RE-IMAGINING PRIMARY HEALTHCARE PROVISION IN SOUTH AFRICA

This dissertation investigates an alternative approach to primary healthcare provision in South Africa, one which considers a primary preventative take on healthcare provision as opposed to a solely curative approach and explores the potential of architecture in assisting in the healing process.

This is suggested through an intermediate scale healthcare facility situated on the Plastic View precinct in Moreleta Park, Pretoria East.

Submitted in partial fulfilment of the requirements for the degree of Masters in Architecture (Professional) in the Faculty of Engineering, The Built Environment and Information Technology at the University of Pretoria, 2016.

Course Co-ordinator:	Arthur Barker
Study Leader:	Carin Combrinck
Study Field:	Human Settlements and Urbanism
GPS Co-ordinates:	-25.826886, S 28.305679 E

Figure a. A helping hand (Author 2016).

In accordance with regulation 4[e] of the general regulations [G.57] for dissertations and theses, I declare that this dissertation which I hereby submit for the degree of Masters of Architecture [professional] at the University of Pretoria is my own work and has not previously been by me for a degree at this or any other tertiary institution. I further state that no part of my dissertation has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this dissertation is substantially my own work. Where reference is made to the works of others, the extent to which the work has been used is indicated and fully acknowledged in the text and list of references.

Michelle Whitaker
2016

With special thanks to:

Dr. Carin Combrinck and Dr. Arthur Barker for your guidance and support throughout this challenging year.

My parents, Mark, Moira and Alison, whose love and support have gotten me through the emotional ups and downs to where I am today, without you this dream would not have been possible.

TABLE OF CONTENTS

ABSTRAK

Vervolgens die Handves van Menseregte is toegang tot basiese gesondheidsorg ‘n konstitusionele reg wat elkeen in Suid-Afrika toekom (SA 1997). Huidiglik bestaan Suid-Afrika se gesondheidsdienste uit ‘n verdeelde privaat- en publiekesektor. Ongelyke toegang tot gesondheidssorg is aan die orde van die dag. Baie gemeenskappe het nie toegang tot die basiese gesondheidssorg wat hulle toekom volgens die reg nie. So ‘n gemeenskap is die fokusarea van hierdie verhandeling, Plastic View, in Moreleta Park.

Daar word tans, en is ook al in die verlede, verskeie voorstelle gemaak om die huidige model te herstruktureer. Die voorstelle kan verdeel word in twee breë benaderings – die eerste stel voor dat die staat alle gesondheidsdienste verskaf en bestuur (‘n sogenamende ‘Top-Down- benadering) terwyl die teenoorgestelde benadering voorstel dat die gemeenskap self meer betrokke raak by die lewering van gesondheidssorg in hulle onmiddelike omgewing. Albei benaderings word later in die teks in krities geanaliseer, waarna tot die slotsom gekom word dat die twee wyses mekaar kan ondersteun wanneer dit saam geimplimenteer word. Die gemeenskap se betrokkenheid by die lewering van basiese dienste sal die druk op staatsinstellings verlig. Op hierdie wyse kan beter dienste aan almal gelewer word binne die beperkte hulpbronne tot ons beskikking.

Dit is belangrik om in ag te neem dat gesondheid gedefinieer word as algehele fisiese, geestelike en sosiale welstand, eerder as slegs die afwesigheid van siekte (WHO 2003). Dus word daar in hierdie verhandeling gekyk hoe die ruimtelike omgewing bydra tot die proses van genesing by persone wat van gesondheidssentrums gebruik maak. Historiese voorbeelde, soos die ontwerp van kloosters en Florence Nightingale se pawiljoen-ontwerpe, dien as inspirasie eerder as kontemporêre gevallestudies. Die fokus van die ondersoek is die rol van argitektuur en die stedelike omgewing in die skep van ‘n gesonde omgewing wat bydra tot die holistiese gesondheid van stedelike inwoners.

ABSTRACT

The Bill of Rights states that equal access to healthcare is the constitutional right of all people living in South Africa (SA 1996). However, with the current healthcare model being made up of a divided public and private sector, gross inequalities in terms of access to healthcare have become a familiar occurrence in the way our society functions and as a result, the statement above is not a reality for many communities. One such community is Plastic View in Moreleta Park, Pretoria East, the research site for this dissertation.

In order to rectify this situation found across South Africa, a number of proposals have been put forward from both a governmental (top down) approach and a grass roots (bottom up) approach, in order to re-engineer the current primary healthcare model. These proposals are critically analysed in later text, and the conclusion that this dissertation proposes, from a programmatic point of view, is how the bottom up preventative approach to primary healthcare may be used to support the larger top down curative primary healthcare model in order to move closer towards a Health for All (Kautzky & Tollman 2009:26).

As health is defined as not only being free from disease or infirmity, but rather a state of complete physical, mental and social well-being (WHO 2003), this dissertation investigates the role that the built environment can play in spatially support the proposals being made from a top down and bottom up approach by assisting the holistic healing process of all the users of such facilities. In order to achieve this, the architectural investigation focuses on facilitating a more preventative approach to health care as opposed to a solely curative approach, and turns to the historical beginnings of healthcare facilities for informants, rather than the case studies present in our society currently. These informants include the design of monastic cloisters and Florence Nightingale's pavilion designs which were centred around the holistic well being of the user's experience.

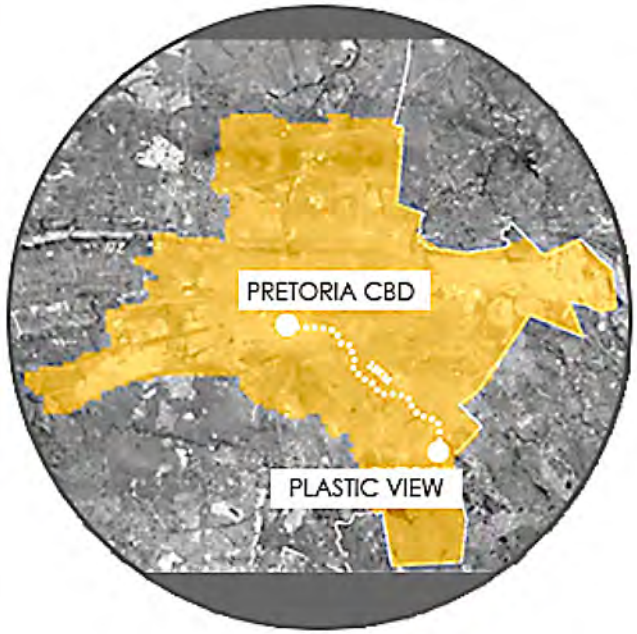
Michelle Whitaker
10025007

Figure 2. Photo Collage (Author 2016)

INTRODUCTION

1. An introduction to site
   A. Research and Mapping
   B. Theory and Framework

Figure b. Contextual photo of Plastic View (UP Arch (MProf) 2016)



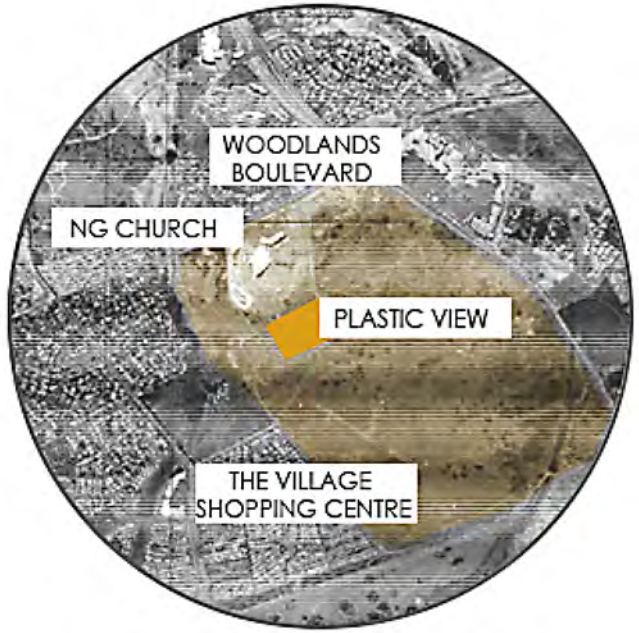
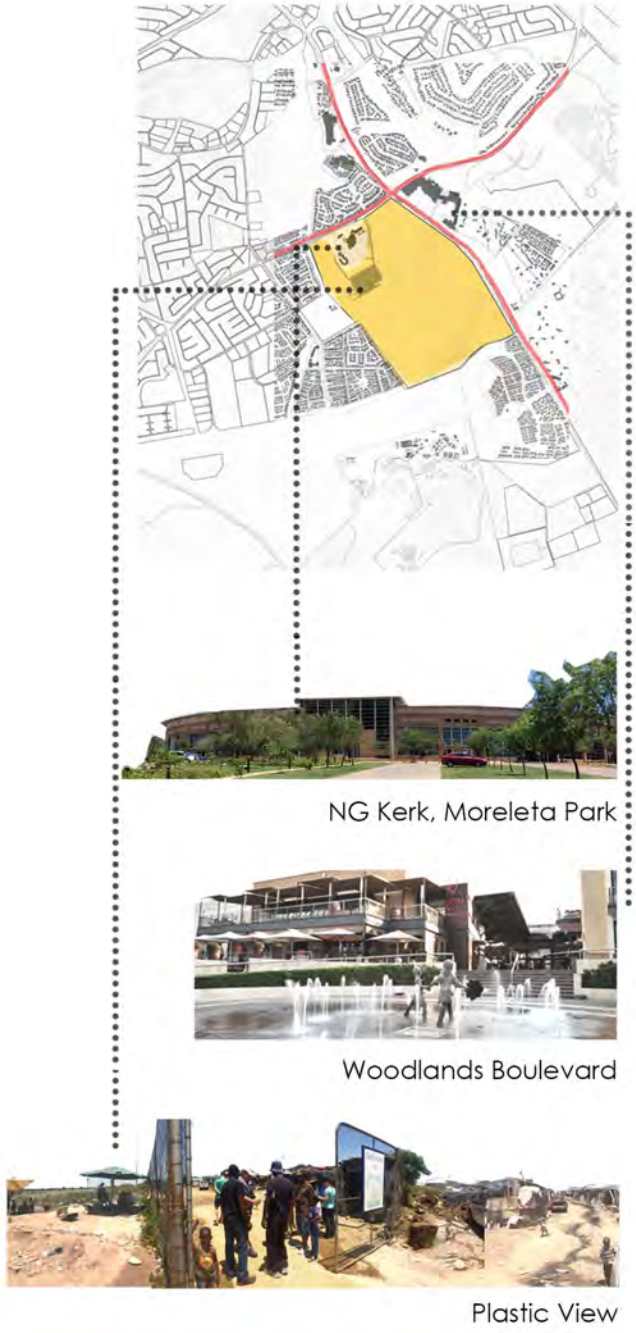


Figure 3. Site Locality Illustration (Author 2016)

1. AN INTRODUCTION TO SITE



The focus site for the research put forward in this dissertation is the informal settlement of Woodlane Village, more commonly known as Plastic View, the name initially given to the community when they first began to occupy a vacant piece of land in Moreleta Park, in Pretoria East (Dredge 2013:18).

Evidence of the origins of Plastic View can be found to date back to 2001. From this time until 2009, the settlement began to grow organically on the vacant piece of land between Woodlands Boulevard and the Moreleta Park Gemeente (Dredge 2013:2). During this time, the community experienced a number of aggressive attacks and threats which resulted in many serious injuries (Dredge 2013: 14). As is common with most informal settlements, this community was constantly at risk of eviction by local police forces and the municipality, a pressure which was heightened by the surrounding land property value market and gated estates (Dredge 2013: 14-17).

In an attempt to avoid drawing attention to themselves and reduce their risk of eviction, the community initially sought shelter in amongst the vegetation on this piece of land rather than erecting informal housing (Dredge 2013: 2, 13).

A local NPO, Tswelopele Step by Step, founded by Denise and Colin Dredge in 2003, recognised this community and the threats they were being exposed to and began to offer support and resources to the community of Plastic View (Dredge 2013:2).

Due to this support and the persistence of this settlement, the establishment of temporary informal shelters then began to take place in 2005 (Dredge 2013: 13). In 2009, after numerous violent and unlawful attacks on the community, Tswelopele made it possible to better support and protect the community by re-organising the settlement into a consolidated and contained area adjacent to the Moreleta Park Gemeente's boundary fence (Dredge 2013: 18). This is what is formally referred to today as the settlement of Woodlane Village (Dredge 2013:18). (Note: Despite this formally given name, this dissertation will still refer to the settlement as its more commonly known name, Plastic View).

