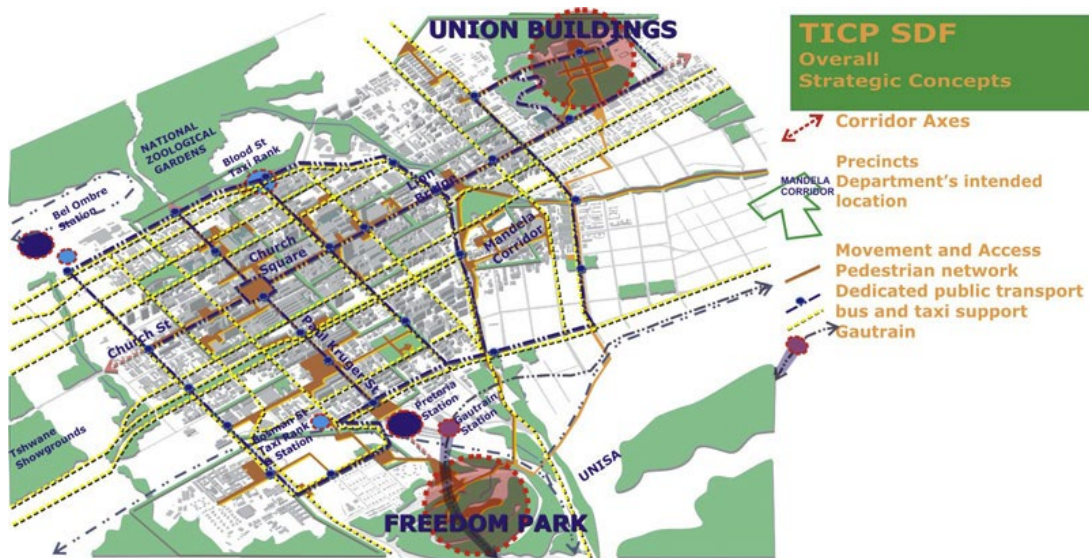


Figure 3.17: Re Kgabisa Tshwane inner-city regeneration programme: Public transportation network (DPW, 2009)

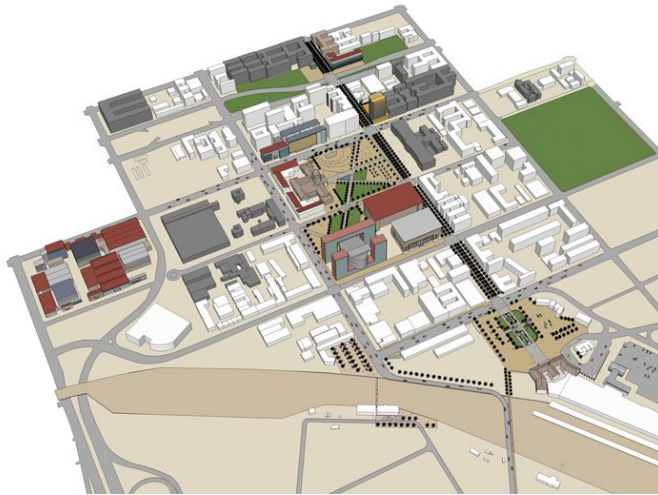


Figure 3.18A: Re Kgabisa Tshwane inner-city regeneration programme: Museum Precinct. (DPW, 2009)



Figure 3.18B: Re Kgabisa Tshwane inner-city regeneration programme: Forecourt to the High Courts (DPW, 2009)



Figure 3.18C: Re Kgabisa Tshwane inner-city regeneration programme: Bosman Street Square (DPW, 2009)

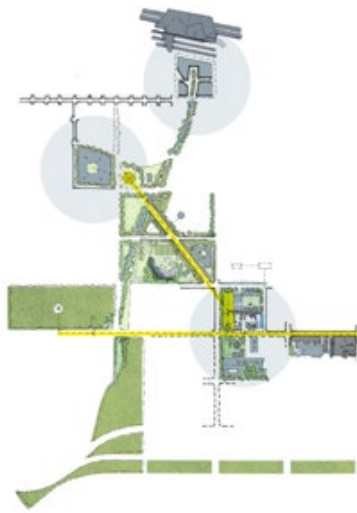
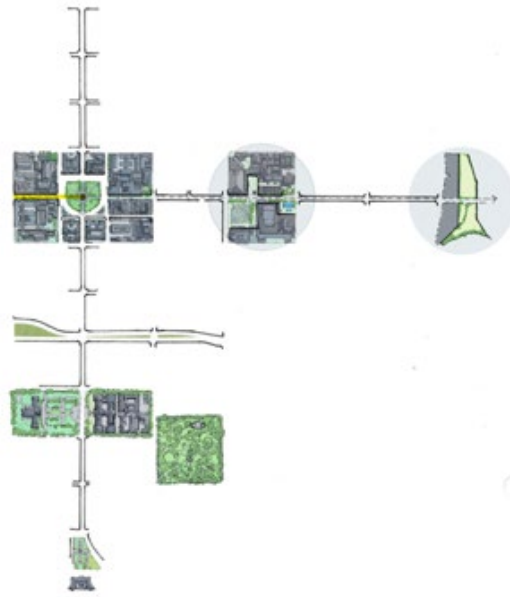


