EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE

Towards a New Police Headquarters for Durban

By

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Date Submitted: March 2013
DECLARATION

COLLEGE OF HUMANITIES

DECLARATION - PLAGIARISM

I, Michael Shane Madden, declare that

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Signed

.............................................................
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DEDICATION

This is dedicated to my family, my Mom, Dad, Sister and brother, for their continued unwavering love and support for me during my 5 years of study in search of completing my degree. I will be eternally thankfully to you all for your sacrifices and giving me this opportunity to follow my dream.
ABSTRACT

Civic institutions such as the Police, the Judiciary and Governmental organizations rely heavily on a positive public perception in order to create a successful symbiotic working relationship. Although the public perception of these various institutions is often based on their actual performance and objectives within the public realm, the cognitive image which the public has of an institution is based on a variety of factors. The architecture which houses these institutions provides one of the primary valuable platforms to engage with the public and to express the vision and ideals of these institutions. It is thus important to understand the potential of architecture to shape a public perception or cognitive image. This paper seeks to understand how this can be achieved through the physical and emotional influences of the built form as well as to understand the role of society in shaping these perceptions. In South Africa, where a new democratic society has emerged, the re-imagination of civic institutions and their architecture to form a new cognitive image finds relevance.
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PART ONE: BACKGROUND RESEARCH
CHAPTER 1 INTRODUCTION

1.1. INTRODUCTION

1.1.1 Background

The Pyramids in Egypt, with their dominant mass reaching into the sky, project an image of power associated with the Egyptian pharaohs of the time and yet also epitomize the search for eternal life after death. On the other hand, the concave roofs of traditional Chinese architecture portray an image of modesty and express the spirit of a society in a state of harmony with nature (Bacon 1967: 18). These two contrasting ideologies expressed through architecture are examples of meaning infused within the built environment, a tool which has been used in architecture since ancient time. This symbolism within architecture has continued to be used as a means of reflecting the changing cultural, political and socio economic conditions of the time.

It is humanity’s ability to understand symbolism with conceptualized meaning through speech which sets us apart of all other animal life and as such the meaning given to objects and perceived by others is an important part of the human environment. People continually perceive their environments, giving meaning to what they see, hear and feel (Jencks 1985). Architecture and the built environment form an important part of the human environment and as such, people perceive, and furthermore, give meaning to architecture. A work of architecture, as a whole and in its parts, acts as a symbolic statement, which conveys, through our senses, humanly relevant qualities and situations (Arnheimn, 1975: 208). Even where architecture has been designed for functionalism with no message or meaning, the inhabitant will find personal meaning within that experience (Broadbent 1979: 12). Architecture, as a means of uniting a collective group of people under one ideology, has been used throughout history. A fine example of this is the oppressive architecture of National Socialist Germany (Nazi). The importance of the built environment as a communication tool for the propagandist nature of Hitler’s regime was such that the labor concentration camps were focused around the production of building materials. The monumental architecture that arose during this time was used to express the power of the political party in power at the time and further helped establish a culture of fear and control and develop a cohesive and purposeful collective cognitive image within that society. (Jaskot 2000) Thus the Symbolism and imagery associated
with architecture are powerful tools which can and have been used by governments, corporations, and religious entities to communicate with the public.

People experience architecture from a distance and are cognoscente of the form and also of how its mass interacts with the space around it. The perception and therefore the meaning found in architecture is created by the viewers experience with the built form. Architecture is not experienced as an isolated visual entity, but rather as fully integrated material, embodied with a spiritual essence with greater metaphysical meaning (Pallasmaa, 2005: 12). However, the building is also experienced from within: the textures, light and shade, functioning and atmosphere add further meaning to the building as the inhabitant builds association due to the collective experience within rather than the preconceived analogy portrayed by the form (Pallasmaa 2005).

1.1.2 Motivation / Justification of the Study

The public protection and justice systems are important institutions which serve to maintain order within modern society (The Constitution of the Republic of South Africa, 1996 Act 108 of 1996). The general public image of these institutions has come to revolve around the criminal element within society with the focus primarily on punishment and the enforcement of law rather than a public service (Faull 2011). However, this preoccupation with dealing with the disruptive and anti social elements within the society has often been at the expense of the average law abiding citizen. As such the public image of judicial offices and law enforcement has historically presented a harsh and overbearing expression of the power of these institutions (Faull 2011).

However, these institutions are places where victims come to seek help at the most traumatic moments of their lives. In these times the victim requires a comforting, welcoming environment which clearly identifies the justice and law enforcement systems as places offering help and relief from societal injustice. The environment should appropriately establish these institutions as a service portal to the community while still allowing for the sense of integrity and strength of the justice system (Rauch 1994).

Post-Apartheid South Africa has a troubled history with regards to law enforcement and judicial systems. The South African Police Service (SAPS) and judicial systems, under the Apartheid regime, were used as a
means of intimidation and facilitation of power. Police brutality and force were used to enforce the inhumane and racist laws of the minority white governed National Party government (Marks 1995). In these times the judicial system, as in the case with many oppressive regimes, served to curtail the basic rights of the majority of the population. The architecture of the time further aimed to oppress the majority and express the might of the government. Although, now in a democratic free state, the stigma attached to the image of the South African police service as an enforcer of government has not yet been redeemed (Marks 1995).

Furthermore, the architecture associated with the criminal justice system, a remnant of the apartheid regime, also has a detrimental effect on those working for these institutions, who serve to protect the public good. In such positions of stress, where on a daily basis these public servants come face to face with the worst elements of society, the psychological effects are well documented with these important figures often lacking inspiration and losing faith in goodness of society (Marks 1995). Therefore the architecture serves as an opportunity to inspire such people and ensure that the values for which that have been fighting for are reinforced. Moreover, the creation of specialized facilities to house these various institutions have been neglected, with a present day trend of locating facilities such as police stations in standard office blocks being widely exposed in the media. In a country where crime is unfortunately a part of societies subconscious, this practice seems inappropriate, and raises questions regarding how this contributes to the public perception of the police force.