Figure 4. A contextual introduction to Plastic View's locality

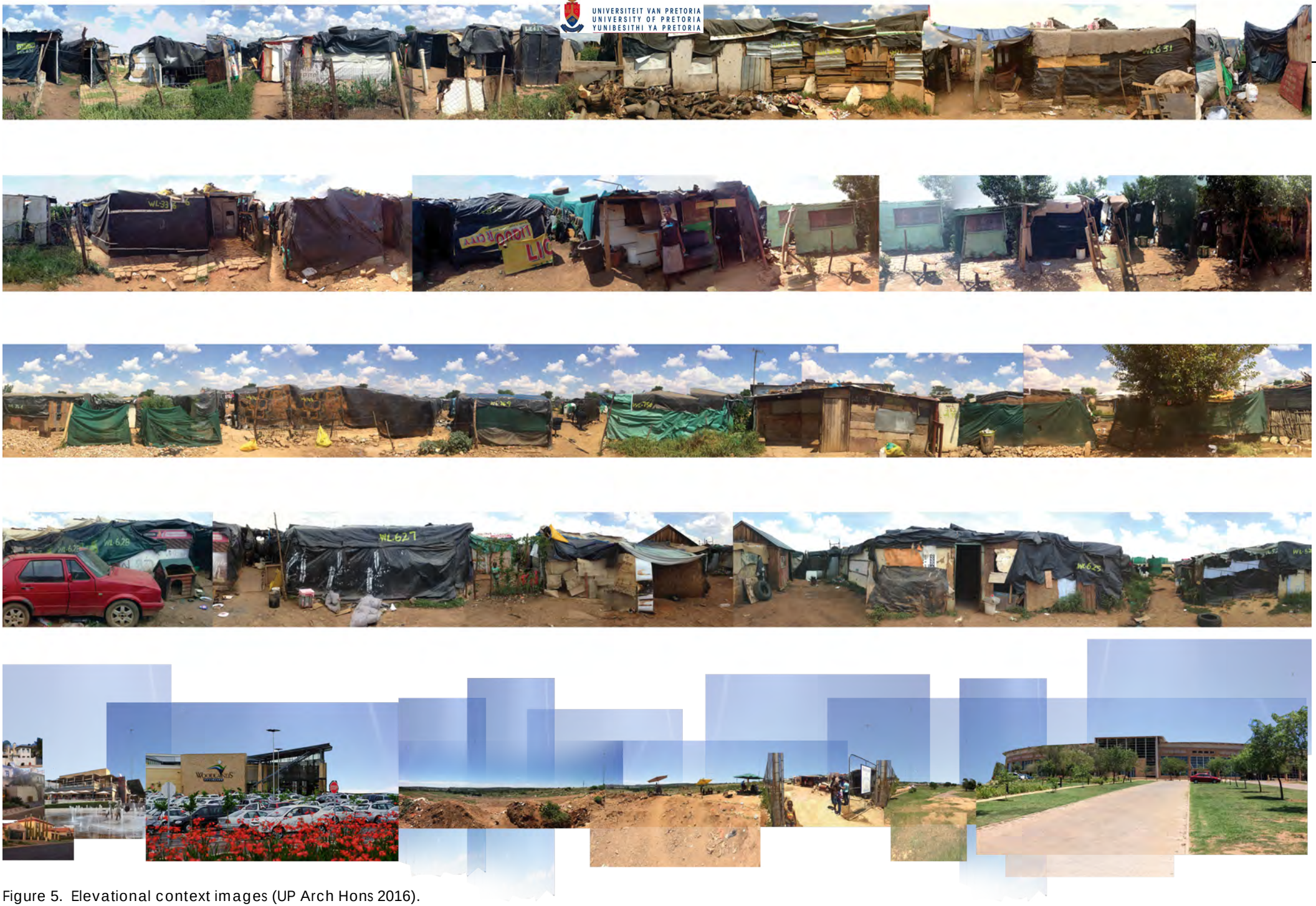


Figure 5. Elevational context images (UP Arch Hons 2016).

2008

2016

In March 2015, when the municipality threatened to sell the property on which Plastic View is found for development at a public auction, Tswelopele contacted Lawyers for Human Rights and initiated a court case against the government to stop this sale (National 2015).

Together with Lawyers for Human Rights, the residents of Plastic View won this court case and halted the sale of the land that they are currently occupying (Mudzuli 2015). Despite this progression, government has still not recognised this settlement in terms of service provision and access to amenities (Oeloefse 2014), which is a direct contradiction of the principles laid out in the Bill of Rights (Chapter Two of the Constitution of South Africa 1997: 5-20). Whilst a number of residents in the surrounding gated communities are opposed to this settlement (People opposed to Plastic view and Cemetery view facebook group, n.d.), the community of Plastic View continues to receive support and resources from Tswelopele and a number of programmes based out of the Moreleta Park Gemeente (Dredge 2013: 24). These programmes include a primary school which is funded by the Pure Hope Foundation and provides education and feeding schemes up until Grade Four on the Church grounds, as well as a skills and development training programme in order to help community members gain domestic help experience, also based on the church's grounds (UP Arch (MProf) 2016).

As a result of the above context, one can see that the community of Plastic View exists in a very controversial situation as an island amongst the larger urban fabric in which it is found, wanting to be supported by a portion of our society, whilst being wished away by another portion.

Figure 6. Development of settlement from its establishment in 2008, to its present day confinement. Author 2016.

In order to better understand the community and the contested site on which it is found, the urban research question for the UP Arch M(Prof) research group focusing on this site began with understanding the history of urban settlement patterns in South Africa and how this has informed the current settlement patterns present within our urban context today. The importance of this research, emphasised in the theories put forward by Alexander (1964), was to understand how these spatial patterns and principles may be used as viable precedents in the development of sustainable cities, where settlements such as Plastic View would be incorporated into the larger urban context.

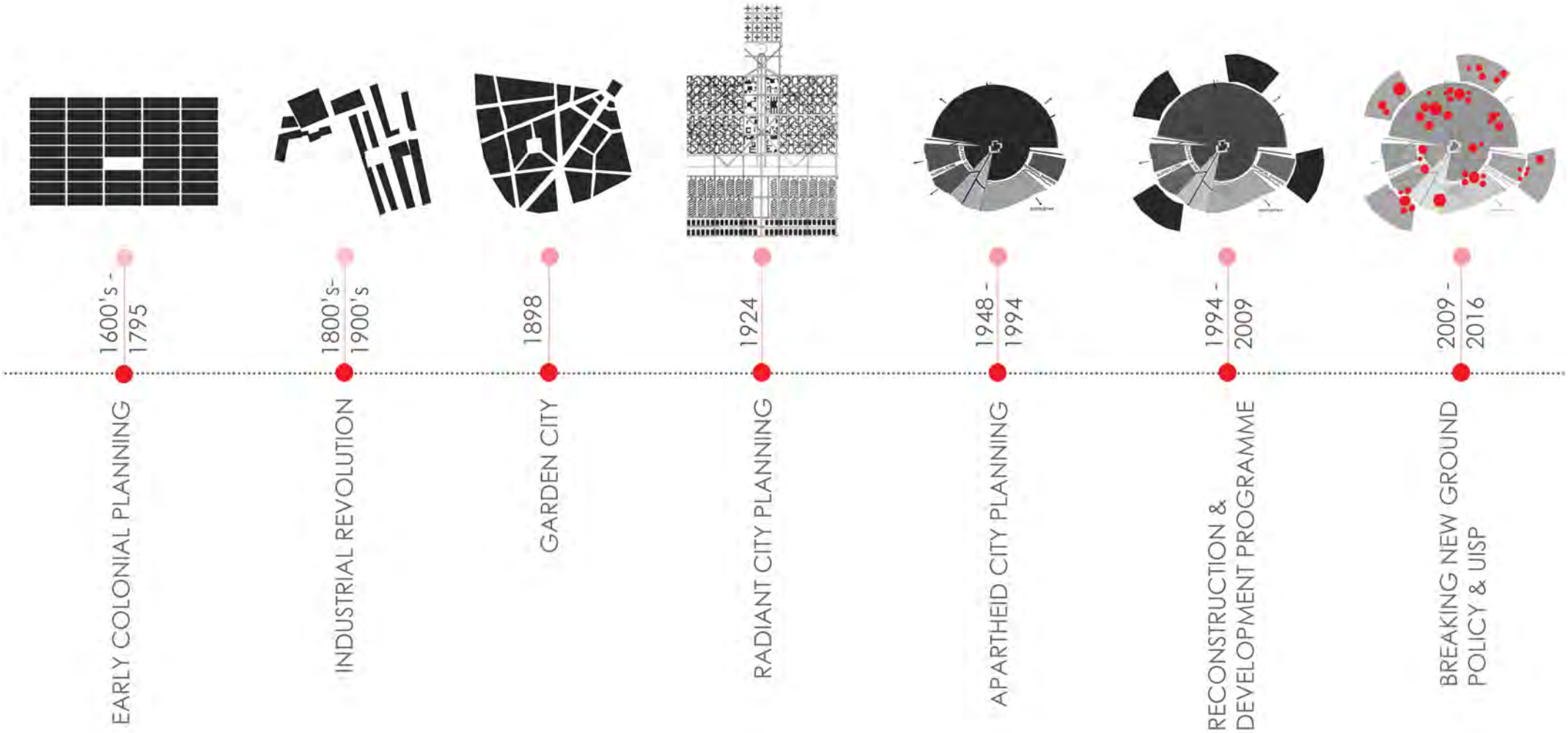


Figure 7. Timeline of urban planning approaches in South Africa (UP MArch (Prof) 2016).

Breaking New Ground Policy Principles:	Results in Cosmo City
Mulitcultural communities	Segregated communities
Upgrading all informal settlements by 2015	Informal activity happening- backyard shacks
Sustainable housing solutions	Standard RDP model not sustainable
Access to basic needs and amenities	Access to basic needs and amenities is limited
Promoting densification and integration	
Creating economic opportunities	

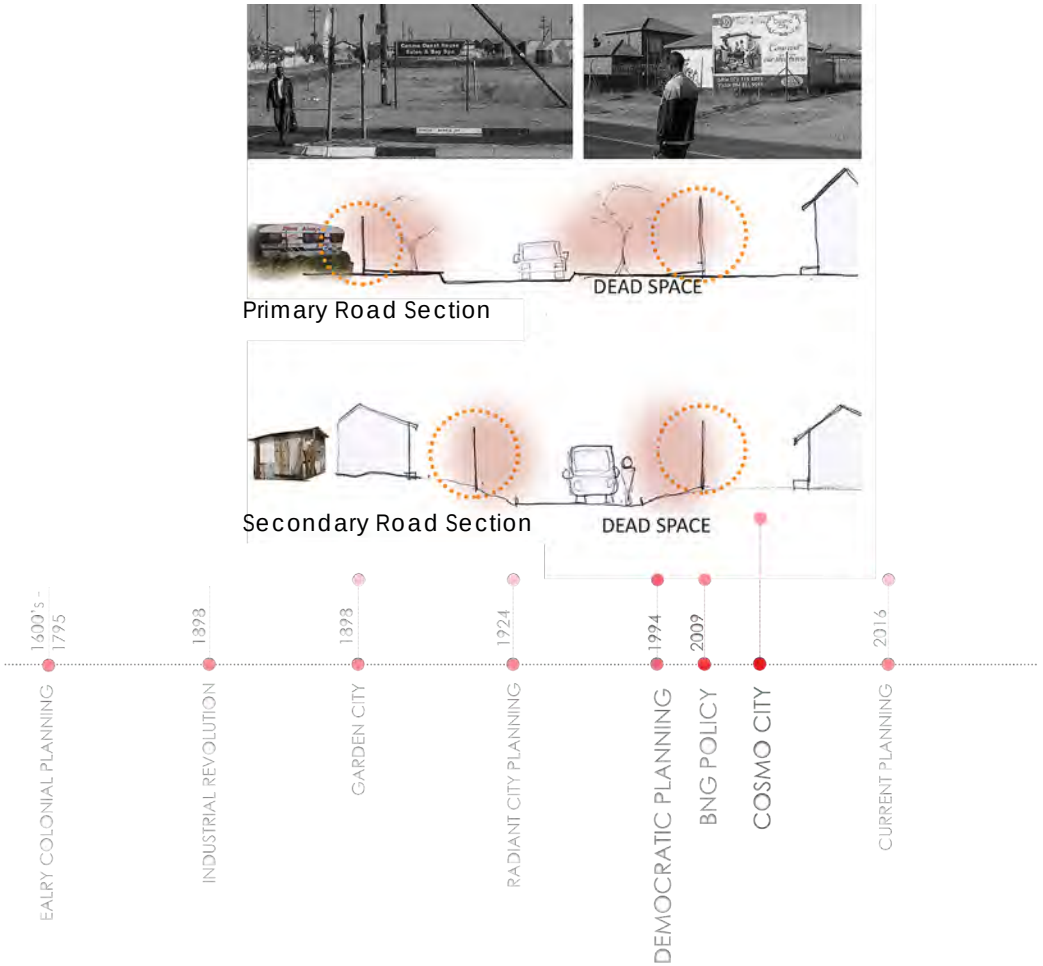


Figure 8. Cosmo City precedent study (Challenges of implementing BNG Policy 2013).

The most recent and influential informants on the research bias is that of the Democratic Constitutional Law of South Africa, specifically the Bill of Rights in Chapter Two of this constitution (SA 1997: 5-20), and the Breaking New Ground policy (2004) put forward by the South African government as a reaction to the Apartheid era of urban planning. A number of secondary informants include other South African Governmental policies, such as the Upgrading Informal Settlements Programme (UISP) (Fieuw 2014) and the National Development Plan for the 2030 vision (NDP) (SA 2012).

Within the constitution and policies stated above, the common theme is the recognition of South Africa's fragmented and complex urban environments, and the response towards creating more cohesive, multi cultural, sustainable communities where all residents of South Africa have the right of equal access to basic amenities such as food, health and education (SA 1997: 5-20). Despite the promising principles put forward by the South African government in these policies, the spatial implementation of this into the South African society is not yet evident. For example, in the case of Cosmo City, all the principles stated in the Breaking New Ground Policy were considered in the planning stages, yet the result is a segregated community where the unsustainable Reconstruction and Development Programme (RDP) model has been implemented. As the main issue of unemployment was not dealt with in this development, the emergence of informal backyard housing solutions which generate an extra income for the unemployed within the community has occurred, and access to the basic amenities of food, education and health is limited (Myambo 2014).

Further evidence of the lack of implementation of these policies was highlighted when mapping conducted by the UP Architecture department's MProf research group showed the number of informal settlements springing up around areas of opportunity within the urban fabric, see page opposite (UP Arch (MProf) 2016). For example, more specific to site location, the development of the Menlyn area and its resulting effects on the surrounding areas, specifically along Garsfontein road. This corridor brings with it many employment opportunities, however due to the deficiency in the provision of low cost housing and services, communities employed in these areas have taken to setting up informal housing instead.