Figure 3.19A: Spatial core frame to connect Marabastad to city centre (Mouton, 2014: 28)



Figures 3.19 (A and B) illustrate an urban framework done by Jacques Mouton in 2014 that attempts to create a spatial core between the cultural node of the Kruger Museum and Marabastad.

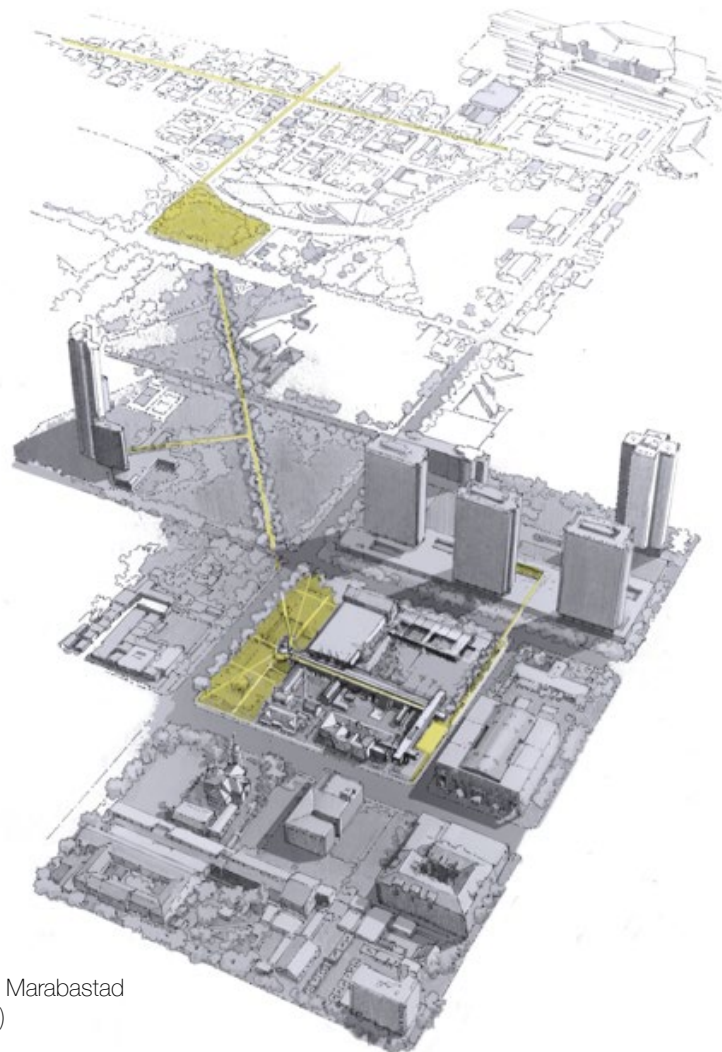


Figure 2.19B: Spatial core frame to connect Marabastad to city centre (Mouton, 2014: 31)

3.3.3 LEARNING FROM THE PAST:

3.3.3.1 HAUSSMANN'S METAMORPHOSIS OF PARIS

Around the same time that Pretoria became a small town, the radical Haussmannian transformation of Paris occurred. It is a relevant case study as it comprised a complete city renovation in redeveloping the existing urban fabric, as in the case of the Pretoria CBD. Considering the general intention of cleaning up and modernisation, the changes (Figure 3.20) that Georges-Eugène Haussmann brought about on the French capital can be viewed as fairly successful; however, it was not without criticism. Philippe Panerai et al. (2004: 8) writes that his implementation of boulevards and avenues were 'devised from a culture that was anchored in the visual', that 'only certain agreed values were made readable', and that they 'functioned like masks, hiding differences in social status, in districts, in activities.'