The architecture associated with the oppression of the majority during the apartheid has remained to serve the new Democratic Republic of South Africa. In a society now based on freedom, the memory associated with these images of oppression serve only to strain ties between the community and the judiciary. Furthermore, in the new South Africa, architecture needs to encourage a holistic approach to justice and law enforcement where community involvement and interaction with these institutions is encouraged as a means of social upliftment and integration which ultimately leads to crime prevention. The new Constitution entitles citizens to freedom, security and dignity, and therefore the duty of the security forces is to protect the rights of the public (Mufamadi 1994). The establishment of this rights based approach to policing will form a powerful symbol of the new democracy and furthermore re-instill public confidence in these institutions (Mufamadi 1994). This is in line with Markus argument that buildings can be seen primarily as social objects rather than mere art, investment or technical triumphs (Markus 1993: 3). In this context, where the vision and objectives of a public institution have changed, the civic architecture
associated with these institutions provides a valuable platform to redefine the public image and thus the social relationship between public and the institution.

1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES

1.2.1 Definition of the Problem

The perception and understanding of symbolic architecture is widely reliant on culture and thus a framework of belief (Jencks 1985: 238). These ideologies upon which the culture is based will often form the basis for language which the architecture adopts. Depending on the socio-political climate of the time and place, concepts such as fear, power, democracy or equality can be demonstrated through the use of the built environment. Semiotics, or the understanding of language, in architectural expression is especially relevant in societies which are trying to reinvent themselves as is the case with South Africa as it moves from apartheid to democracy (Joubert 2009:12). It is on this basis that the research finds relevance with special reference to the public protection and justice systems which hold great power in the symbolic transformation of the country.

Although primarily focused on the role of the built environment in the formation of a public cognitive image, the research also finds broader social relevance in the social perception of civic institutions. Governmental organizations, corporations and religious institutions rely heavily on their public image to secure a positive relationship with the public. The media provides a good platform for these institutions to brand themselves and thus influence public perception in a broad manner. Furthermore, this provides a basis for the creation of a working relationship with the societies which they serve. A community which feels connected to the institution such as a police station will be more inclined to form a closer positive working relationship (Rauch 1994). Architecture, which pre-dates print and television media, can further add to the forum whereby these institutions establish a positive public image and more importantly, a successful working relationship. As previously discussed, the post-apartheid South Africa is still in the process of redefining and reconstructing the public images of institutions such as the justice and public protection sectors. In the democratic South Africa the Reconstruction and Development Programme (RDP) provides an outline of the policy changes the government seeks to undertake. This plan seeks to create a coherent integrated socio-economic policy framework to move towards a free and democratic country.
Within this framework, the importance of consultation and the creation of a positive working relationship with civil society is highlighted (www.nelsonmandela.org). The problem facing the architecture of civic institutions and even that of corporate brands is how to successfully align with changing policies and frameworks and successfully express these ideals to the society which their built environment serves and thus form a coherent positive cognitive image with the public.

1.2.2 Aims

The aim of this research is to investigate and understand the importance of the creation of a cognitive image through the built environment and furthermore explore the factors which influence the development of meaning and perceptions of civic entities and the urban environment as a whole.

1) Understanding how spatial planning and urban design of architecture can create a positive psychological and physical linkage between the individual, society and the given institution.
2) Investigate the importance of architecture in the image and identity of civic institutions.
3) Explore how meaning is given to architectural form.
4) Understand how culture influences perception, meaning and identity within the built environment.
5) Understand how existing public perception of an institution influences how the public views the architecture.
6) Investigate the role of physical form and experiential symbolism in the creation of a cognitive image.

1.3. SETTING OUT THE SCOPE

1.3.1 Delimitation of the Research Problem

This research will seek to understand the importance of symbolism and the cognitive image in the creation cohesive communities. Thus, the main area of focus will be on the psychological and metaphysical importance of architecture and will aim to establish how architecture can successfully express meaning to the society which it serves. Furthermore, the research is to investigate whether the physical form or the
experiential value of space is more important in creating meaningful symbolism and positive cognitive imagery within the built environment?

This research seeks to understand how architecture can be used in modern times to convey positive meaning and promote a successful relationship with the community through the creation of a positive cognitive image. The research takes cognisance of the diverse nature of cultural differences and will not seek to define a specific culture specific formulation for specific symbolic meaning.

1.3.2 Definition of Terms

Signifier: The pattern of marks on paper, sounds in the air or even building forms by which the sign itself is made physically manifest.

Signified: The concepts or ideas which are represented by the signifier.

Built environment: In terms of this research, this term refers to all built form, including architecture, urban design, landscaping and elements such as sculpture.

Cognitive Image: This is the generalized mental picture of the exterior physical world held by an individual, based on immediate sensation and memory of past experience. This is used by the individual to interpret the situation and gives an emotional and analytical perception of that environment (Lynch, 1960:4).

Subject: The person or society who is experiencing and thus interpreting the building. (Markus 1993)

Subjective: Phenomena appertaining to mental life

Objective: Phenomena occurring in the physical environment (Hesselgren 1969: 14)

1.3.3 Stating the Assumptions

Key assumptions are:

1) People perceive their environments and thus give meaning to form, space and objects.
2) Symbolism and image are important tools in architectural expression.
3) Civic entities use symbolism and meaning to express their relationship with the public
1.3.4 Key Questions

The primary research question will seek to understand whether the physical form is more important than the experiential value of space in creating meaningful symbolism and positive cognitive imagery within the built environment?

The relevant questions to answer this problem are as follows:

1) How does perception influence symbolism and meaning?
2) How does sensory experience through spatial and 3 dimensional planning create a symbolic meaning in architecture?
3) What is meaning?
4) How does architecture communicate meaning through form?
5) What is the role of symbolism in architecture in civic society?
6) What is the importance of creating a positive cognitive image, through the built environment, within the minds of the public?

1.3.5 Hypothesis

The hypothesis for the research is as follows:

In order to create meaningful spaces, where a symbiotic relationship is created between the public and civic entities, positive cognitive imagery will best be established through the appropriate use of both form and experiential symbolism.
1.4 CONCEPTS AND THEORIES

1.4.1 Semiology

Semiology, the theory of signs, is essentially the fundamental science of human communication (Baird, 1969:7). In order to understand meaning in the built environment, a semiological approach is required to understand the mechanics of meaning and perception. Within this, the concepts of iconism and monumentality versus that of the small scale narrative need to be discussed. Fundamental to semiology and meaning in architecture is the idea that any form in the environment, or sign in language is motivated, or capable of being motivated. Saussure points out that although a form may initially be arbitrary, subsequent experience of that form may give rise to the form acquiring meaning (Jencks 1969: 11).

Related to the notion of semiology is symbolism. Symbolism within the built environment is an important element within this research. Symbolism is the expression of the intangible or invisible by means of visual representation and thus is of interest when understanding how social, cultural and political ideals are represented through the built environment.