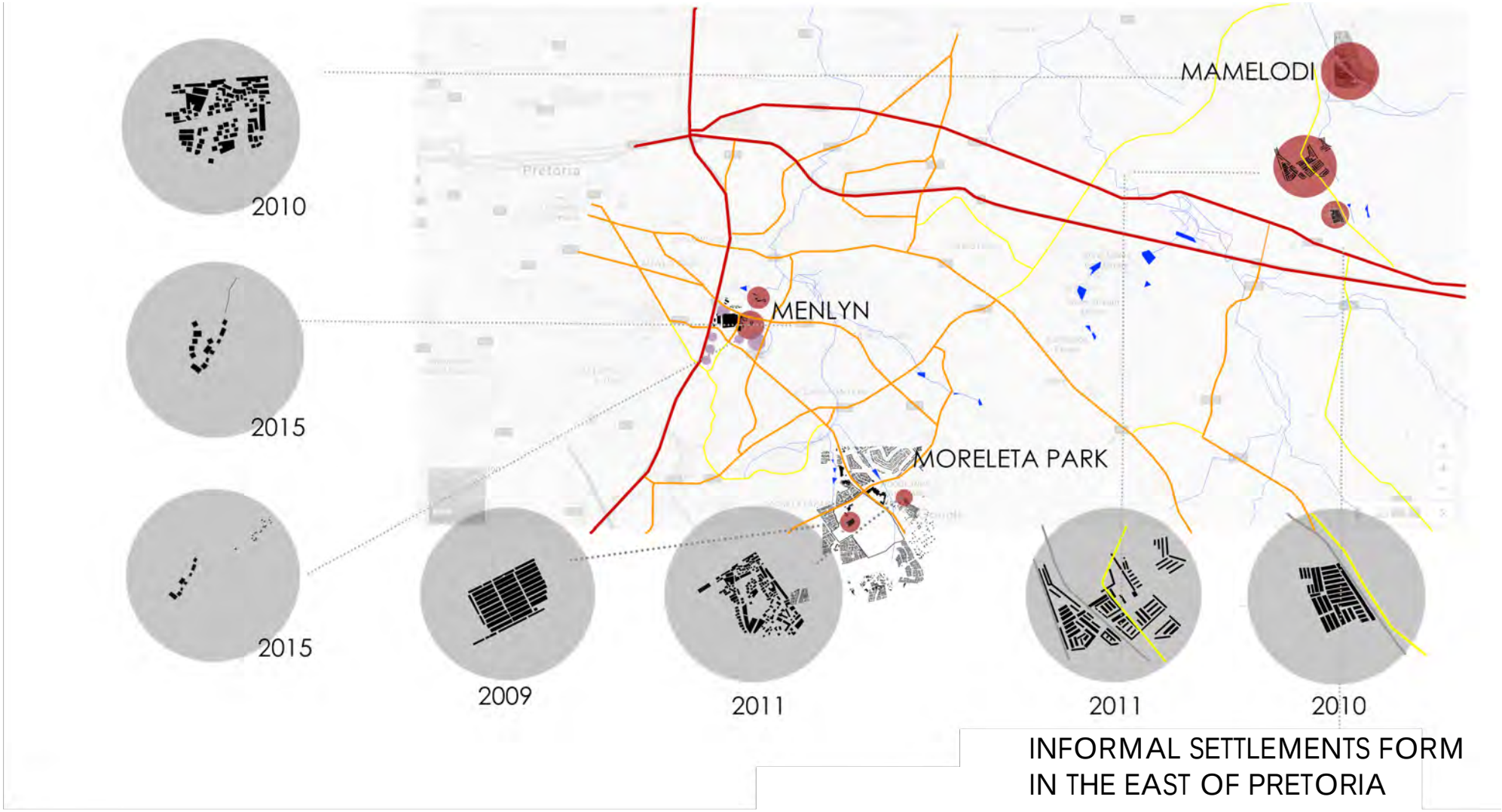


Figure 9. This illustration depicts the density, size and location of the informal settlements in Pretoria East mapped by the UP Arch M(Prof) research group 2016 to support the arguments made on the previous page (UP MArch(Prof) 2016).

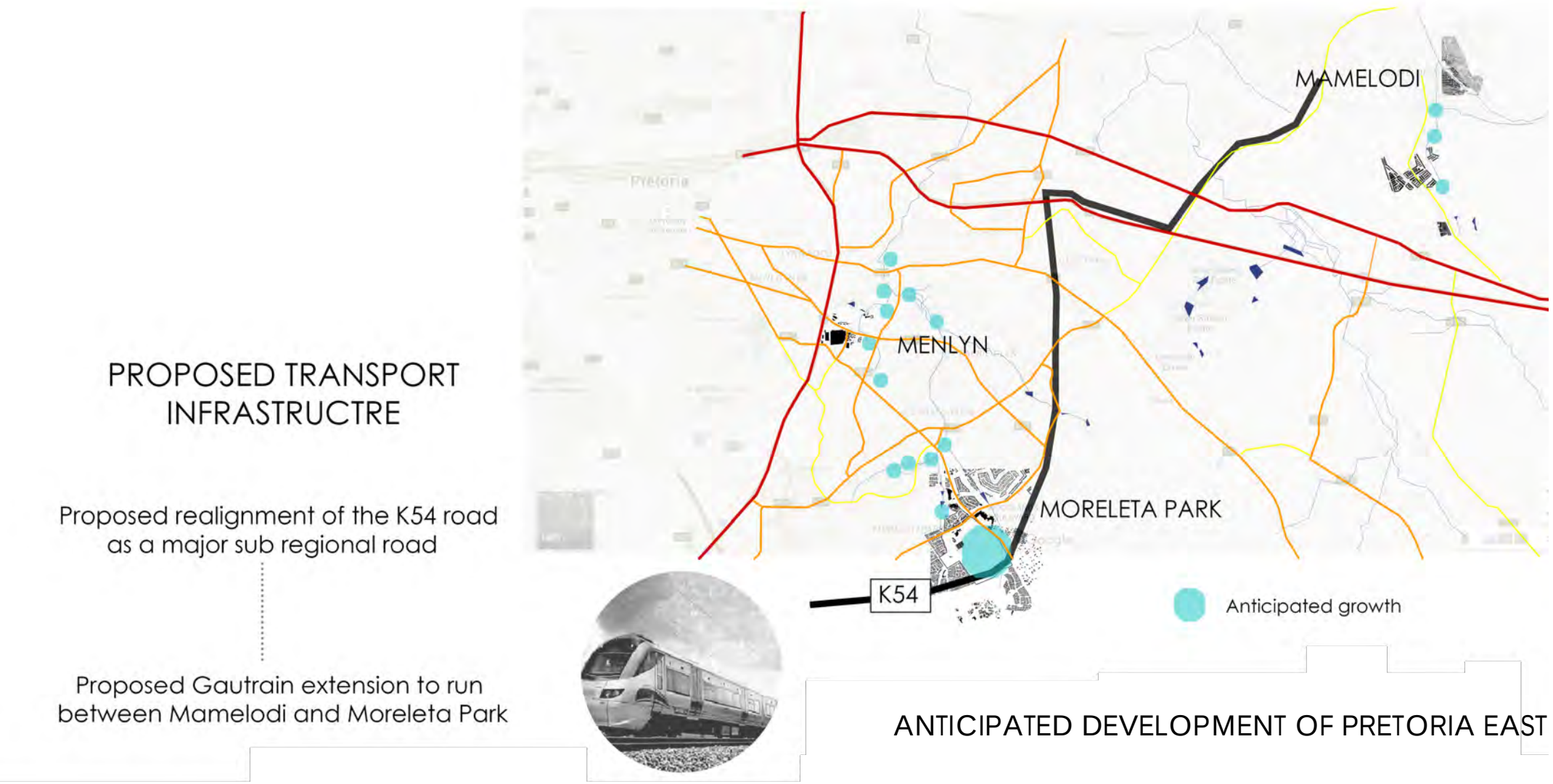


Figure 10. Illustration depicting the anticipated development of Pretoria East (UP MArch (Prof) 2016).

Food Network

Health Network

Education Network

With the establishment of these informal settlements along Garsfontein road, as well as the future proposals for the development of this area, such as further growth of the Menlyn economic centre; the new K54 access road, and the extension of the Gautrain route through Pretoria East to Mamelodi, this corridor is seen as a significant area of urbanisation for the future development of Pretoria. The situation of Plastic View within this corridor thus makes it a significant area of research for the future of Pretoria. In keeping with the principles put forward in the Bill of Rights, the Breaking New Ground Policy and on a more global scale, the United Nations (UN) Universal Declaration of Human Rights (2015), one of the mapping exercises conducted in alliance with the BArch (Hons) research group also working on this site, was the mapping of the context and access to basic amenities situated around the Plastic View site.

In order to achieve this mapping, the research process was initiated by the division of work into a number of sub focus research topics, namely; infrastructure, economic nodes, environmental mapping, cultural asset base, social capital, density, financial profile of the surrounding areas and food sovereignty. This mapping was conducted on both a macro scale for the context around Plastic View as well as a micro scale within the Plastic View settlement itself. The initial stages of the research process involved a desktop research approach which then informed the investigations conducted through a number of site visits and interviews with the Plastic View community members in order to better understand the community's access to food, health and education within the area. Access to these basic amenities was considered through both the public and private sectors of service provision.

The results of this mapping show that although access to food, health and education from the Plastic View site is easily accessible within the private sector, accessibility to these amenities in the public sector is limited, as illustrated in the images opposite.

Figure 11. Mapping of access to basic amenities from site (UP MArch (Prof) 2016).

This documentation proves that despite the pro-humane intentions stated in the principles laid out in government documents and policies, the actual spatial implementation of these principles is seen to be lacking in many areas of our society, such as is the case of the community of Plastic View above (UP Arch (MProf) 2016). This situation concluded that the most prominent urban issue in the case of Plastic View is that the site is as an island of contestation within the fragmented urban fabric in which it is found. A fragmented urban fabric which is made up of a number of broken service provision networks across both the private and public sectors of our society.

Therefore, the urban intention of the MArch(Prof) research group working on the Plastic View site, is to propose an urban vision which spatially supports the intentions laid out in policies such as Breaking New Ground, in order to stitch this fragmented urban network and minimise the gap between public and private sector service provision within our urban society, transforming Plastic View from a site of contestation, into a site of conciliation.

Figure 12. Urban Vision Conceptual Image (UP Arch (MProf) 2016)

B. THEORY AND FRAMEWORK

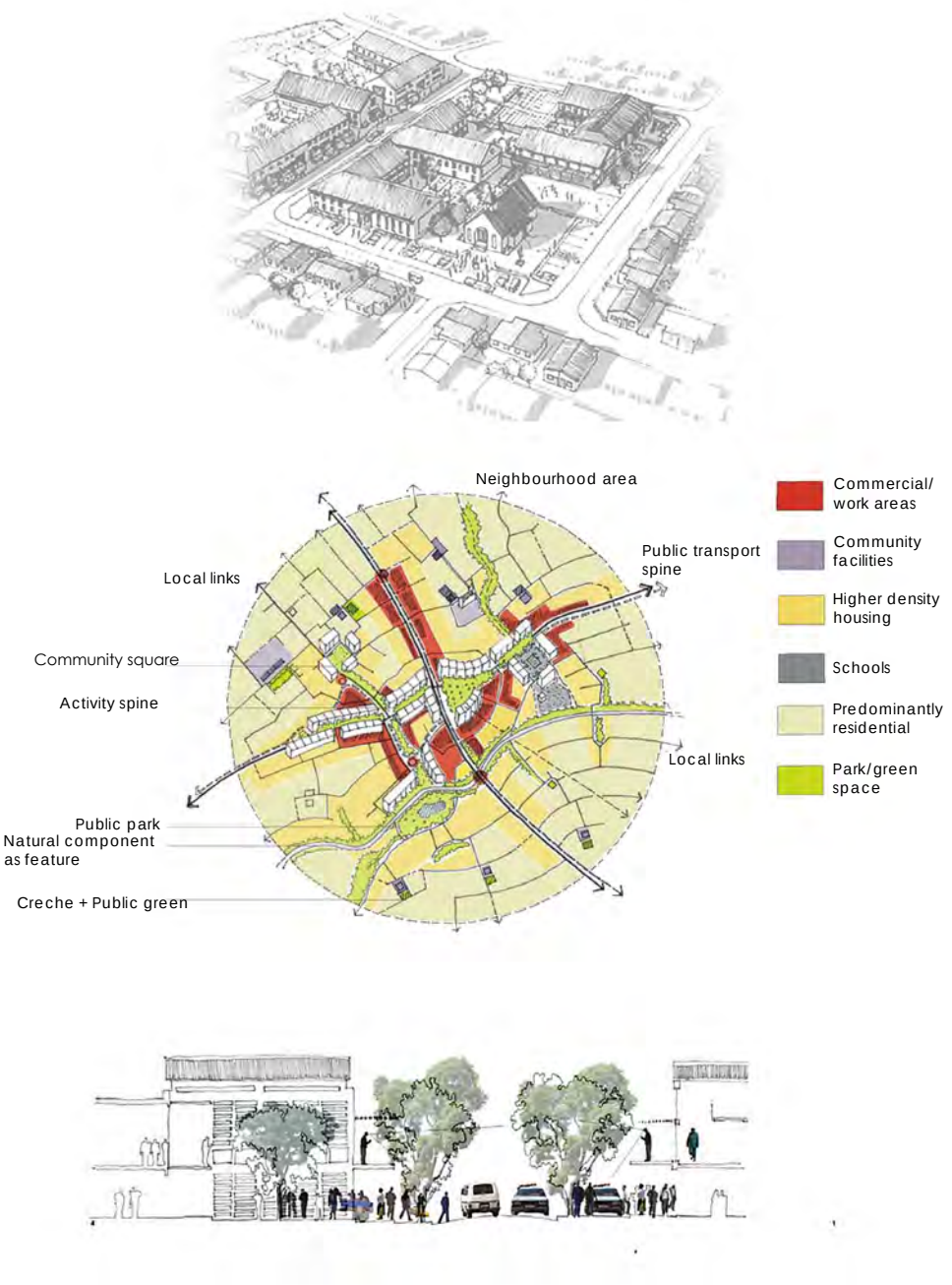


Figure 13. Thorntree view precedent images (GWAStudio 2007).