"The haussmannien percées are of a rigorous, almost monotonous, formal conformity: they overshadow the identity of the districts (the centre, the working-class east, the residential west) to the benefit of the global signifier of Paris, the capital city." (Panerai et al, 2004: 8)

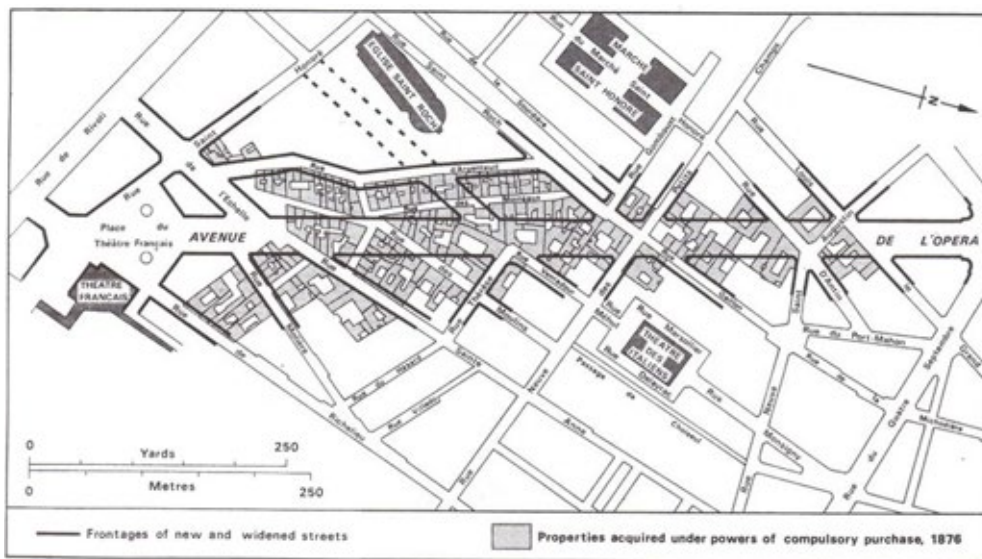


Figure 3.20: Superimposition of the Avenue de l'Opéra before and after the Haussmannian transformations (Lambert, 2014)

In light of this statement, the renovation is an example of man's continuous attempts to instil a sense of formal rationality onto an informal, natural world, resulting in the complete negation of existing daily life in the city and basically masking reality.

In a post-apartheid era, Mouton's proposal of a diagonal thoroughfare makes sense to connect the previously racially-demarcated area (See Figure 3.19) of Marabastad to the rest of the city-core. However, it is still reminiscent of the rectilinear *Haussmanian* boulevard which, according to Panerai et al. (2004: 8) is of an "almost monotonous, formal conformity" that does not take into consideration the informal activity and natural, organic order of everyday life that Jacobs and Koolhaas speak about (see section 3.4.2).