Perception also forms an integral part of the study. In order to understand how meaning can be successfully transferred to the public through the built environment, it is important to understand how perception is formed within the mind of the individual and community at large.

1.4.2 Identity

An understanding of the expression of culture and identity through architecture is also required as culture can be defined as the totality of symbols in which human life within a group is realized (Mehrhoff, 1990: 13). It is thus through culture that identity is established and architecture forms part of the symbolic whole of culture.
1.4.3 Hybridity

Linked to identity and culture is the notion of Hybridity, increased globalization has meant the merging of local regional cultures with universal ideals. This has lead to the creation of new hybrid cultures where symbols and the subsequent meaning have become blurred. It is thus important to understand how symbolism and meaning should adapt where different perceptions and ideologies are combined, and furthermore to understand the impact this has on the cognitive image created.

1.4.4 Phenomenology

This refers to the experiential nature of architecture. The preoccupation with the visual realm has accounted for many astounding photographed buildings; however these buildings often fail to leave a lasting impression on the occupant. Phenomenology seeks to create an integrated architectural sensory experience. Rather than placing importance with the object, it is how the object relates to and communicates with the subject to further the cultural environment inherent in the place. This may be argued as a deeper form of expressing symbolism and meaning.

1.5 RESEARCH METHODS AND MATERIALS

As this research is based on meaning and human perception of the built environment, this research primarily used qualitative methods of data analysis. The understanding of emotional and psychological links between people and the built environment required an insubstantial measurement of the concepts, opinions and subjective qualities. To achieve this end, both primary and secondary sources have been used in this research.

1.5.1 Primary Resources:

1.5.1 a) Criteria for selection of case studies:
Given that the research was based on civic or public buildings, the chosen case study needed to be civic by nature. Furthermore, the case study needed to be linked to an institution which is effected by the socio-
political climate. This is to understand the link between the social context, the principals of the institution and how this is manifested in the built environment

1.5.1 b) Case Study 1: The Durban Magistrates Court
Described by architects I interviewed as a monument to the apartheid regime, this building was of interest in understanding how the institution of the judiciary was portrayed during the apartheid era and how appropriate these are in today’s society.

1.5.1 c) Case Study 2: Ntuzuma Magistrates Court
In contrast to case study 1, this new court scheduled for completion in late 2012, attempts to follow the principals of the new democratic South Africa and to help redefine the image of the judiciary. A comparative case study was undertaken.

1.5.2 Instruments Used to Conduct Research:

1.5.2.1 Focused Interviews:
This involves asking questions systematically to find out what people think, feel, do, know, believe and expect. The respondents are to be known to have been involved in a particular concrete situation or an uncontrolled but observed social situation. The objective of this method is to understand the individual’s interpretation of any situation in a personal capacity

At Case Study 1, the researcher interviewed members of the public, police officers, judges, lawyers using the building. This was done in order to understand what affect this building has on their perception of the greater judicial system, and also to understand how their personal experiences within the building have affected their personal image of the judicial system. The researcher was able to interview 15 participants in total. The researcher used stratified sampling in order to gain an understanding of a variety of different experiences of different groups within the building. Police officers, lawyers, members of the public and magistrates were interviewed. Orphans and widows were avoided.
At Case Study 2, the building had not yet been occupied and as such it was impossible to do interviews as in as in Case 1. However, contact was made with the Chief Justice of the Court who was able to answer questions on his perception of the building in relation to the justice system.

1.5.2.2 Observing Environmental Behavior
Within Case 1, the researcher observed the behavior of people within the context of the building to understand how people use, and are affected by their physical environment. In this instance the researcher was part of the situation as well as an observer and as such the researcher’s personal perception of the spatial experience was also of interest. The researcher observed how different spaces were used, their functions and the perceived emotional state of people. This was done in order to understand how the building influences activity within an institution.

1.5.2.3 Observing Physical Elements:
The researcher analyzed the form, planning and urban fabric of both Case Studies to understand the context and reasons for the physical objects and to understand what meaning was given to and perceived by the forms. This was undertaken by visiting the buildings and studying the built forms. Furthermore, it was achieved through analyzing of plans and design reports acquired from the architects for Case 1 and the department of public works for Case 2.

1.5.2.4 Interview
An interview and tour of Case 2 was conducted with Olga Shumilovska of Dgit Architects, the architects responsible for the design of Case 2. An interview was prepared for the architect to understand what the intentions for the design of this building were.

1.5.2.5 Original Documents
The researcher also gained access to original documents within the offices of Case 1. The documents included speeches and commentaries of the opening ceremony of the building in 1976. The researcher used these documents to get an understanding of what was intended for the building and how it was interpreted in its original context.

1.5.3 Secondary Resources
1.5.3 a) Key Precedent Study: The Constitutional Court (OMM Design Workshop)

The Constitutional Court has been described as an architectural symbol of democratic South Africa (Joubert, 2009:116) seeking to redefine the public image of Justice with in the country through the use of African Symbolism. To understand how quality of space, form and experiential nature of the building have shaped the symbolic image of one of the highest institutions in the country, a visual as well as spatial study through literature will be of high value to this research. As the symbolic form of the Constitutional Court is of interest to the research, it is important to analyze the physical nature of the object. The researcher will study the physical form of the building and how the various forms are symbolic in nature.

1.5.3 b) Literature Review

The research makes use of a review of the available literature to synthesize an understanding of the diverse nature of the research topic. Literature will be sourced from books, journals and articles available at libraries and on the internet.

1.5.3 c) Precedent Studies

Other precedent studies of buildings acknowledged for their symbolic value will be undertaken to analyze how symbolism has been engineered, and furthermore, how they have contributed to the public cognitive image.