In order to translate this urban intention into an urban vision which improves the spatial implementation of principles put forward by the current governmental policies, the MArch(Prof) research group adopted an approach which has recognised the need for a paradigm shift in terms of the planning procedures conducted in the South African urban context.

The current neo liberal approach to urban planning (Wright 2013), seen as a reaction to the apartheid era, attempted to initiate policies that include principles of equality, however the lack of spatial implementation of these principles, for example in cases such as Cosmo City, has done little to correct the great spatial inequalities in our society. One reason for this is that despite the suggestion of equality and social justice, this neo liberal approach is governed by a market oriented mentality, which means that an individual's right to the city is often dependent on their claim of ownership to property which is determined by their socio-economic status. Therefore the suggestion is to move from a neo liberal approach to urban implementation, to that of an ecological world view.

Theorists such as Salat (2011) and Steyn (2005), have adopted such an ecological approach and have published a number of principles which became highly influential on the urban conceptual vision and approach to this dissertation. One of the most prominent of these principles includes Salat's (2011) description where the structure of the urban fabric is seen as being similar to that of a leaf, providing resilience through multiconnectivity and interconnected network systems (Salat 2011:18). Salat (2011) advocates that the advantage of viewing the city in such a manner, i.e. as a living system which is never static, suggests that it is adaptable, therefore ensuring its sustainability (Salat 2011: 399). In order to achieve this Salat (2011: 400-401) suggests, through a number of precedent studies, the following characteristics; streetscapes becoming a stage for activity which create fluctuating energy nodes within the urban context, high density, mixed use communities, pedestrian and bicycle oriented environments, the provision of public space, self sufficient districts made up of heterogenous communities and a strong recognition of the existing conditions on site.

An example of these principles being exercised in a local context is Thorntree View, in Soshanguve, by Holm Jordaan Architects (GWAStudio U3 2007). In this precedent, the urban planning focused on strengthening the existing networks by providing community specific spaces. The proposal saw the project not as an isolated entity, but rather as an additional node that responds to its surrounding context and connects to the existing nodes of energy. This was achieved through heterogenous, mixed density communities which focused a high concentration of energy and density along activity corridors through the proposal. The sensitive use of public space and building footprints were used to

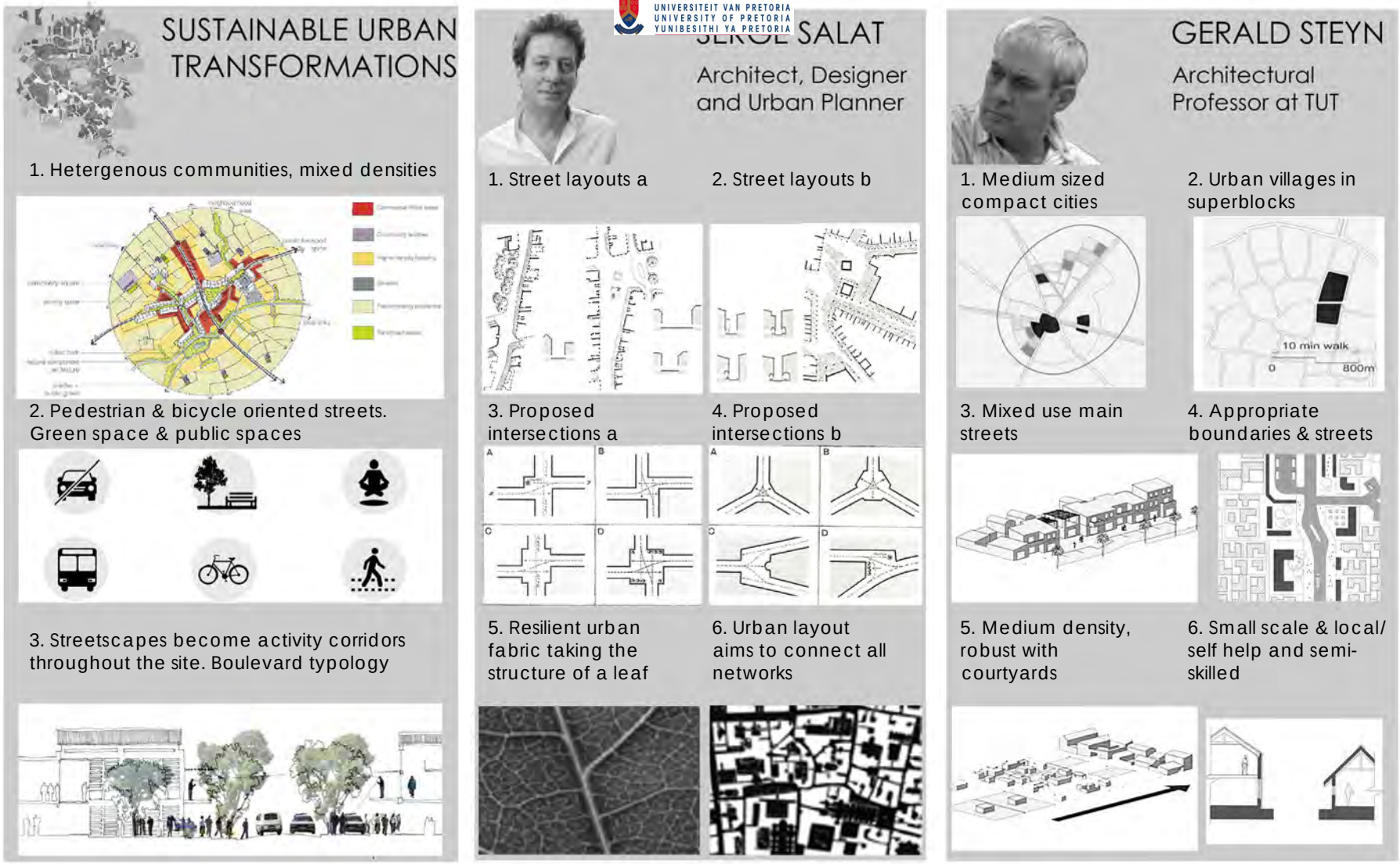


Figure 14. Urban theoretical informants (UP Arch (MProf) 2016) Individual sources from left to right (GWAStudio 2007), (Salat 2011) & (Steyn 2005).

define and support existing community activities (GWAStudio U3 2007). Steyn (2005), gives a more locally appropriate slant to this view. Having conducted research in Mamelodi, Steyn (2005) states that due to urban sprawl and spatial and social fragmentation, our urban fabric has become unsustainable (Steyn 2005: 1). Steyn's response to this observation concludes that although a sustainable African neighbourhood would certainly differ from a European one in terms of character and appearance, such as the ones Salat considers, the basic ordering principles and characteristics would essentially be the same (Steyn 2005: 2), namely compact, walkable, mixed use environments with a high level of economic self sufficiency, with access to amenities being available within a walkable distance (Steyn 2005: 3-5).

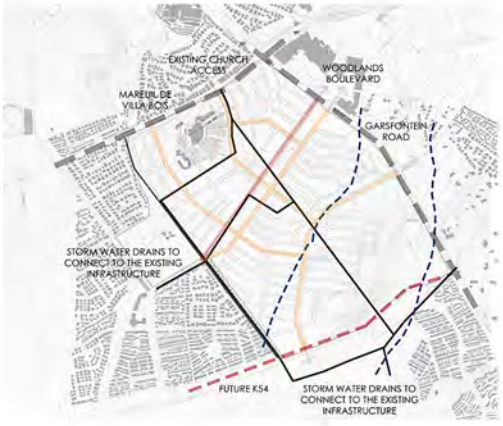
Using these principles as basic informants for the conceptual urban vision, the framework proposal for this dissertation was then initiated by considering an existing, formal framework proposal for the development of the Plastic View site by StudioMAS Architects (StudioMas 2008).
By viewing this formal proposal through the lens of the theoretical approaches listed above, specifically focusing on accessibility, heterogeneity and consideration for the existing conditions on site, the MArch Prof research group critically assessed the proposal and slightly altered areas within it accordingly in order to reach the urban vision used in this dissertation. The result of this is shown below.

Main Access Roads

Hierarchy of Density

Relocation of Plastic View

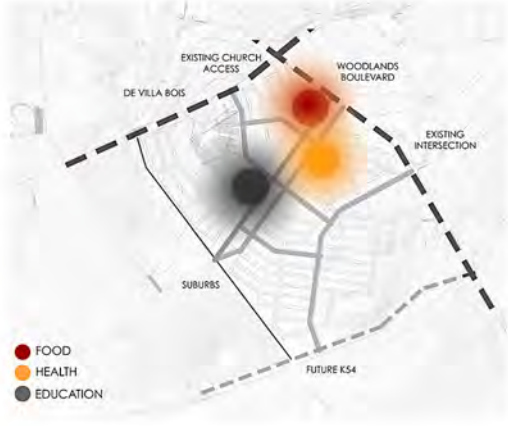
Recreational Spaces



Municipal Proposal for Stormwater Drains

Municipal Proposal for Water Supply

Municipal Proposal for Sewerage System



Proposed Energy Nodes- Interventions

Figure 15. Urban framework explained (UP MArch (Prof) 2016).

The provision of basic amenities was also considered for the urban vision. Using Salat (2011) and Steyn's (2005) theories, the image below depicts the proposed provision of these basic amenities across and around the site, the main guiding principle for this provision being the proximity of these amenities within walking distance from the current site of Plastic View and the surrounding communities.

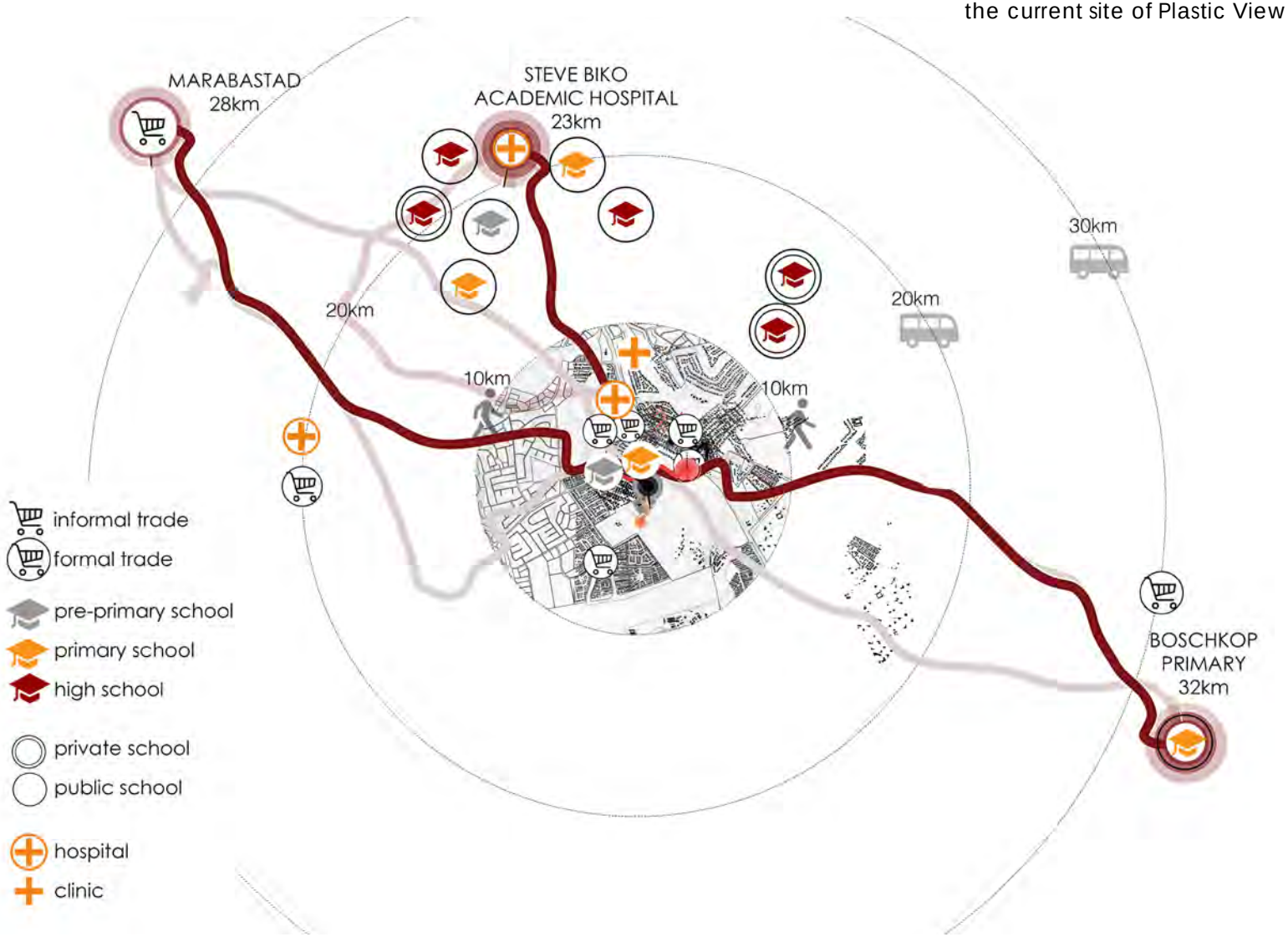


Figure 16. Proposed basic amenities in the urban framework (UP MArch (Prof) 2016).

Due to the vast scale of the site, the group's focus on site is on developing the high activity access boulevards across the site, which connect the high energy nodes of activity on either side of the site. These access roads are envisioned as becoming high density, mixed use activity corridors through the site which aim to encourage a distribution of the existing energy onto and across the proposed framework on site.