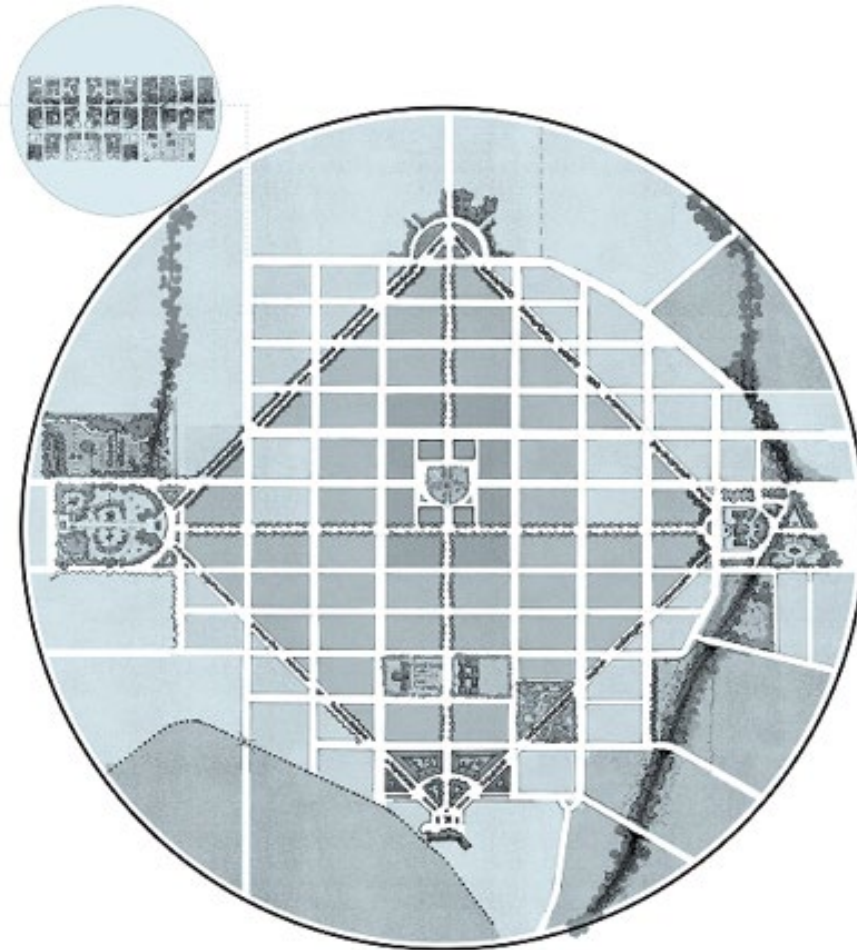


Figure 3.21: Moerdijk's proposal for the *Beautification of Pretoria* proposal (cc 1930) attempts to preserve the inner core of the city. "The diagonal avenues impose a diamond grid over the rectilinear city and, as the case with Haussmann's urban upgrade for Paris, a so-called militarised strategy is induced in an attempt to fortify the core (note the enhanced exclusion of Marabstad with such a gesture)." (Mouton, 2014: 24)

3 . 3 . 3 . 2 J A N E J A C O B S C R I T I Q U E : ' S O R T I N G O U T '

In the course of her examination of all the chronicled city-planning movements (such as the Decentrists' Garden City ideas, Le Corbusier's Radiant City as well as the City Beautiful concepts towards the end of the 19th century), Jacobs (1992: 25) pinpoints the overall issues with inherited city-planning as being "the idea of sorting out certain cultural or public functions and decontaminating their relationship with the workaday city". In other words, all of our cities have been planned and developed with the distinct mutation that is the principle of "sorting out" - sorting out all that which is nice and pretty and ignoring that which is ugly but necessary. The City Beautiful concept was especially a predisposition with the sorting out of all the pretty, all of the ideal, planning the city according to how it looks, not how it works. Henceforth arises a certain degree of partitioned spatial arrangement - a divorce between the ideal and the common, or perhaps rather, the formal

and the informal. In relating these statements to Pretoria, especially in its current urban condition as a post-apartheid city, it is clear that the informal activity of everyday life has completely inundated the formal, idealistic intentions with which the city was built (Figure 3.22). Moerdyk's proposal for the Beautification of Pretoria (Fig 3.21) is typical of the previous political paradigm and a prime example of 'sorting out'.



Figure 3.22: Present day (informal) conditions overlaid onto formally planned city

3.3.3.3 "SORTING OUT" _ COUNTER - STRATEGY

Alternatively, Jacobs (1992:14) advocates a "need of cities for a most intricate and close-grained diversity of uses that give each other constant and mutual support, both economically and socially". The architect Rem Koolhaas (as cited by Packer, 2006) has the same appreciation of this notion in his perspective of the city of Lagos as being "a protean organism that creatively defies constrictive Western ideas of urban order...that triggers off all sorts of unpredictable improvised conditions, so that there is a kind of mutual dependency...With its massive traffic jams creating instant markets on roads and highways, Lagos is not a kind of backward situation...but, rather, an announcement of the future". Albeit controversial, Koolhaas's commentary (Quirck, 2012) accepts exploding population growth, urbanisation and therewith poverty as being a reality, and the inevitable future outcome of all cities, and looks for opportunity within this chaos, stating that "modernity could actually be a state of spontaneous ingenuities within disorder, rather than a trajectory towards order".

3.3.3.4 INTERROGATING SPATIAL STRUCTURE: THE GRID

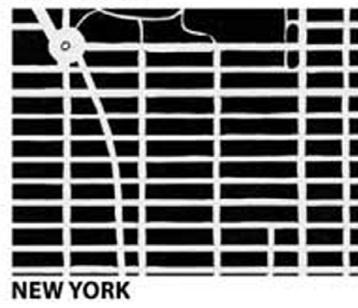
It is generally accepted that Pretoria's grid-layout is based on the same planning principles of the town of Graaff-Reinet, which also comprises a rectangular grid set within the natural ridged landscape, with the church building as an important node in the city (Jordaan, 1989: 28).

Figure 3.23 illustrates different European urban design models presenting a much more organic composition such as Rome and Barcelona, in relation to the formal grid-layout of Manhattan and Pretoria.

In another instalment of opposition against strict formality in city planning, Koolhaas (1987:20) (specifically referring to Manhattan) renders the grid as the "subjugation, if not obliteration, of nature and its true ambition", stating that in its "indifference to topography, to what exists, it claims the superiority of mental construction over reality". The rationalisation behind the employment of the grid in New York City at the beginning of the 19th century is understood - to give a sense of legibility and comprehension to the city-dweller - but isn't this rigid definition of blocks within the grid-structure exactly what is constraining this fine-grained heterogeneity of spontaneous formal and informal functions?