1.6 CONCLUSION

This chapter has established the research background as well as the motivation and methodology for the study. Through this introduction, parameters have been established for the research of this dissertation. The research methodology has been documented and the information collected has established the conceptual and theoretical framework upon which the research will be based. As stated, two case studies were carried out for the reasons listed, with the criteria for the selection of these case studies having been discussed in this section. The following chapters will bring together the primary and secondary research undertaken by the author to further understand the creation of cognitive public image within architecture. Chapter 2 is a review of the existing literature, concentrating on meaning in the built environment and how it is given and interpreted, both individually and by society as a whole. This chapter is concluded by the precedent study of the Constitutional Court of South Africa. Chapter 3 contains the case studies of the Durban Magistrates
Court and the new Ntuzuma Magistrates Court. Both buildings house the same functions yet the image they create and the message they give are vastly different.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction to Semiotics and Meaning in Architecture

2.1.1 Semiology and Meaning

In order to understand meaning in the built environment, a semiological approach is required to understand what mechanics are at work when meaning is conveyed or perceived (Krampton, 1979: 1). Semiology, the theory of signs, is considered the fundamental science of human communication (Baird, 1969: 7). As such, meaning and semiology are inherently linked to the notion of language, the system of agreed upon rules to communicate. The link between language and objects, architecture being an object, is the common root that they are human artifact. Krampton states that an artifact is the result of human labour, which is an intentional act where the labourer has learned to assemble his materials. Language too is learned by society and intentionally formed and produced by man (Krampton 1979: 13)

Language is however not meaning, it is the conveyor of the meaning. The success of conveying meaning through language rests on a commonly understood understanding of the texts or words. A scholar of material culture J Kouwenhoven clarifies this problem through the understanding of a “bank”. In describing the experience of a bank he notes the following: the classical entrance, a domed banking hall with mosaic floors and mahogany counters. This, in his experience is the physical reality of the word “bank”; however, he then states how a person living in Hong Kong visiting the Shanghai Bank’s Headquarters would have a vastly different experience and thus different mental picture of the word “bank” (Markus 1993: 5). This example demonstrates how the built form as a ‘word’ can be misunderstood depending on the author and interpreter having shared the same experiences. This further opens the debate as to where meaning in text is derived from, is it created by the author or the readers mind? This analogy by Kouwehoven establishes the weaknesses of language and the power of experience when dealing with interpretation of meaning. This example shows that language requires a speaker and listener who are members of the same language-using society, where given and acquired meaning will intersect successfully through a common shared experience and understanding. (Markus 1993).
The importance of meaning is given by the fact that meaning only becomes a problem when access to it is difficult, or when a new language is encountered without the aid of a translation. When a building is viewed out of its original context its narrative is somewhat distorted. The narrative of a building is continually unfolding through conception, production, use, and even changing use. The difficulty comes as society adapts and changes, and the clarity of such narrative becomes difficult for the subject to understand especially where function has changed. (Markus 1993:5). The ever changing contexts of history and society mean that to understand the true meaning of a building the tradition has been to isolate the building within its own original context. This however, is problematic, as the only true experience one can have is of his own narrative through and of the building in his own societal context.

Nelson Goodman argued that we must consider how a particular work of architecture conveys meaning before we are able to understand what the building may mean (Vale 1959: 4). He further stated that although architectural meaning can be purposefully conveyed, a building can also gain meaning through association (Vale 1959: 4). Goodman identifies four ways in which architecture can infer meaning: Denotation, exemplification, metaphorical expression, and mediated reference. When viewed together these methods explain how differing layers of interpretation can exist. An example is that of the Lincoln Memorial in Washington, DC. Denotation is where meaning is read literally, as in the Lincoln Memorial, where speeches carved into the wall give direct communication. Exemplification or the highlighting of an object is used as the memorials east façade draws attention to its centre along the central axis of the urban...
design as well as through the rhythm of the columns. In this way importance is given to the Lincoln statue. The building may also be seen in metaphorical terms as the architecture of the Memorial pays homage to the ancient temples with the statue of Lincoln placed as the deity within. Lastly, the mediated reference or rather the chain of thought or reference that is established through the deification of Lincoln. This chain may see Lincoln as a broader savior of national unity and racial equality and thus the memorial becomes associated with the advancement of civil rights, this may explain why many civil rights protests are held in front of the memorial. (Vale 1959: 5)

Arnheim states that a work of architecture, as a whole and in its parts, acts as a symbolic statement, which conveys, through our senses, humanly relevant qualities and situations (Arnheim, 1975: 208). Furthermore he states that the built environment is a fact of the human mind experienced through physical reality as well as the resultant thoughts and strivings (Arnheim, 1975: 4). Broadbent further states that meaning can be given to any object if there is some relationship with the individual, a symbol on the other hand can generally only be read if learned within a particular cultural context (Broadbent, 1979: 3). As such architecture can symbolize and give meaning to various different physical as well as emotional elements; these can be representative of the following:

Figure 3. The “deity” of Lincoln (source: http://benedante.blogspot.com/2012/02/romance-at-lincoln-memorial.html)

Figure 4. A Rally at the Lincoln Memorial (source: http://www.fitsnews.com/2010/08/29/beck-turn-back-to-god/)
ARCHITECTURAL CODES: (Broadbent, 1979: 110).

1. A way of life sign, a sign of ethnic domain, a sign of inhabitation and comfort
2. A sign of building activity (e.g. connection between inhabitant and house)
3. A sign of traditional ideas and beliefs
4. A sign of various functions
5. A sign of socio-anthropological meaning. (proximities)
6. A sign of psychological motivation (e.g. phallic / sexual codes)
7. A sign of spatial manipulation
8. A sign of surface covering (rhythm, colour, texture...)
9. A sign of formal articulation

2.1.2 Form and Meaning

Architectural form can be divided into three components: the spatial composition or geometry of space which is defined through planning. Secondly the mass which is the concrete material which defines the space and lastly visual phenomena such as light and colour which affect the visual image (Markus 1993: 12). This section will deal specifically the mass and planning. The human mind intrinsically seeks meaning, at both a trivial and profound level. Take the example of the apparent face in the cloud, in this regard humans are the only animals which would actively seek and recognize forms in clouds. Humans read everything they see for its significance and are frustrated when the environment does not reward the expectation that life is meaningful (Jencks, 1985:35). Physical form of an object is the set of all its features directly or indirectly perceptible, such as shape, colour, texture, smell, sound, temperature, weight, etc. Significant form is an abstraction of physical form which includes some of its features, those which refer to the meaning, and excludes the rest (Broadbent, 1979: 283). Form which intentionally and consciously applies symbolism is generally superficial (e.g. the design of a sawmill owners house blade) (Arnheimn, 1975: 207). The conventional symbol such as the cross shaped plan of a Christian church has very definite meaning based on the cultural and social preconceptions. In this case, it is intrinsically linked to the powerful Christian imagery of the cross and crucifixion, as such all other possibilities of meaning are removed from the form of the cross in this context (Arnheimn, 1975: 209).
To successfully impart meaning or symbolism, the form is allied to more basic and spontaneous expressions (Arnheimn, 1975: 208). In architecture, as in language the metaphor is more expressive than the simile. The metaphor is generally derived of expressive shapes and actions in the physical world such as in “high” hopes or “deep” thoughts.