Figure 17. Current energy diagram across site versus proposed energy diagram in vision (UP MArch (Prof) 2016).

The current community of Plastic View will be catered for within this urban framework through the provision of low income housing, including the municipality's current proposal of moving the community to another developed site just across Garsfontein Road, to the North East of the site (Tlhabye 2015).
The access roads consist of a vehicular oriented road, as well as a secondary parallel pedestrian oriented road in order to introduce the compact, accessible and walkable aspects to the vision as Salat (2011) and Steyn (2005) suggest.
It is from these main access roads that the individual dissertation proposals then branch off of, contributing to the mixed density, heterogeneity and energy of these boulevards. In addition to this, the individual proposals, influenced by the study of South African policies and constitution, also have a strong focus on the accessibility of basic service amenities to the community found within this framework.

Figure 18. Site plan displaying proposed dissertation sites (UP MArch (Prof) 2016).

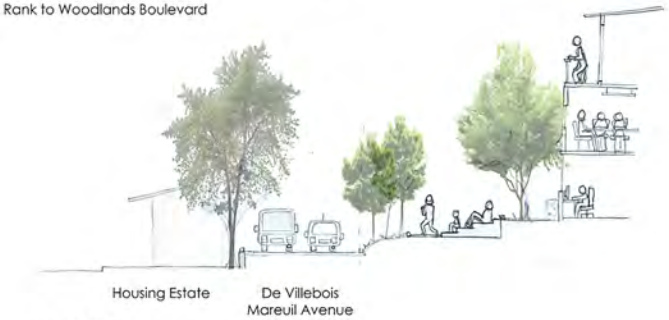


Figure 19. Conceptual images of the proposed urban framework (UP MArch (Prof) 2016).

CHAPTER ONE

Figure c. Young child (Author 2016)

1. RESEARCH DISSERTATION PROPOSAL

THE BILL OF RIGHTS STATES THAT EQUAL ACCESS TO HEALTHCARE IS THE CONSTITUTIONAL RIGHT OF ALL PEOPLE LIVING IN SOUTH AFRICA (SA:11, 1997). HOWEVER WITH THE CURRENT HEALTHCARE MODEL BEING MADE UP OF A DIVIDED PUBLIC AND PRIVATE SECTOR, GROSS INEQUALITIES IN TERMS OF ACCESS TO HEALTHCARE HAVE BECOME A FAMILIAR OCCURRENCE IN THE WAY OUR SOCIETY FUNCTIONS AND AS A RESULT, THE STATEMENT ABOVE IS NOT A REALITY FOR MANY COMMUNITIES.

1.1 URBAN ISSUE

As previously mentioned, the larger urban issue considered in the urban vision, is that the site exists as an island of contestation amongst the fragmented urban fabric of broken service provision networks across both the private and public sectors in which it is found. Branching off from this larger urban issue, the individual proposal discussed in this dissertation specifically deals with the inequality of access to healthcare in the public sector in the vicinity of Plastic View.

The community of Plastic View are constantly exposed to situations which threaten their health and safety. Open flames often result in burns on some of the younger residents of the community (Andersen 2016), and cultural tensions within the tightly packed community often result in violent fights and sometimes death (UP Arch (Hons) 2016). However, access to reliable health care to treat injuries caused by these incidents is limited. The research process, as explained in greater detail previously, resulted in a collaborative mapping effort between the University of Pretoria's Architecture Department Honours and Masters year groups. This process produced documented evidence of the healthcare delivery services within the vicinity of Plastic View. This mapping is shown in the illustration opposite.

Figure 20. Mapping of healthcare facilities in the area and those visited by Plastic View residents (UP MArch (Prof) 2016).

From this mapping one is able to see that the healthcare delivery services within the vicinity are predominantly only accessible to private healthcare users, with the nearest private hospital being the Netcare Pretoria East hospital, within 30 minutes walking time from the current Plastic View site. The nearest public healthcare facilities are the Steve Biko Academic Hospital which is situated over twenty kilometres away from Plastic View, and the Pretorius Park Clinic, which is situated just over thirty minutes walk away from Plastic View.

Pretorius Park is a small scale clinic which primarily provides HIV and TB treatment however upon arrival, the user is met with the stereotypical frustrations of the generic public clinic experience in South Africa: long queues and waiting periods as well as inconvenient opening hours. Therefore in the event of an after hour emergency, members of the community of Plastic View need to travel to the Steve Biko Academic Hospital for healthcare provision (UP Arch (Hons) 2016). This mapping evidence became one of the informants for the urban issue proposed by the individual component of this dissertation, namely how one may minimise the gap between the provision of healthcare service delivery facilities in both the public and private sectors of our society.

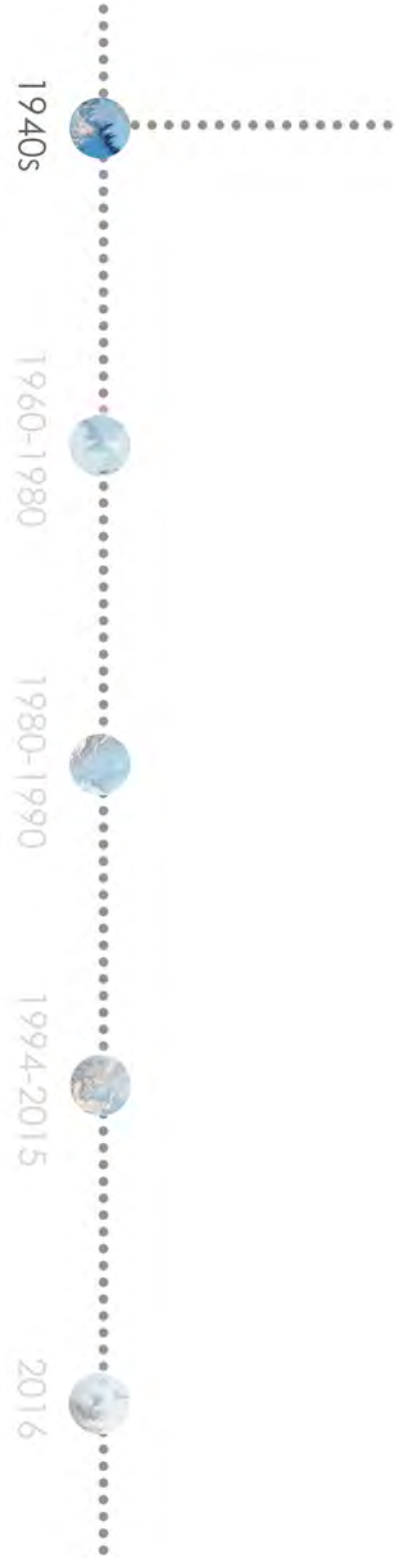
The research within this dissertation supports this by then considering, from a top down approach, the gaps in the present healthcare model and, from a bottom up approach, independent programmes such as the Community Oriented Primary Care (COPC) programme (Marcus & Hugo 2013), and how these two approaches may be merged in order to stitch the gaps present in primary healthcare provision within our urban context, in order to move closer towards a *Health for All* (Kautzky & Tollman 2009:26).

Figure 21. Context photo. (Author 2016)

1.2 A CRITICAL REFLECTION ON THE SOUTH AFRICAN HEALTHCARE MODEL

Despite the same expenditure related to both the private and public healthcare sectors, the public sector has to serve 84% of our population, whereas the private sector only serves 16% (Bam et al 2013). As a result, 4 200 public healthcare facilities are available to serve this 84% of the South African population, which means that there are 13 718 patients per public clinic. This exceeds the World Health Organisation's recommended figure of 10 000 patients per clinic (SA 2012). As a result of this 37% excess (Du Trevou 2014: 22), these facilities have become over burdened, underfunded and under resourced, lacking the necessary infrastructure required to support this large percentage of our country's population. These stereotypical characteristics mean that many patients do not receive the medical attention they may require which is a direct violation of their constitutional right. The private health sector is also not without its problems as patients often end up being over serviced and having to pay for unnecessary consultations. The cause of these situations became evident in a literature study which highlighted that the common issue seen across both the public and private sectors in South Africa is with the primary healthcare service provision. The importance of a resolved primary care provision system is evident in a particular study which compared countries at the same level of economic development. It showed that those whose healthcare is organised around the tenets of primary healthcare proved to have better health outcomes from the same investment (Voce et al 2014: 46). As a result both government, from a top down approach and independent organisations, from a bottom up approach, have begun to consider how to make the statement set about in the Bill of Rights a viable reality by considering how to re-engineer the South African healthcare model. This poses an interesting question to the architectural profession of how one can then spatially support the re-engineered healthcare model being proposed.

Figure 22. Context photo. (Author 2016)

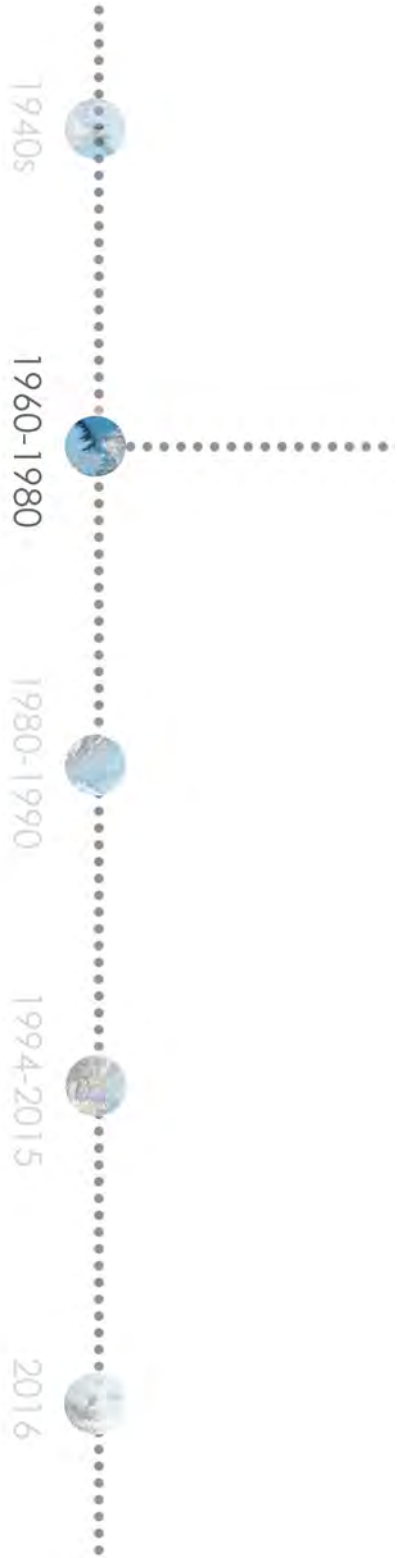


1.3 A BRIEF HISTORY OF THE PRIMARY HEALTHCARE SYSTEM IN SOUTH AFRICA

Since the memorable statement of Health for All was made at the Alma Ata health conference in 1978, health care systems worldwide have been revisited in the hopes of making this statement a reality (Kautzky & Tollman 2009:26). In spite of being a pioneer in many healthcare models, such as the Pholela Health Care (Kautzky & Tollman 2009:26) model, South Africa is only just embarking on their journey towards this goal. Although there have been numerous attempts to address the division between public and private sector health care post-1994, with the most recent being the National Health Insurance Green Paper (National Department of Health 2015), a great inconsistency is still evident between the two health service sectors. In order to understand what has led to this grossly biased system, the following text shall critically analyse the development of primary healthcare provision in South Africa.

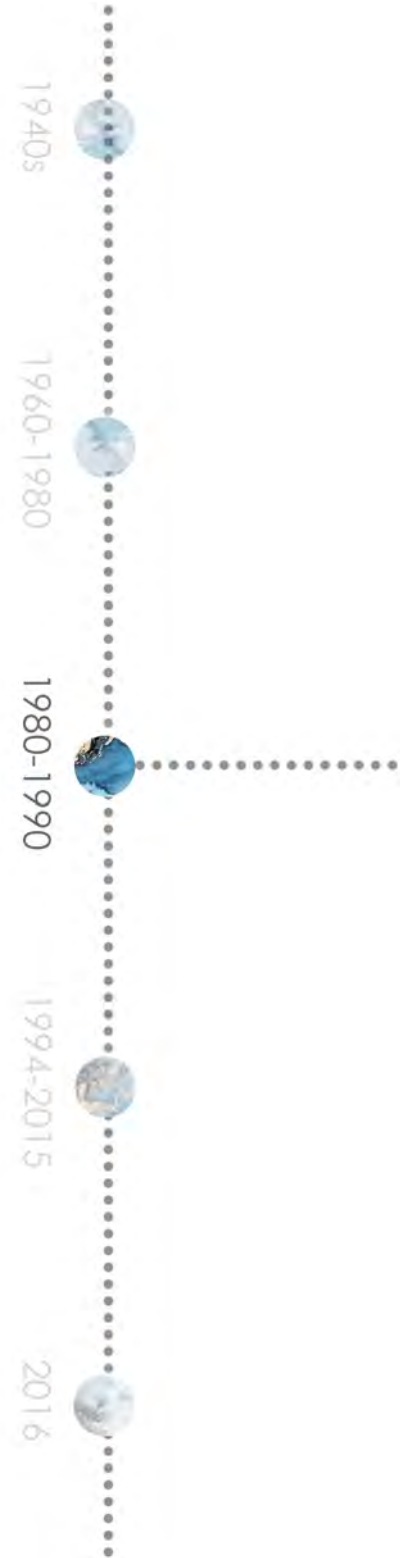
1.3.1 PHOLELA PRIMARY HEALTHCARE MODEL

In the 1940s, Dr Sidney Kark set up the Pholela Health care model in the rural homelands of KwaZulu Natal. This model became the global forerunner for Community Oriented Primary Care (COPC) (Pillay 2011: 1). The unit was set up in order to provide both a preventative and curative healthcare facility model which could be used as a precedent for both rural and urban facilities. This model made use of population-based investigations which then informed the provision of health services at the facility and incorporated health education and health promotion as essential elements of the healthcare delivery system. Its purpose was to emphasise the provision of holistic health care, rather than simply medical care. As a result, Pholela provided an example of one of the first working models of COPC in practice (Tollman, Kark & Kark 1997: 217).This model became very influential on the larger healthcare policies and models of its time with the idea of health becoming accessible to all. However before it could take full effect on reforming the South African healthcare model, the National Party rose to power, and the well known spatial separation and racial segregation policies meant that the healthcare resources and policies became biased towards a minority provision healthcare approach (Kautzky & Tollman 2009: 19). As a result, the COPC movement in South Africa had collapsed by 1960 and the 44 facilities which were created were forced to close. This resulted in over 20 years of innovative, community-based research, training and health systems development being lost. However countries such as USA, Iran, Thailand, Malaysia and Kenya had already started to see the value in this model and started to implement it into their healthcare systems (Roemer 1991: 156).