3.3.3.5 INTERROGATING SPATIAL FORM: SCALE

Apart from the two-dimensionality of the city block, when examining the issue of scale and imageability in urban environments, the difference between street-level and bird's-eye views should be considered; for example, when thinking of a city like London or New York, in addition to the busy streets, one also thinks of the iconic landmarks and built skyline (which appeals only to the ocular function); when imagining a city like Tokyo on the other hand, only the intimate streetscapes come to mind (Ikeda, 2008). Ian Borden (2001 cited in da Costa & van Rensburg, 2008: 45) writes that "the human body needs to be recovered in spatial production, to become both subject and object, where architecture and urban design is based on bodily experiences". This advocates the notion that city-planning should rather be focused on humanist-scaled 'iconic places' for people to dwell in and inhabit, than only 'iconic objects' for people to merely look at.



V E R S U S



Figure 3.23: City-grain models - Rational grid of New York & Pretoria versus Organic composition of European cities

3.4 PROBLEM STATEMENT:

LIMITED SPACE FOR PUBLIC CITY LIFE

A comparative block study was done in which the sizes of typical city blocks in Pretoria are compared with those in other cities like Barcelona and New York. This indicates quite a difference in scale; as illustrated in Figure 3.24, Pretoria's city blocks are much bigger than the others. The spatial implications of this is that it limits the amount of space available for public city life. In the current model, the only space left for the pedestrian is that which is clearly defined as such, like Church Square, or the 5-meter side-walk around these completely secluded city-blocks, (Figure 3.25) which, in most cases, are dominated by parked cars.

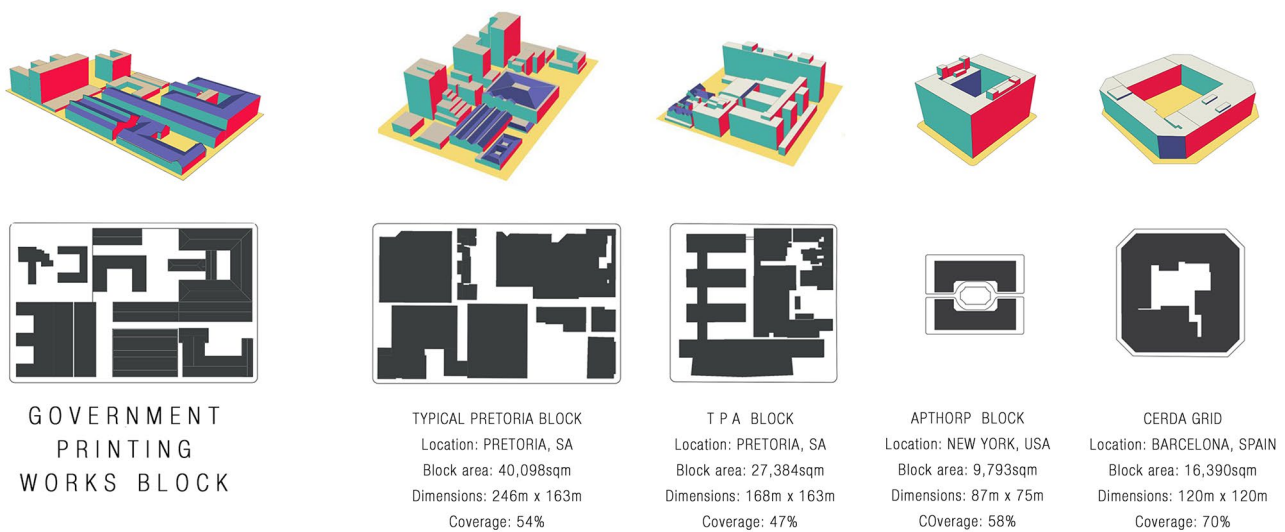


Figure 3.24: Comparative block study (Dodds, 2015, edited by author, 2016)

The alternative model is one that programmes public space into the centre of city blocks (Figure 3.25) and where the edges of those blocks are characterised by varying degrees of accessibility. This is to some extent in line with Haussmann's ideas about the 'strategic rupture' of city blocks, (except that his focus was on the boulevard, the rupture of city blocks was a by-product) where previously interiorised 'spaces become 'theatres of collective appropriation' into which individual modes of expression can be imprinted' (Wiggin, 2010: 42).