Figure 5. 3d Visualization of the Tallinn Town Hall showing the permeability and accessibility to the external public spaces (BIG 2010:162).

An example of this metaphor can be seen in the design of Tallinn Town Hall in Estonia by BIG Architects. In the old town which houses many historic towers and spires, the new building has tilted roofs which extended upwards to the sky, metaphorically paying homage to the old spires. Furthermore this building is intended as to stand as a symbol of a participatory democracy through an open and permeable institution rather than the typical organization representing power and authority (BIG 2010: 162). The town hall seeks to express a two-way transparency, an institution aware of the public and their needs as well as an institution which is easily accessible to the public.
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The building offers open glazed facades to the public plazas which are partially covered by over sailing canopies created by municipal offices above. The glass allows the public to view the processes within therefore giving the impression that the civil servants are approachable and of the people, rather than cold-minded administrators behind impenetrable buildings (BIG 2010: 162). At the same time the civil officials can enjoy at clear view of the public plaza creating a sense of connection to the public who they above all serve. As another reminder that the building and its occupants exist to serve the surrounding town and its people, the buildings facades and roofs are to be clad in a reflective material. The reflection of the town on the building clarifies how this institution aims to be interdependent with the people to form an open democracy. This reflective element is also in response to the old town hall where a vaulted ceiling was decorated with a mural of the sky and land under the ruler of time, the cladding of the new building gives the public a similar opportunity to enjoy the reflections of the town. In terms of planning, the conceptual approach was to move away from the typical formal rectilinear planning associated with municipal authoritarian buildings.
A rectangular plan, made up of several smaller squares, was broken up into the various squares with each square being rotated. This conceptual approach allowed the diagrammatic planning to become instantly more permeable and accessible, rather than a solid block as is typical of many civic municipal buildings. Beyond just making the building permeable, the separating and rotating of the blocks facilitated the formation of courtyards which allows plentiful light within all areas of the building. This abundance of natural light furthermore provides an uplifting light and positive environment hopefully portraying the ideal of democracy. This further reiterates that architecture beyond just a physical fabric is a cultural phenomenon. Architecture is easily scientifically documented through building sciences, behavioral

Figure 8. Aerial view Tallinn Town Hall showing the permeability and courtyards (BIG 2010:163).
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sciences, and environmental sciences, however people also build non-scientific conceptions of architecture. People make assumptions of the values inherent in the architecture (Bonta, 1979: 14).

Figure 9. Conceptual plan development of the Tallinn Town Hall (BIG 2010:166).

2.1.3 The Role of Function and Typology

The three elements of form combine with the function of a building to give meaning about the world (Markus 1993: 12). The function of a building, especially a civic building, speaks about the society of the time. The abstract notions such as sacred-secular and lawful-criminal are concretized in the spaces labeled for their different functions such as the law court or church (Markus 1993: 12). Markus describes the function of a building as the social practice inscribed into a building. The law court for example has been built in a variety of different styles and also in different spatial structures. These spatial structures signify different social relationships which may change as society develops. As such function is linked to a spatial structure defined by societal relationships. These spatial structures defined by the function and the social relationships, can be defined through methods such as restricting access. Controlled or free flowing movement between spaces can define privacy or the hierarchy of spaces which they separate; furthermore the abstract ideals of freedom and transparency or oppression can be achieved through these methods (Markus 1993: 25).

The narrative of a building created through its use may be just as powerful as the form itself. Kouwenhoven described how meaning was powerfully portrayed through experience and memory. The function of a building gives rise to its use, however, the external stranger knowing the function, could not know the real value associated with that space by the occupants. Kouwenhoven contemplates the different meaning the
stranger will gain from being at your old school, or the house you grew up in or even the church in which you were married. As such the narrative of use can be as moving or poetic as that of form. (Markus 1993:9). Even when a building is designed with the intention of imparting no meaning at all, or as a faceless object in space, the people who interact with it will interpret it and give meaning to it as they see fit. As such some buildings designed to convey a message are interpreted differently to the given meaning (Bonta, 1979: 22).

The question of symbols in architecture is a broad principle. It may be argued that most architecture does not communicate but rather simply acts as a functional entity (Broadbent, 1979: 12). However, function is an intrinsic part of communication. A roof serves to shelter and stairs serve to move an individual from one level to another. If a person encounters stairs or the roof, they are innately aware of their function, even if being unused, these objects signify their function. It is the idea of these objects when in disuse that gives them meaning, the object itself communicates the function to be fulfilled (Broadbent, 1979: 13). If it is accepted that architecture communicates, then architecture can be viewed as a system of signs. This functional approach views architectural signification primarily through the use of specific organizing notions and concepts, rules and prescriptions (Broadbent, 1979: 244).

The image of the building should lead, not mislead, in its overall arrangement as well as in detail. The principle of correspondence between function and appearance has a purely practical aspect (Arnheim, 1975: 205). The shapes of buildings in a cityscape create a visual language giving cues to the typology of the building, distinctiveness being derived in part by the differences in function i.e. a library vs. a hospital (Arnheim, 1975: 206). Typologies have changed over time as culture has evolved, a church or theatre of today looks very different to examples of the past. In the case of religious architecture, new forms seem to have very little resemblance to gothic or Romanesque cathedrals of the past. Yet they still have standard elements such as the nave and alter etc. A new set of rules has been applied to give an identifiable image of the building and its use. The images are continually changing as cultures and communities develop (Arnheim, 1975: 206).
2.2 Meaning in the Urban Scale

2.2.1 Image of the City

Language and meaning can be given to the urban environment. Barthes held that the city is a general language consisting of relationships and oppositions of elements, with the meaning of the city to be found in the perception of the readers (Krampten 1979: 32). This view was enforced by the work of Lynch where parts of the city such as the node or landmark were seen as texts. In this regard, the meaning of the city was derived from its functions and how the relationships between the various elements were structured. Beyond Barthes theory, Choay proposed 3 separate semiological theories based on different historical contexts. The meaning of the medieval city was to promote human contact; the renaissance system of meaning was based perceptual qualities, with space being primarily aesthetic. Lastly the industrial revolution system was a time where space lost its meaning and simply became a functional instrument of circulation (Krampten 1979: 32). As such urban meaning is generated by its function as well as territorial, psychological and cultural behavior and it is the role of the designer to integrate these elements. According to Fauque, urban meaning is based on the ways in which people perceive the city which coincides with Lynch’s preoccupation with the elements of the city. This method looks at the arrangement of objects based on notions such as “central vs. peripheral, close vs. far or dense vs. clear. This proposes that a structure such as a tower would be influenced by the qualities of objects and space around it as well as its own placement within these conditions. If the tower were to move, it could for example lose prominence and thus its meaning could change. This can be described through the example of the Arc de Triomphe.