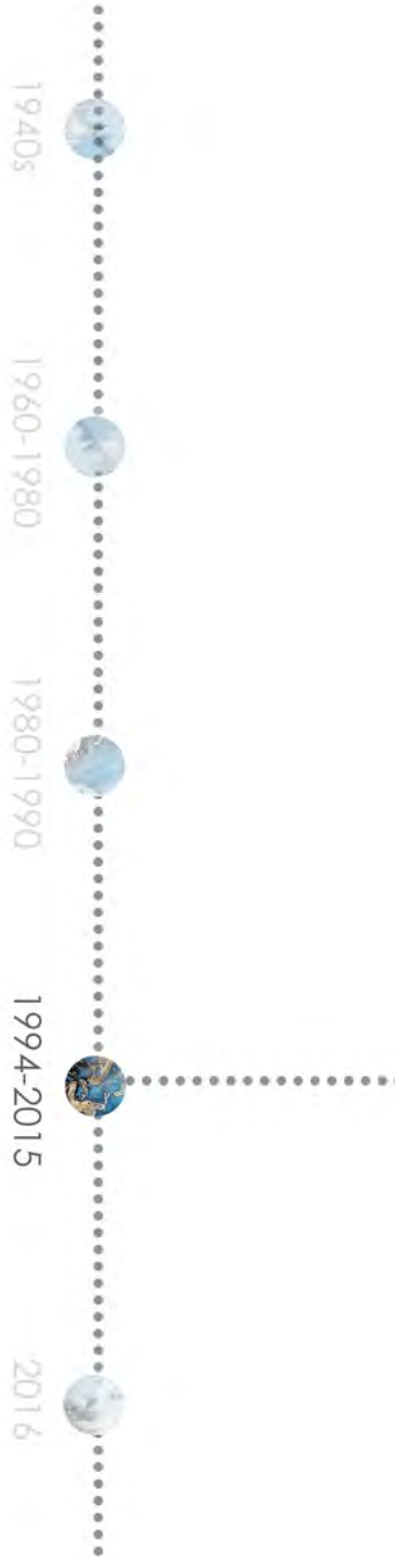
1.3.2 APARTHEID

The introduction of the policies brought about by the apartheid era introduced two developments which proved to be particularly damaging to the country's health care and systems development. This was the racial fragmentation of health services and the deregulation of the health sector (Tollman & Pick 2002). Within the townships created by Apartheid policies, further racial segregation into minority ethnic groups meant that the already undermined, stretched resources and facilities became even more insufficient and as a result, health care services to this section of society worsened. Simultaneously on the other side of the fence, the economic downturn and pressures exerted on a already heavily taxed white minority population by the private sector and medical industry, caused the government to deregulate the health care sector (Kautzky & Tollman 2009: 21). After this, the privatisation of health care led to the rapid expansion of hospital-based curative services and facilities. This intensified the already severe rural / urban discrepancies in terms of resources and personnel distribution and raised the financial barriers to service access, further disadvantaging lower-income groups (Kautzky & Tollman 2009: 21). The volatile political era did not help the situation. The Soweto uprisings in 1976 caused many medical staff employed in public hospitals and facilities in townships such as this, to resign due to safety concerns. This placed an even heavier burden on already under-resourced facilities (Kautzky & Tollman 2009: 22). With the killing of Steve Biko in police detention in 1977 and the torture and murder of Dr Neil Aggett in 1982, health and health care services became increasingly politicised (McClean & Jenkins 2003: 77-95). However, despite being the darkest period of South African history, the apartheid era witnessed the rekindling of a number of COPC principles in a variety of grass-roots initiatives. International missionaries and NGOs in the country recognised the value and resilience of the Pholela model and set up a number of health care facilities in the vulnerable under serviced township areas. An example of such a centre, pioneered in the 1970s by Erika Sutter of Elim Hospital, was the care-group movement, which involved hundreds and later thousands of volunteer village women. It began by targeting the eye condition of trachoma, after which efforts spread to infectious disease and, more broadly, issues of nutrition and income generation (Sutter & Maphorogo 2001: 47-49).



1.3.3 REACTION TO APARTHEID

Inspired by Alma Ata and in fierce opposition to apartheid and the homeland health services, a range of organisations and individuals were organised in the 1980s to develop and promote a national primary healthcare strategy for South Africa. One of these was the National Progressive Primary Health Care Network (NPPHCN). This organisation called for the implementation of progressive primary healthcare in South Africa, and suggested basing it on four key principles: commitment to socio-economic development; community accountability; concerned health worker practice; and comprehensive care (Kautzky & Tollman 2009: 22). This organisation became important as it provided a critical platform whereby government policies could be openly challenged. In the late 1980s and early 1990s, members of the National Department of Health who belonged to this NPPHCN attempted to implement principles of the COPC into government health policy. However due to the apartheid mindset still being a stronghold, little was achieved (Tollman & Pick 2002).



1.3.4 DEMOCRACY

After the advent of democracy in 1994, the South African constitution recognised the past inequalities in terms of access to healthcare, and as a result, the Bill of Rights, Section 27 was established (SA 1997). As a result, a range of pro-equity policies and programmes was initiated throughout the public sector in order to make healthcare an equally available service to all. With many motivated members of the primary healthcare movement in the new National Department of Health, and a relatively clear policy direction detailed in the White Paper on the Transformation of the Health System, formally endorsed by Parliament in 1997 (Kautzky & Tollman 2009: 23), there was great enthusiasm for the transformation of the national health system. However the translation of these policies into practice proved to be difficult. In review of this, more policies such as the Breaking New Ground Policy (SA 2004), and the National Health Insurance (NHI) Green Paper (SA NDoH 2015), still promoting equal access to healthcare, have been endorsed by the government in order to revise the implementation of these principles (Kautzky & Tollman 2009: 23).

1.3.5 CURRENT STATE OF THE PROBLEM

The main purpose of the NHI Green paper was to eliminate the current tiered healthcare system where those with the greatest need were given the least access to healthcare provision and had the poorest health outcomes in our society (SA NDoH 2015: 1). This paper set out a number of guidelines in order to reform our national health model, however the one that relates back to the main issue within the South African healthcare model is the need to re-engineer the South African primary healthcare system (SA NDoH 1997:5). From a top down approach, the National Health Insurance (NHI) Policy uses countries such as Brazil's healthcare provision system as a precedent (Binge 2010). In the latest review of this policy, three possible streams for the provision of this primary healthcare are suggested, namely district based clinical specialist teams (DBCST), school based primary healthcare services and municipal ward based primary healthcare agents. Below is an image depicting the restructured healthcare model proposed in the National Health Insurance Policy Paper (SA NDoH 1997:37).

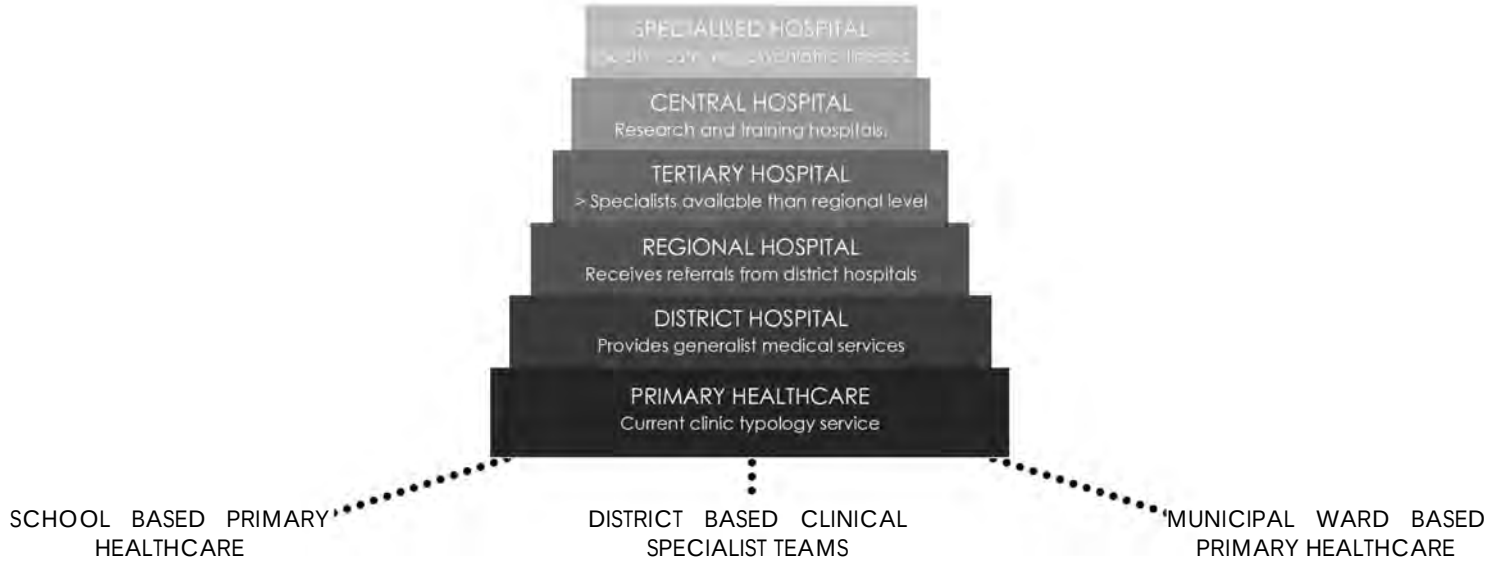
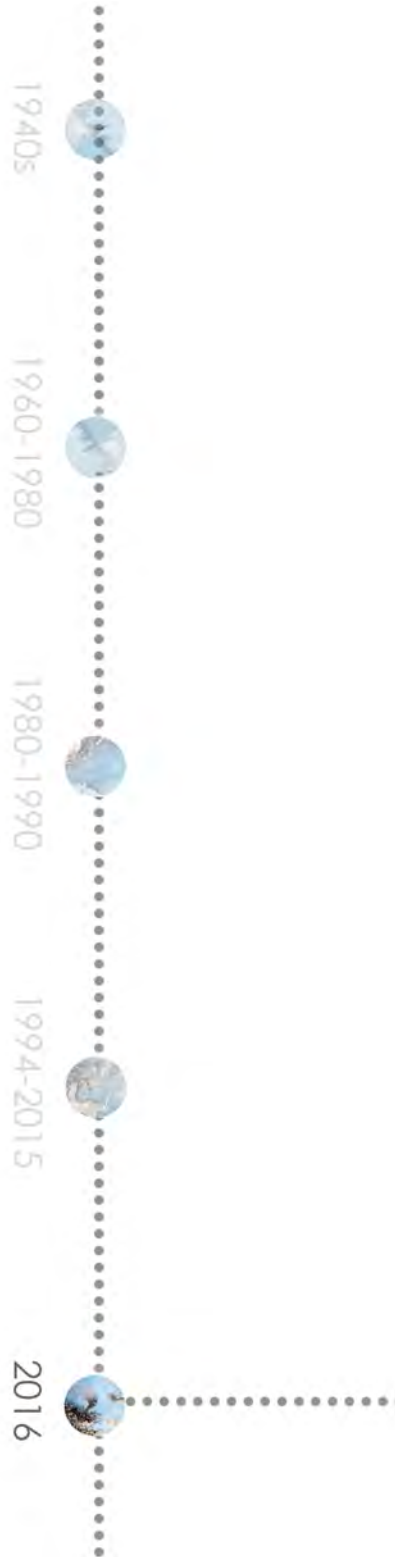


Figure 23. Proposed restructured model put forward by the National Health Insurance Green Policy Paper (Author 2016).



Of these three streams, the concept behind the DBCSTs, whether it be on a more institutional, centralised level, possesses the most similarities to the ideas put forward in the Pholela healthcare model.
In order to delimit the field of research and for the purposes of comparison, this dissertation will focus on the concept of district based clinical specialist teams (DBCST) which provide clinical support to local communities. The aim of these DBCST's is to provide integrated working practices between general practitioners and hospital based specialists (SA NDoH 2015: 18). The medical professions which make up these teams are identified in the policy document and are seen as a standard pattern throughout all district teams, despite any specific needs of the health profile of the district in which it is found. The focus of these DBCSTs is more biased towards a curative approach as opposed to a preventative approach (SA NDoH 2015: 18).

The 2008 World Health Report of the World Health Organisation (WHO), detailed three trends that undermine the improvement of health outcomes globally, one of these trends being hospital centrism, where there is a stronger curative focus than there is a preventative process (NDoH 1997:6). Therefore, having seen evidence of the successes and persistence of the concepts put forward by the Pholela healthcare model throughout the timeline discussed previously and considering the WHO report above, in order for these DBCSTs to become a part of a successfully re-engineered primary healthcare system, the driving concepts behind them should again adopt similar principles to that of the Pholela healthcare model. That is to say, a largely de-centralised healthcare model which makes use of population-based investigations to inform the provision of health services at a primary care facility. This model also encourages a holistic health care system, avoiding hospital centrism, by promoting a more preventative approach to healthcare through the incorporation of health education and health promotion in its system (Kautzky & Tollman 2009: 18). These concepts become evident in an independent, bottom up programme, the Community Oriented Primary Care programme (COPC), which involves the community in the delivery of healthcare (Marcus 2014).