ISOLATED CITY BLOCKS

VS

RUPTURED CITY BLOCKS

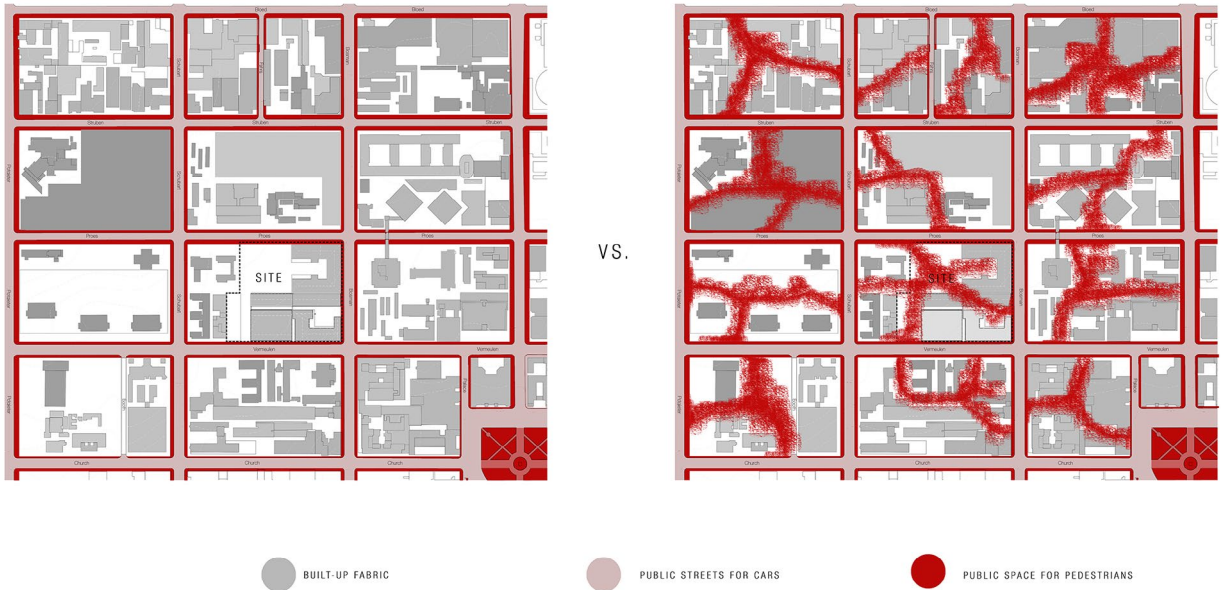


Figure 3.25: Juxtaposition of existing versus alternative city block models - (Only schematic diagram, not representational of realistic context) (Author, 2016)

Previous studies have been done whereby the city block typology has been 'ruptured' and opened up in various ways, as illustrated in Wiggin's (2009) urban block investigation (Figure 3.26). In Figure 3.25 the current city block model is juxtaposed to one in which each block is ruptured, which differs from Wiggin's approach in two distinct ways: firstly the idea is that each block is ruptured in a way that suits that block's specific composition, (not a one-size-fits-all-rupture strategy) and secondly, in a more organic and informal way, more suited to the activity of aimless wandering and exploration by the urban flâneur.