Figure 10. The Arc de Triomphe at the centre of the Champs Elysees (source: www.bookitnow.com/paris-tours-when-in-paris-be-enchanted)
The Champs Elysees runs along an axis which penetrates the length of the city of Paris. The Arc de Triomphe is situated at the centre of this axis and is given prominence due to its position along the axis. However, if the Arc were moved to either side of this axis, the object would be perceived in a very different way. When considering the meaning given to urban design, the example given here of Paris is of interest as the meaning given to the powerful axis has changed with society and the culture over time. The grand axis first served as a reminder to the public of the hierarchy of the monarch, and it was here that grand imperial processions took place. However, having undergone a variety of socio-political and cultural changes the axis has been redefined. With the advent of the Grand Arch of La Defense and the Pyramid of the Louvre, the axis is now a symbol of high culture and capitalism (Vale 1959: 20).
Lynch states that citizens of a city have personal associations with different parts of the city and that the image an individual has will be based on memories and meanings gathered over time (Lynch 1960: 1). A clear mental image of the cityscape is given both practical and emotional importance to the individual subject in the city. Lynch states that on a practical level, a legible city which creates a clear mental image, will allow for easy access to important points such as police stations or hospitals. Beyond this practicality, a clear image may also allow for a sense of emotional security as fear is associated with disorientation (Lynch 1960: 5). Orientation and legibility thus form an integral part of a clear image. The environmental image is the result of a process between the subject and the object. The subject observes the object or environment and gives meaning to the image through his own perceptual input which may be his own prejudices or past experiences (Lynch 1960: 6). As such the mental image of a reality may be different for different observers (Lynch 1960: 6). To create a coherent image amongst individuals requires a common group of similar socio-political, geographical, historical or cultural backgrounds (Lynch 1960: 7).

For an image to have value in a city, Lynch states that the image of the building or city should allow the individual to operate successfully within his environment (Lynch 1960: 9). The mental image should easily guide a person to where they need to be. Lynch describes the quality of how successfully an object achieves this clear image within the mind of an observer as imageability. This identifiable and powerful image may be achieved through colour, shape and arrangement or even through a sharp relationship to the other senses. Lynch states that as the development of an image is a two-way process between the observer and the observed, the image can be strengthened by training the perceiver or reshaping ones surroundings (Lynch 1960: 11). In the South African context with specific reference to the justice and Police systems which had such a negative yet powerful image in the apartheid era, architecture and urban environment provide an opportunity to retrain the perceptions of the public by reshaping the environment.

According to Lynch, in order to create the powerful clear public image which is necessary for the creation of a successful city, the contents of the city should be divided up into various elements which come together to form the whole image. These elements are: Paths, edges, districts, nodes and landmarks. Paths are the channels along which the observer moves such as roads and walkways. How these paths are arranged or related will give hierarchy to parts of the city or is the primary point from where the city is observed. Edges are boundaries between various elements within the urban realm. A boundary may suggest impermeability or may encourage interaction and may define outlines. Districts are large sections of the city which are recognizable as having a common identity or character. An observer may have a strong
image of a city based on the different zoning such as a cultural precinct or municipal precinct. Nodes are generally intensive focal points which the observer enters such as where paths or transportation routes end or intersect giving rise to a point of importance or rather a point which creates a powerful mark on the observer’s image. Landmarks are similar yet are not entered by the observer; they are an external physical element which is easily identifiable (Lynch 1960: 48). It is the combination of the qualities of these various elements which gives meaning within the urban environment and develops the mental image of the observer.

2.2.2 The Cohesive City

The city and the built environment can be described as a result of a series of decisions made by human civilization rather than a series of accidents and thus the city acts as an indicator of the state of the civilization at any given time. A cohesive city is key to a complete and clear image of a city within the mind of the public. The growth of the ancient Greek cities along movement systems, typically that of sacred processional pathways used the minimum construction necessary to articulate and celebrate the important free flowing movement systems for man’s use, rather than impose function and order, the flow of life was expressed as an organic entity. The Greek cities were based on the interaction of tensions across space and through the use of interlocking architecture where buildings were able to reach out across space through shafts of energy and make strong connections with the public moving through the streets. (Bacon: 1967; 68).

Another example is the city of Priene, where there is harmony of architecture and planning through one unified design idea where the entire form down to the finest detail will read together as one and thus allow for people to have a strong unified sense of the city (Bacon: 1967; 62). The city of Camiros, allowed for the gradual accumulation of many buildings over time where each individual designer is sensitive to the existing state of the city (Bacon: 1967; 63). These 2 examples showed that the design of a city does not necessarily have to have a complete design ideal as long as a sensitivity and respect is shown on the designers behalf to create a unified and cohesive cognitive image. In contrast to the Greek cities, Rome placed rational order into the design of buildings through the fragmentation of space (Bacon: 1967; 71). Here unlike in ancient Greece, where the delicate tension between buildings was key, growth was achieved through the accumulation mass which were held in place in their composition by the powerful force of
compression and the interlocking of axes connected to these large masses. Roman architecture achieves a harmony of design as a result of the similar theme in the form of sheer mass modulated and unified through the use of colonnades and the visual connection of axes (Bacon: 1967; 68). However, even though mass is used a cohesive city is created within the mind of the public.