One of the advantages which this programme provides over the proposed district health specialist teams, is the use of confirmed indications of needs from the community at hand in order to inform an appropriate provision of health services applicable to that specific community. The continuous monitoring and data recording of the health requirements of the community, by community members themselves, allows for the service provision to be updated according to the changing profile of disease which in turn, allows for a better health service provision. This model also allows for the preventative aspect of healthcare through education and promotion of health such as healthy eating and basic hygiene (Marcus 2014).

However, considering this system critically, one can see that at present, its independence severs it from the district and sub-district health facility development model proposed in the policy document. It may be more worthwhile to consider it as a supporting programme to the larger healthcare model, rather than a separate entity. In other words, considering a facility or programme which bridges the gap between the principles put forward by the COPC model and those put forward by the DBCST in order to improve the provision of holistic healthcare to vulnerable, low income communities within our society.

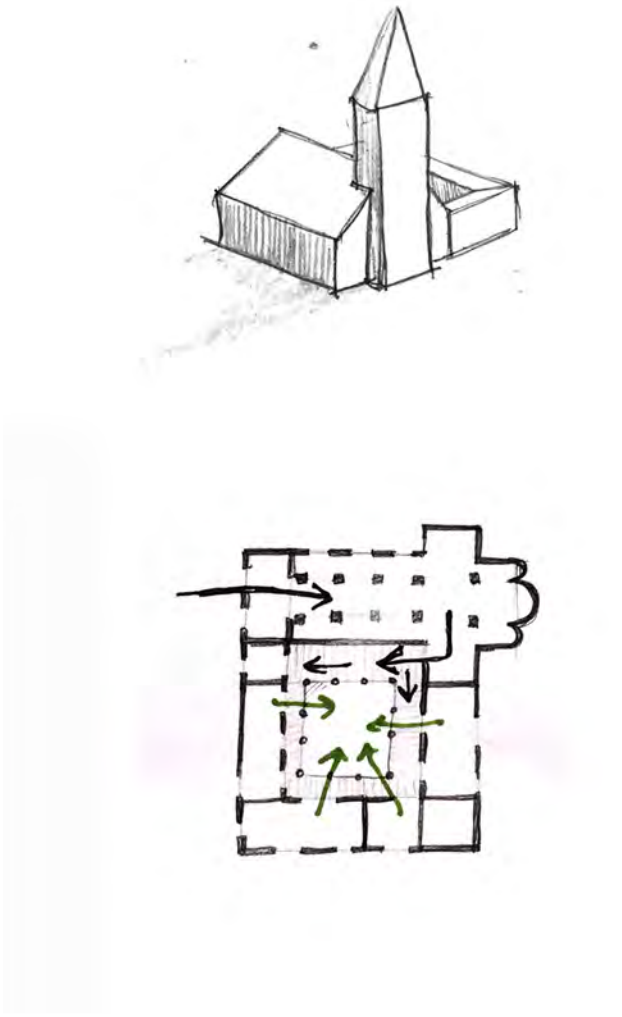


Figure 24. Diagram of monastic cloister layout (Author 2016).

1.4 ARCHITECTURAL ISSUE- THE HEALING POWER OF PLACE

The World Health Organisation defines health as not only being free from disease or infirmity, but rather a state of complete physical, mental and social well-being (WHO 2003). Therefore the mental and emotional well being of the users also needs to be considered in this re-engineered primary health care facility. Research shows that architecture can play an important role in accommodating this statement by assisting the healing process and promoting the well being of the users (Dijkstra 2009:15).
Using the concept of the healing power of place and space (1995), Claire Cooper Marcus and Marni Barnes conducted research and investigations into the consideration of the emotional and spiritual well being of patients in healthcare facilities. The results of this research showed that this mental state of well being plays an important role in a patient's healing process. Including spaces in the design of healthcare facilities which are sensitive towards the emotional and spiritual aspect of patients helps to reduce stress and pain levels, boosting one's immune system in a way that allows one's own body, together with other treatments, to heal (Franklin 2012). The research also showed that this complete state of physical, mental and social well-being is not only important for the patients, but also for the other predominant user group of healthcare facilities, namely the medical staff (Franklin 2012). Interviews with medical staff, also conducted by Cooper Marcus and Barnes (1995), showed that when the medical staff of these healthcare facilities felt very stressed, they used restorative areas such as outdoor gardens just as much as the patients did for emotional and mental upliftment (Franklin 2012).

Historically healthcare facilities were provided with spaces where such an holistic state of well being for all users was considered. The earliest evidence of this recognition was found almost five thousand years ago by the holistic healers that practiced traditional medicine in China and India (American Holistic Health Association 2016). Both these practices recognised the importance of emotional and spiritual well being in the process of physical healing and used the concept of nature and herbal medicine as an influence (AHHA 2016). During this time, and for many years to follow, healthcare was practiced out of spiritual temples (Yi Shi Za Zhi 2002: 102-107). This idea of healing being closely associated with spirituality continued into the early years of Christianity where the church's charity ethos expanded into caring for the sick as well as for the vulnerable in society (Mann Wall 1998: 1). This ethos accompanied the growth of the monastic orders during the Middle Ages where wards, added onto medieval monastic cloister gardens, were seen to provide comfort and spiritual sustenance on top of healthcare (Mann Wall 1998:1). These establishments were seen to play an important role in civic life and many settlements were set up around them (Burpee 2008:1).

The early stages of the Renaissance era saw the establishment of universities in Italy and Germany which became centers for the education of medical practitioners (Mann Wall 1998:1). This education in medical and surgical treatment became important in the way the sick were cared for and so hospitals developed into medicalised rather than religious spaces that were focused on catering for the physical aspect of healthcare more than the emotional and spiritual aspects (Mann Wall 1998:1).

The late 1700s saw a re-evaluation of this hospital form in order to create a standard hospital typology. This re-evaluation revisited the holistic aspect of healthcare by recognising that clean air and hygienic conditions are important agents in the healing process (Burpee 2008: 1). However, this realisation was once again lost after the outbreak of a number of wars which caused a higher demand for physical healthcare provision. In 1854, during the Crimean war, Florence Nightingale became witness to this neglect and set about trying to reassert the holistic idea of healthcare (Biography.comEditors 2016). Nightingale trained nurses in the importance of a patient's access to natural lighting, air, landscape, dietary awareness, entertainment and stimulation in the healing process. The implementation of such principles into the hospital which she was working in during this time resulted in a sanitary environment that reduced the hospital's deaths by two thirds (Burpee 2008:2). This led to her publishing Notes on Hospitals (1863) which explained how to run civilian hospitals properly. This publication influenced hospital design for the next hundred years (Burpee 2008: 2). The result of this influence was a pavilion design which provided adequate access to natural light and air, efficient circulation and humanistic principles for all users of the facility (Burpee 2008:2).

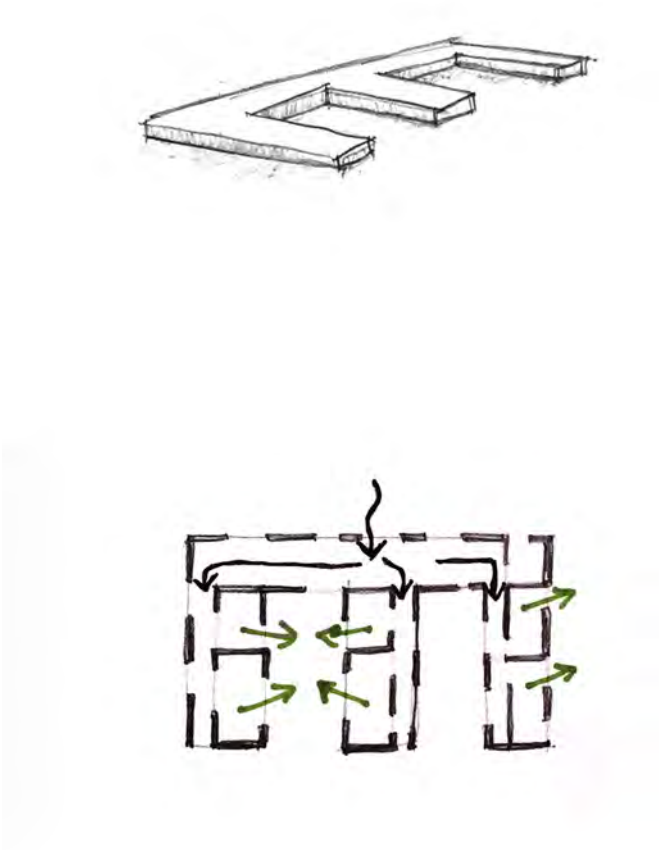
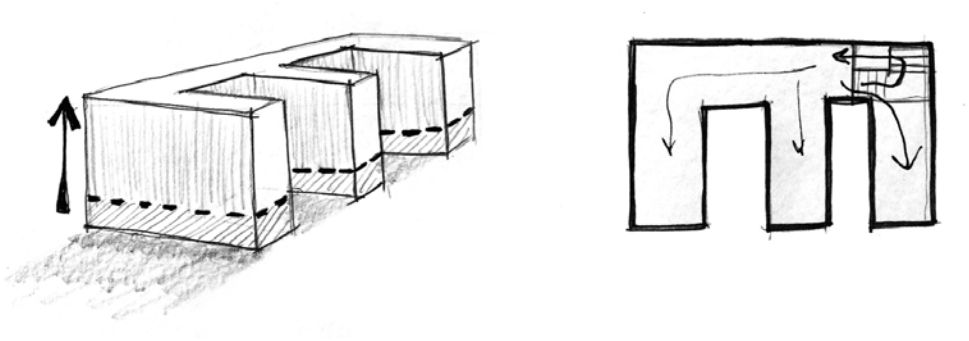
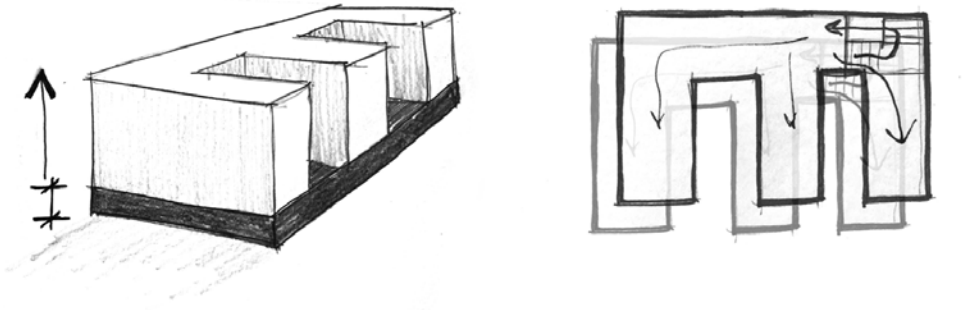


Figure 25. Diagram of Nightingale's pavilion layout (Author 2016).



Following another hospital boom after World War Two, these concepts put forward by Nightingale (1863) for hospital design were replaced with deep span, multi floor block buildings which could accommodate more patients with the sole focus of physical healthcare. The advancement in building technology aided this development by allowing for longer span structures, mechanically ventilated spaces and vertical circulation with elevators (Burpee 2008:2). This typology consisted of confusing circulation patterns and a perspective of hospitals being a well tuned machine rather than a holistic healing facility which also considers the emotional and spiritual factors for the patients, staff and visitors of the facility (Ulrich 2002: 2).

Figure 26. Diagram of industrialised machine like healthcare design (Author 2016).



Since the time of its inception, this model has become larger and taller, further limiting aspects of natural light, air and outdoor views which Nightingale (1863) found to be essential in the healing process, and designers and builders have maximised this machine like efficiency of hospitals without evaluating its effects on human health (Ulrich 2002:2).

The spatial manifestation of such principles is evident in the healthcare models often seen in current South African healthcare facilities. Here, rather than promoting the emotional and spiritual healing effects, physical healthcare provision is offered at the expense of healthcare facilities being characterised by fear, anxiety, stress and uncertainty (Dijkstra 2009:11). For example, from a top down approach, despite the National Health Insurance's proposed programmatic restructurings, one can see the spatial manifestations of the current governmental healthcare facilities that are in existence today. The sole function of such facilities relies on the efficient delivery of curative healthcare treatment for the physical aspect of healthcare with little respect for the emotional and spiritual effects of the spaces on the users (Cooper Marcus 2005).

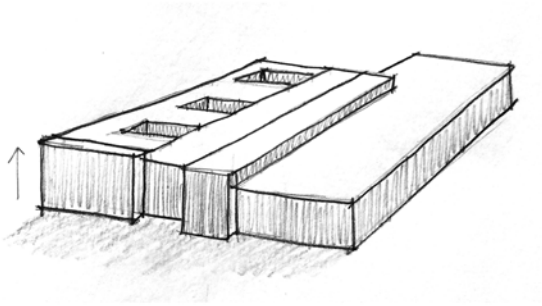
Figure 27. Diagram of the progression of the industrialised machine design (Author 2016).

For example, in terms of provision for the community of Plastic View, observations were made by the author during a site visit in order to explore the Steve Biko Academic Hospital. This hospital, established in 2007, is a tertiary health care facility intended to provide specialised and highly specialised services to patients referred to the institution by their local clinic (Gauteng Province Health Department 2016).

Parking is scarce for the size of this institutional facility and sometimes patients have to wait in a vehicular queue on the road outside, or park their car far away and walk in. Upon arrival at this hospital, patients are made to enter through an uncomfortable and unwelcoming security check point threshold. If patients are unable to pass this point, or would prefer to wait outside until their appointment, they are made to wait outside on hard wooden benches which are positioned parallel to and facing the movement of other visitors entering the facility. This situation doesn't allow for any privacy or quiet spaces for the waiting patients and also causes some congestion during the busy opening hours (Author's observations 2016).