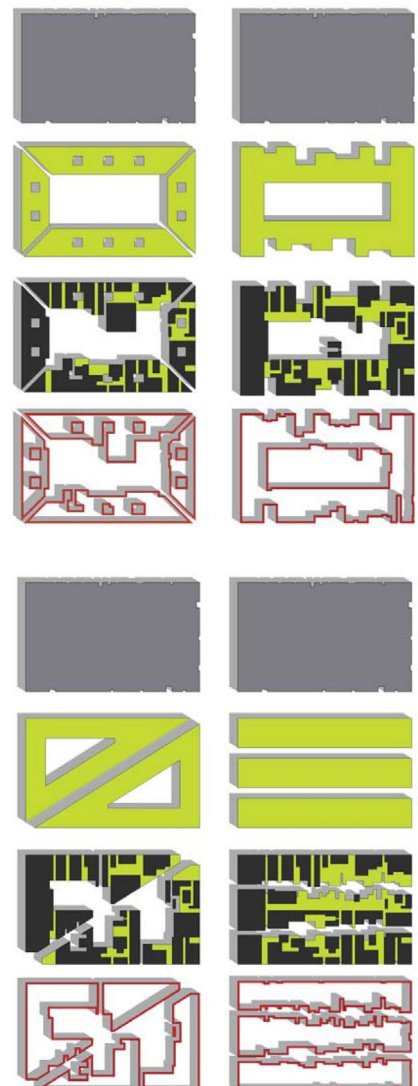
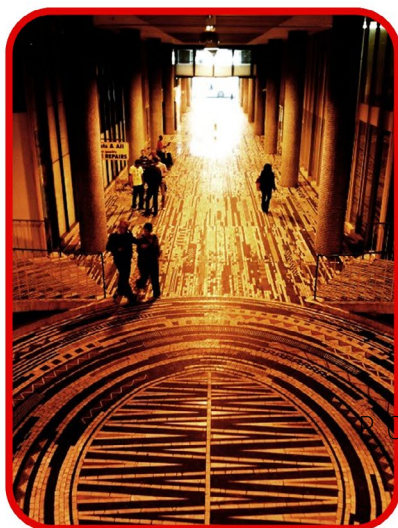
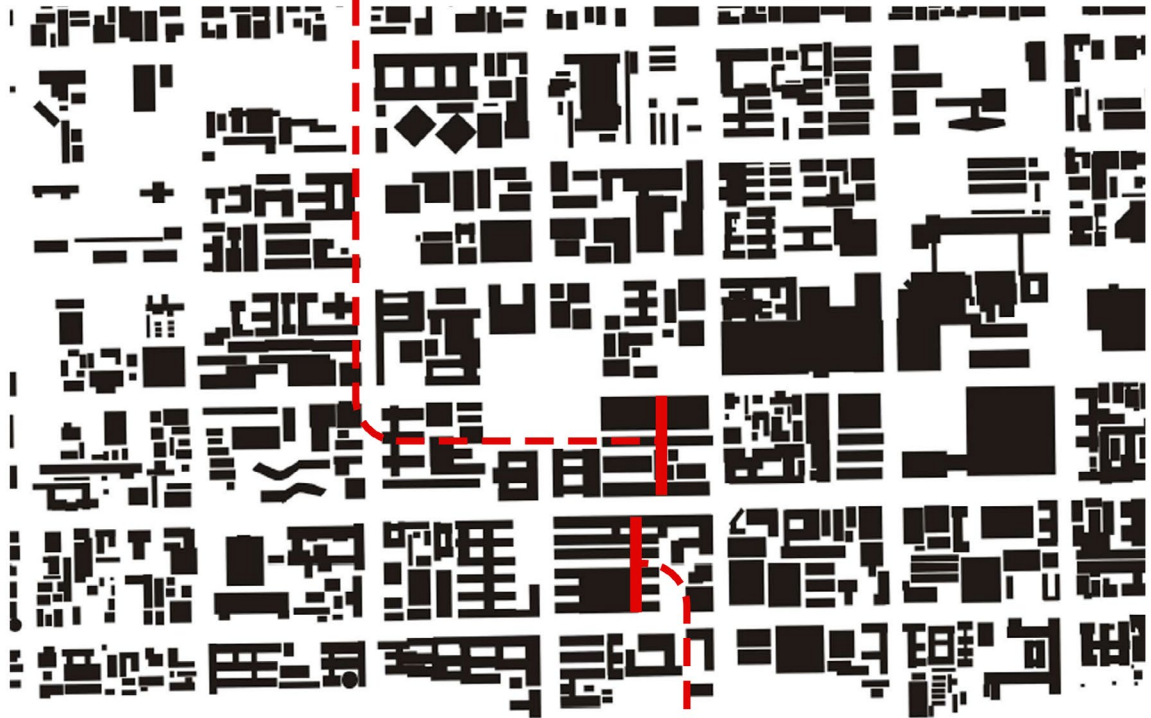


Figure 3.26: Urban block investigation (Wiggin, 2009)

Figure 3.27: Nolli map indicating the location of Koedoe Arkade and Polly's Arcade in Pretoria



KOEDOE ARCADE



POLLY'S ARCADE

A distinct feature that repeats itself in the Pretoria CBD fabric and which is a part of the city's urban heritage, is the public arcade route cutting through some of the blocks - examples include Koedoe Arcade and Norman Eaton's Polly's Arcade (see Figure 3.27). The idea of the covered walkway became popular in Paris during the 19th century, as it is an extension of public space for the act of aimlessly wandering about by the pedestrian, with the provision of protection from weather elements, especially in winter. Although Pretoria is not exposed to such a harsh climate, the arcade typology still managed to find its way through the urban fabric; which illustrates the importance of spatially celebrating the act of *flâneuring*. Being situated in a relatively comfortable and pleasant climate, the arcade route can perhaps be translated into an outdoor, open-air, meandering pedestrian route typology.

3.5 PROPOSED URBAN FRAMEWORK :

‘AN ARTERY OF ACTIVITY’

In light of the theories and case studies discussed in this chapter, the urban framework proposed for this dissertation in the north-western quadrant of Pretoria CBD (Figure 3.29) is focused on four main considerations:

- 1.) To accommodate and provide for one of the existing main directions of movement in the city (as indicated in Figure 3.16) from the northern entryway to the city, down to the city-centre (and back).
- 2.) To activate the stagnant “brak” (Naude, 1991: 106) of Pretoria (as discussed in section 3.2) with a human-centric approach, in line with the main transportation mode in this direction of commuting on foot.
- 3.) Thirdly it aims to subjugate the rationality of the rectilinear grid layout for a more natural, organic composition more suitable to the act of *flânerie* (of aimlessly wandering about, discovery, observation and spontaneous social encounters) - with the scale of the route and spatial arrangement accommodating this.
- 4.) To serve the urban dwellers of Pretoria by expanding space for public city life at large, by rupturing the rationality of the urban grid, permeating the secluded boundaries of most city blocks, and giving them access to the inherent spatial potential on the inside of city blocks.