During medieval times the scale of buildings seen in classical times disappeared. The city design was based on rational principles but unlike in Roman times where the city was viewed in terms of individual rigid connections between masses, the city is seen as an organic entity and as complete whole which Bacon believes is one of the most important contributions by the medieval era. Bacon describes how through design dispersal a unity is achieved between the scale of the neighborhood and the scale of the city (Bacon: 1967; 79) using the example of a large central cathedral surrounded by smaller ones in surrounding neighborhoods. Here there is the establishment of dominant and subdominant themes where the citizen feels pride in the immediate neighborhood but is still connected to the city as a whole (Bacon: 1967; 87). During the Renaissance era designers of the time created a rational basis for the extension of the city in accordance with the new larger scale of the city where elements were constructed such that created psychological and visual centre’s which became the orientating point for later work (Bacon: 1967; 93). During this time order was created from chaos through the definition of axis originating from these orientating points, the directional force was an important element in creating unity and coherence. During this time the integration of the architecture of buildings and the modular placement of sculpture established that the space itself could be the subject of the design such as was seen in the great piazzas of the time. Furthermore, during the Baroque period, designers deliberately planned a network of lines of design energy on a city wide basis, providing channels for the transmission of the design energy of existing buildings and creating locations calling for new design. The example is given of the simple placement of obelisks in Rome at important nodes which unified the separate nodes and the city into a complete whole. This example shows that a single point in space can achieve a powerful design force as the obelisks became the organizing factor of the immediate vicinity and acted as the termination points of the various movement systems with their influence extending along the lines of connectivity strung between them (Bacon: 1967; 117).

In contrast to these very unified ideas of city wide design the modernist planning as exemplified by Le Corbusier’s vision of an austere and completely ordered environment which harbored ideas of disconnection. Le Corbusier’s vision allowed for the design of the land and the building as separate entities.
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and the arbitrary placement of the building on the land without regard to the environment and without a total city design principle to adhere to (Bacon: 1967; 217). With reference to the new city of Chandigarh, Le Corbusier screens off any awareness of the existing city in his architecture and creates what is essentially a vast series of islands. His buildings fail to connect to each other and to the city as a whole and thus Bacon believes that it is impossible to learn from Le Corbusier when seeking application to the larger problem of the city (Bacon: 1967; 219). This isolation is evident though the use of the public plaza at the centre of the political institution of power. The vast open space intended for public gatherings is only ever used as a transit space for people working in the complex. (Vale 1959: 115)

When considering the urban environment in terms of a semiological view, the urban environment would be considered as the combination of architectural objects into an integrated whole. As in language where word is part of the language, so architecture is part of the language of the urban fabric. Although the city grows as an organism, architecture and urban objects should be designed to integrate with the meaning of the urban whole (Krampten 1979: 66). In this sense the meaning given to city should be considered above the meaning of its components. However, in South African cities where a new democratic government has taken over from a divisive regime, the problem is how to reintegrate the city structure into a system which is appropriate to the new political power. In this sense the components will have to redefine the whole.
2.2.3 The Importance of Urban Space over Mass.

Within the realm of urban design and architecture the importance of space is argued in that space is experienced as the given that precedes the objects in it, as the setting in which everything takes its place (Arnheim, 1975: 8). Space should thus be construed as the dominant element rather than mass. Bacon defines “Architectural design” as the interrelation of mass and space (Bacon: 1967; 15), where mass is an earthly entity, conversely space is the universal system from which a much greater satisfaction can be achieved. Form is described as the point of contact between mass and space (Bacon: 1967; 16) which therefore reflects the relationship between man and his universe, an example being the Pyramids in Egypt which dominate through their mass and in contrast the concave roofs of China indicate modesty and a state of harmony with nature. Furthermore, Bacon states that it is the role of architectural form to create spaces which are infused with the spirit of society, as it is the experience of being within a space which human beings relate to rather than the architectural form itself. The articulation of the architecture should therefore stir the senses and emotions of the user of the space through the use textures, colors, materiality, and the modulation of light and shade (Bacon: 1967; 18). As space is in an experiential entity, it cannot be considered in any one dimension, it must be considered in 3 dimensional physical forms as well as in terms of time and movement (Bacon: 1967; 19). The experience of the city is a continual series of experiences, it is thus the role of architectural composition to heighten the drama of living in the city and articulate the continuous flow of harmonious experiences and impressions through space (Bacon: 1967; 19). To achieve this harmony, it is thus important that there is always an engaged relationship between built form, space and the human participator, moreover it thus essential that the designer imagine his creations from the viewpoint of the person on the ground rather than that of the disengaged intellect (Bacon: 1967; 29).

As stated the dominant force is not the architectural mass but rather the relationship between space and movement where mass is rather the product of movement through space (Bacon: 1967; 34) and thus it is the role of the designer to create continuity of experience along the tract of movement. However, there are simultaneous continuities of these movement patterns, these being movement of differing speeds and modes but which are all interrelated as simultaneous experiences. It is thus the task of the designer to ensure appropriate response to these differing yet connected experiences. The built form should thus express the speed of movement through space i.e. the fast freeway can have free flowing curves and forms with widely spaced articulation whereas the movement of the pedestrian is slow and thus variety and points
of interest at rapid change are more appropriate (Bacon: 1967; 35). Feelings of anticipation and fulfillment along movement systems can heighten the drama of the experience.

The dynamic of movement is not isolated to systems passing by buildings; the metaphysical movement of the built form through space is described quite simply by Bacon: The point moves off to create a line, the line moves to form a plane, and it is the movement of the plane that gives rise to the 3 dimensional building/body. When the body moves, it is reduced to a point, as the point produces a line, so the building creates a shaft of energy into space which impinges on the sensibilities of people who move about the space (Bacon: 1967; 49). It is this shaft of energy that connects the design of individual buildings along a movement system to each other and to the movement system itself. This allows for an architecture which interlocks, where buildings reach out across space to create tension in the space between. This connection to the movement and to the surrounding buildings helps create a more complete cognitive image within the mind of the public.

The role of space in imparting meaning to the public is thus of great importance. The architecture and built form create the spaces in which the public perform the activity of life. As such the building can portray meaning through its relationship to the other structures and the surrounding space and can reinforce issues such as alienation and empowerment. When considering a civic building, the institution is able define its relationship with the community through its relationship to the city. The meanings extend beyond the facades of a public building into the urban fabric. The dominance of scale in the precinct, through proportion and material can influence to what degree of isolation or accessibility to the public. When considering the movement of people around civic structures, especially in times of high pageantry such as civilian protests, the origin, the route and the destination may be symbolic in nature (Vale 1959: 9).

2.3 The Role of Culture and Society in Meaning

2.3.1 Phenomenology and the Importance of Place

The myths associated with Australian Aboriginals believe that the world was created by spirits of nature in “Dreamtime”. These myths are passed down through poetry, song, paintings and stories told at places known as “Dreamsites” which hold a high degree of symbolic meaning for the people. It is not the
Dreamsite which gives the space its power but rather the stories, song and rituals which are associated with the site that give a powerful mental structure to the people. It is these invisible cultural structures which give power and significance to the physical built environment (Markus 1993: 3).