The first entry point into the hospital facility consists of a deep space where already the evidence of natural daylighting and ventilation have been forgotten in the space. This has resulted in a dark and stuffy entrance space. The choice of finishes on the hospital surfaces does not help to alleviate this dark and depressing feeling as every surface is painted in shades of grey and brown. The internal waiting area, tucked into the corner of the entry space, is packed with patients waiting to attend their appointments on more hard wooden benches.

The little natural ventilation supplying this internal waiting area is tainted with the smell of cigarette smoke from the smoking area attached to the adjacent hospital cafe (Author's observations 2016). After passing this waiting area in order to gain access to the rest of the facility, the user is met with the generic hospital corridor typology with harsh artificial lighting and the same dreary colour finishes which continue throughout the building (Author's observations 2016). These initial observations made during the progression through the entry spaces to the



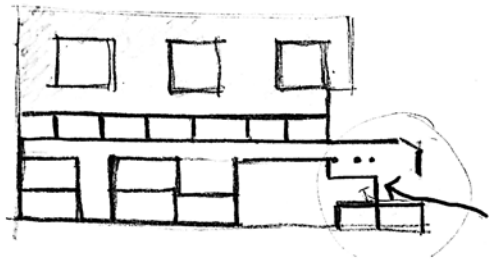


Figure 28. Diagram of Steve Biko Academic Hospital layout. Exhibiting similar principles to figure 20 (Author 2016).

hospital immediately show the lack of awareness for the emotional and spiritual affects of the spaces on the users. Instead, the spaces induce the same anxious, uncomfortable feelings felt induced by so many other such facilities in the South African society (Author's observations 2016). The same can be said for the mental and emotional effects on the medical staff who work at this facility as they are constantly exposed to this environment. There are however, programmes in South Africa such as the previously discussed COPC programme, which attempt to address these negative spatial characteristics.

What this process presents as a development, is the consideration for the holistic state of well being of the community. From this bottom up approach, healthcare provision is taken to the community by community health workers with the intention of providing a more preventative aspect of healthcare that supports the activities already in existence in the community (Marcus 2014). This action of the community being supported and visited in the comfort of their own homes begins to initiate positive emotional responses towards health care provision as it becomes a comforting and familiar, rather than anxious experience.

However, despite this advancement in the consideration of the patient spatial experience, little spatial regard is given to the holistic state of well being of the health workers and medical staff conducting the household visits. The facilities used as a base for these health workers are often found operating out of temporary health outposts or existing clinics in the area, as is the case in the informal settlement of Alaska in Mamelodi (UP Arch (Hons) 2015). Therefore these posts may be seen to exhibit similar spatial consequences to that of the current clinic typologies in South Africa. Another such example which is more contextually suitable to the location of Plastic View, is the Pretorius Park Clinic. This clinic, like many others in South Africa, is an under resourced facility made up of spaces that receive little natural lighting and ventilation. Some of the consultation rooms in this facility are found on the inside of the building and therefore don't even have access to a window. The staff facilities which the health workers would also make use of, such as tea rooms and ablutions, are limited in size and offer little consideration to the mental well being of the medical staff servicing the community. For example the seating options available in these tea rooms and the lack of designated outdoor/relaxation spaces.

From the examples shown above, one can see that the current healthcare provision programmes and facilities do not provide for the holistic state of well being of all users of the space. In order to assist in creating such a situation, an intermediate scale facility between the two approaches discussed above is suggested; namely, a place of holistic healing which provides physical healthcare support, as well as mental and social healing to all users of the space. In order to achieve this, the investigation proposes not only confining healthcare to a specific facility, but rather spreading healthcare and healing further into the community by using preventative healthcare to support community activities. Iain Louw (2006) theorises that considering such an interaction will produce a design with a new set of spatial relations that provide a unique fit of user community with site, need, and resource (Louw 2006:48). A characteristic which would allow for a place of healing that facilitates a hybrid form of co-existence between the community and the generic healthcare typology (Louw 2006:45). As many successful forms of co-existence are evidenced to be built through relationships of respect and recognition and are often widely understood as being related to social inclusion and social integration (Berns & Fitzduff 2007: 2), this dissertation proposes a health care facility which consists of community oriented, socially inclusive spaces, rather than simply a destination for physical healthcare treatment. Examples of the re-examination of this typical hospital block form in order to provide for what is suggested above, already began to occur in Europe in the 1980s, and has more recently become a question of research in South Africa as well (Burpee 2008:3).

Figure 29. Context Photo (Author 2016)

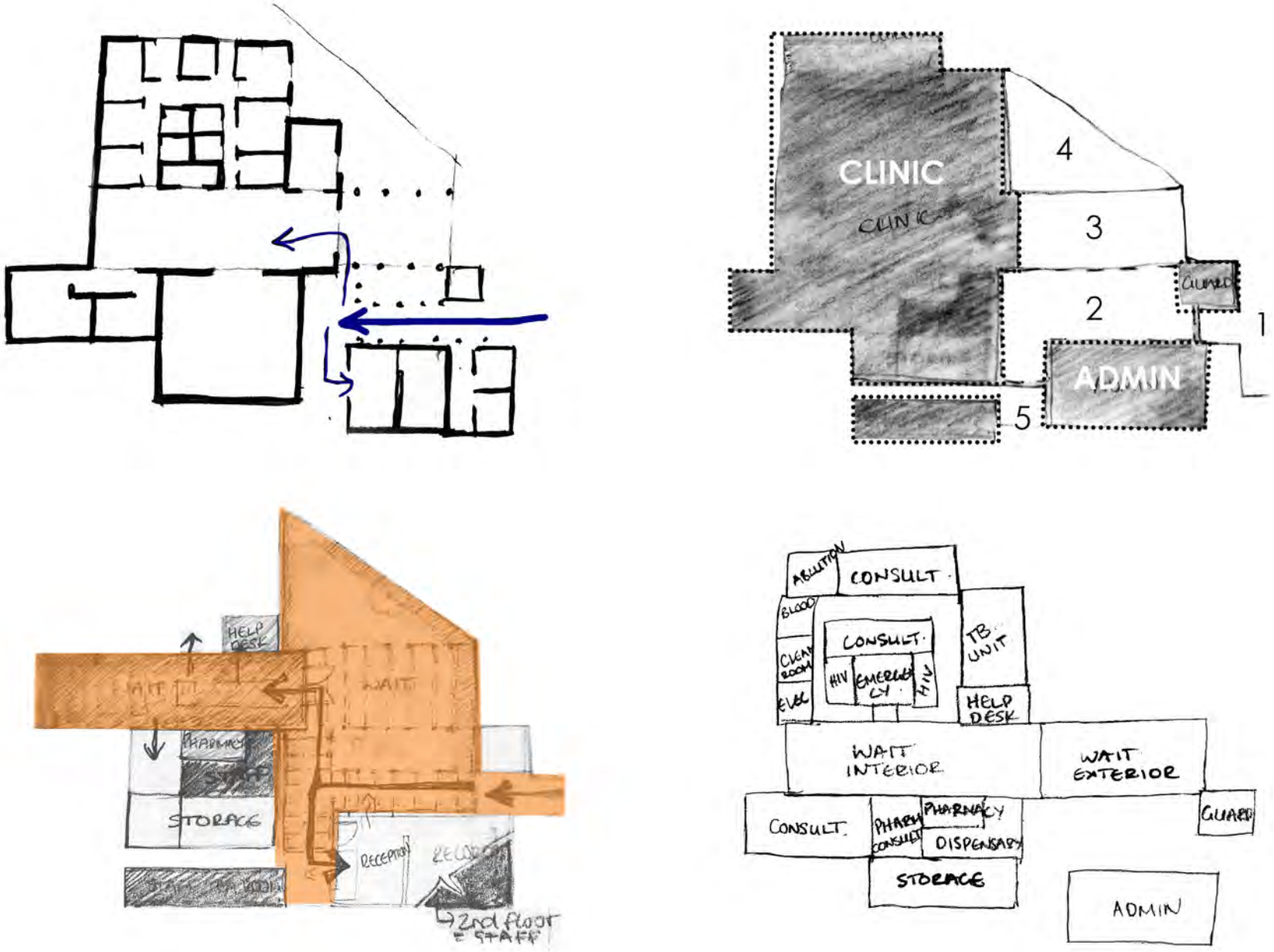


Figure 30. Diagrams of Pretorius Park Clinic layout, showing circulation and flow, hierarchy of courtyards, public vs staff space and organisational layout (moving clockwise from top left)(Author 2016).

1.4.1 PRECEDENT STUDY

The Department of Health in the Western Cape has begun to implement a strategy for a number of healthcare facilities resonating with the intentions and concepts discussed above. These healthcare facilities reassess and challenge previous healthcare facility typologies in under privileged communities in the province where access to primary care is restricted, through the provision of Community Health Centres and, more lately, Community Day Centres (Constable 2015:41). Examples of such facilities include the Hermanus Community Day Centre and the Du Noon Community Health Centre.

The Hermanus Community Day Centre, located in Hermanus in the Western Cape, was designed by Gallagher Lourens Architects (GLA) and was opened to the public in January 2015 (Barker 2015). The intention behind the facility was to challenge the legacy of poor healthcare facilities as well as alleviating the consequences of the spatial legacy left behind by the apartheid era (Barker 2015). In order to achieve this, the architects' intention was to design a healthcare facility which created comfortable, protected, healthy and emotionally uplifting spaces to encourage positive interaction between the users and the facility (Barker 2015).

Figure 31. Images of Hermanus Community Day Centre by Gallagher Lourens Architects (Lourens 2015).

The Du Noon Community Day Centre, found in Milnerton in Cape Town, was designed by Martin Kruger Associates and was officially opened in December 2014 (Barker 2015). The key design considerations that drove the architects' approach to the project was the facility's connection to the public realm, the public future of the building and the hierarchical order of public spaces in order to determine the facility's layout (Barker 2015). These considerations led to a design that boasts people centered spaces made up of diverse public halls and small courtyard gardens which are broken up by corridors that act as light sources and waiting spaces (Barker 2015). A number of spatial thresholds helped to organise the internal functions of the facility whilst simultaneously providing a sense of public to private hierarchy and sense of security (Barker 2015).

Figure 32. Images of Du Noon Community Day Centre by Martin Kruger and Associates (Kruger 2015).

Both these facilities adopt a preventative rather than curative approach to health care and allow the users' needs to lie at the core of the functionality and architectural design of the building (Constable 2015:41). The design and construction of these health centres, facilitated by the Department of Transport and Public Works (DTPW) feature a number of prominent principles (Barker 2015) which became valuable guiding principles for the beginning stages of the design development process.
What is evident in both designs is the intention to not only create a physically healing environment, but also comfortable, emotionally and spiritually uplifting spaces through user centred designs: A direct contrast to most current healthcare facilities in the South African context.

1.4.2 CRITICAL REFLECTION

Whilst these examples show advancements in healthcare facility design by considering the users' needs and comforts as important informants they are, at present, still solely a centre for the provision of healthcare. Therefore, this dissertation intends to build on the potential of these preceding design principles through proposing a multi-functional healthcare community support centre which facilitates a holistic state of well being by considering the users' emotional responses and interactions with the facility as well. The importance of considering this human experience and interaction in the design process is highlighted by Heidegger (1971) in his essay *Building, Dwelling, Thinking* (Sharr 2007: 2-3). In this writing, Heidegger emphasises that the consideration of such principles increases the value of the meaning of spaces and creates a productive mutually dependent relationship between the building and its users (Sharr 2007: 36). Therefore, in order to enrich the value and meaning of the spaces in the facility, this dissertation considers how the community may further intensify this relationship between space and experience by increasing the user interaction with public spaces such as the waiting areas, public entrance threshold and the facility's facades (Sharr 2007:3).

For example, in both the Hermanus and Du Noon health centres, the public waiting spaces situated on the street edges which act as a threshold into the facility, are seen to possess the sole purpose of a waiting area. Whilst design consideration was given to the sensory comfort of these spaces, they may be seen to be separate entities to the emotional experiences and qualities of their inhabitation (Sharr 2007: 2) as they possess no further interaction or meaning past this purpose. The hard seating options provided and the position of this seating does not encourage interaction between patients or passerby pedestrian traffic. To achieve this intensified user interaction, the dissertation intends to include additional programmes into these public interface spaces, such as healthy eating and health education programmes, which strengthen the preventative aspect of the design and also provide apt opportunities for the reintegration of the making of space with the activities and qualities of its inhabitation (Sharr 2007:3). The aim of these added programmes is also to further physically intensify the relationship between the street edge and public entrance threshold into the facility, in other words, blurring the edges between street edge and entrance threshold, encouraging further possibility for larger community interaction with the healthcare facility.

Figure 33. Context photo (Author 2016)

1.5 PROJECT INTENTIONS

Therefore, the intention behind this dissertation is to stitch the gaps in primary healthcare provision within our urban context by re-evaluating the typical healthcare facility typology, which has developed into more of a machine like efficient building that gives little consideration for the mental and social well being of the users.
In order to achieve this, the possibility of the de-centralised COPC model supporting the larger healthcare model is suggested so as to make healthcare a more accessible amenity to all.

In order to do so, this dissertation aims to investigate the possibility of a spatial engagement of the community in an accessible healthcare facility that facilitates both a healthcare provision aspect, as well as a healthcare outsource base.

Using the principles laid out in the Pholela and COPC healthcare models, the project intends to adopt a primarily preventative attitude to healthcare which exists as a spatial intermediate between the facilities proposed in the top down and bottom up approaches. The pause areas or waiting areas located within the site are seen as places of manifestation for this preventative approach through programmes such as healthy eating, health awareness and health education.

Figure 34. Context photo (Author 2016)