As illustrated in Figure 3.29, the ‘artery of activity’ constitutes a public route of pedestrian movement that starts from Belle Ombre Station, down to Jazz Square, cutting through the new Thembelihle Village, south-east through the Printing Works block and into Church Square. It is an open-air, urban arcade on a larger scale that defines a route, lined by various points of attraction that include tree-lined green spaces, permanent structures that accommodate informal trade activity and other public furniture and urban markers.

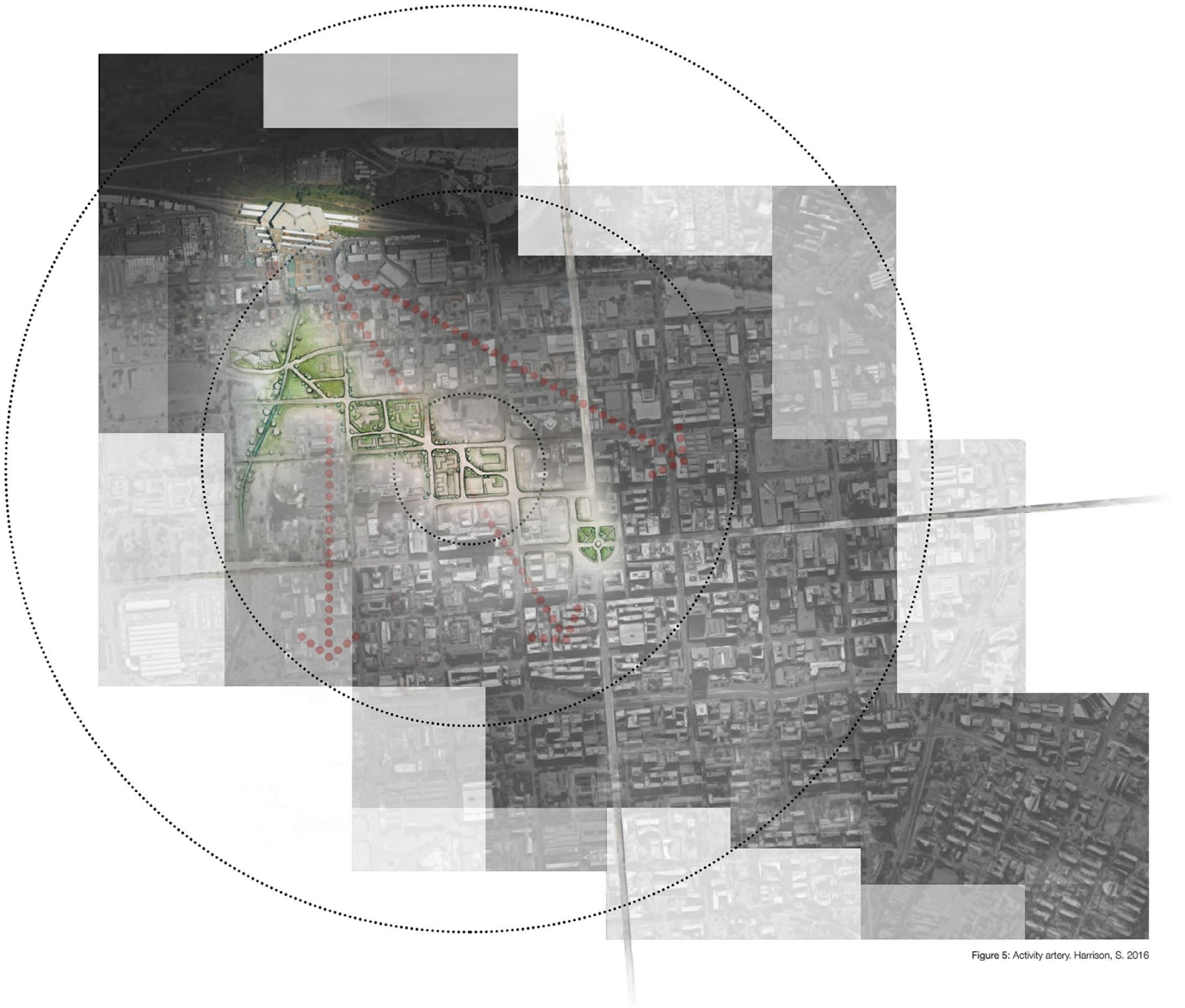


Figure 5: Activity artery. Harrison, S. 2016

North-western quadrant - Urban framework:
Activity artery from Belle Ombre to city centre

GPW Block as GATEWAY

Figure 3.29: Urban framework proposal (Author, 2016)