As such meaning is also linked to cultural systems such as music and art. Even if not completely understood, these are recognized as cultural systems of signification (Broadbent, 1979: 244). Semiotics, beyond being the science of recognized systems of signs, is also a science of studying all cultural phenomena as if they were systems of signs, assuming culture to be understood as a form of communication (Broadbent, 1979: 11). As architecture forms part of the contexts in which society participates, it is thus given cultural meaning. As Norberg-Schulz states, phenomena can be divided into 2 categories: the concrete, consisting of the tangible earthly elements, and the intangible, consisting of elements such as feelings (Nesbitt: 1996; 414). He furthermore argues that the tangible elements are not to be mistaken for just tools of everyday life, but rather a system of cultural signs.

Karsten Harries argued in his essay on architectural ethics that a universal scientific freedom would find the scientist at ‘home’ anywhere, however he further states that this idea of home would not be completely viable. By being infinitely mobile this theoretical subject would have no true roots at all, thus in a sense completely free but at the price of a state of homelessness (Nesbitt: 1996; 394). He further explains that in an increasingly global community this search for homogeneity without reference to time, space, boundaries, periods or regions renders life itself insignificant. Man naturally takes cognoscente of these various boundaries within time, space and memory and Harries argues that it is the role of architecture to ensure an acceptable dwelling or ethos is derived out of these aspects. Harries uses the earliest example of a Greek temple articulating the landscape and drawing society together to explain that architecture has always had an ethical function to establish man’s ethos. While architecture is a result of human activity, it is more importantly a tool which helps to influence man’s activity too. Harries states that “To build is to help decide how man is to dwell on earth” (Nesbitt: 1996; 396). A technological age lends itself to interchangeability and uniformity where architecture is seen as a machine for working and living. This links to the notion of ‘form follows function’ and other modernist principles whereby the intimacy and distance of different places are not articulated. Each place or region has its own character and architecture needs to articulate these differences to unify these places with a humane understandable architecture rather than a disembodied foreign built form. As such it is from the place and time that architects will find hints as how to establish environments which best suit and connect with that society rather than manipulate the built
environment which may alienate and overwhelm. The manipulation and control of the built environment without taking cognoscente for the local culture may leave a negative or alien perception with that society, although some political or civic entities may find that helpful depending on their intentions. (Nesbitt 1996). The interpretation of the symbol or perception of meaning is largely dependent on one's location and thus the spirit of the place gives reference.

2.3.2 Power and Government

Political power takes many forms… the charismatic leader, an indomitable military presence, an entrenched bureaucracy… an imposing network of laws or statutes and even the symbolic use of the physical environment (Vale 1959: 3). History has shown that architecture and urban design has been manipulated in the service of politics. Governmental buildings can be seen as symbols of the state rather than merely a practical house of government. If these buildings serve to support specific regimes, then a lot can be learned about the various political regimes by what they build. Furthermore, understanding can be gained of the cultural balance of power as coined by Clifford Geertz. This fits into the argument that buildings are products of the social and cultural conditions of that time. Therefore symbolic state buildings are best understood in their social political and cultural contexts. (Vale 1959: 3)

As such Nelson Goodman argued that the meaning of a building may have nothing to do with the architecture itself. A building may come to stand for some of its causes or effects, or a historical event associated with it (Vale 1959: 6). This raises the question as to how the architect can defend a work, ingrained with its own social or aesthetic meaning, when these non-architectural associations, which can be very powerful, overshadow the architectural integrity. It can be overshadowed by the acts of the institutional inhabitants or other historical relationships with that building. It is thus important that an understanding of not only architecturally derived meaning, but also the socio-political and cultural influences of that time and institution be understood (Vale 1959: 6). Thus when considering meaning in architecture, it can be argued that comparative historical architectural analysis should be used alongside a cultural and socio-political analysis to gain a complete understanding of how that section of the population truly establishes meaning with the built environment. Meaning in the civic realm is two-fold; the socio-political cultural status will influence the physical design of the architect and furthermore establish how that architecture is viewed by the public (Vale 1959: 6).
In the case of the neoclassical buildings of Washington, the buildings are seen as reassuring symbols of concepts such as justice, and a democratic government that caters for all. Here, the American society has a cohesive and widely shared cultural understanding of the meaning inferred by these buildings (Vale 1959: 7). This is in contrast to a meaning given through the individuals own experience of that space. At the same time, these monumental iconic symbols of democracy and justice serve to infer different meaning. The scale of the structures serves as a reminder to the public of the power of the authorities within the various institutions and as such pose a subliminal threat to the public. On another level the power of those working within the institution is reinforced through the grandeur of the building. In this example meaning is ambiguous and it is dependent on the individual’s personal relationship to the institution and the building and this is an important element of civic architecture. A balance is found between reassuring civic messages and discomforting authoritarian ones which people will recognize at differing cognitive levels (Vale 1959: 8). It can be argued that this dual cognitive image is appropriate for a civic institution as these institutions such as the government offices require the belief and cooperation of the public, yet at the same time need to establish themselves in a role of leadership and power.

Lawrence Vale argues that the need for urban design and architecture to serve politics is especially greater in countries where the political platform is new and the architecture is old (Vale 1959: 9). The leaders of newly independent countries, such as South Africa, often use the built environment to redefine the image of the new government away from that of the old. Furthermore, it is seen as an attempt to create a new national identity and national unity (Vale 1959: 10). This can be linked to most institutions, such as the police and justice departments, when policy changes are brought about either in the forms of government or internal changes. If the institution decides to move towards a new architectural identity, the new architecture should again redefine the balance between dominance and submissive image with the public (Vale 1959: 10). On the other hand, if the institution remains within an existing architectural platform, the definition of the public image of that institution will most likely remain unchanged due to the memory of the past. However, as discussed, if allowed time to gain a new inherited meaning through a differing public interaction, then a successful renewal of the public perception is possible over a greater amount of time, but unlikely.

Having made a decision to build a new place for a civic institution such as governmental offices, the important decision of placement is to be considered. The building needs to be looked at in relation to neighboring buildings as well as the city and the country as a whole (Vale 1959: 10). Vale states that the
placement of parliamentary buildings in particular is a product of social and cultural forces. It can be argued however, that this is the case for most buildings housing civic institutions as they have value in the socio political and cultural realm. A governmental capitol complex is probably one of the more powerful examples of the importance of placement and its symbolic value as a spatial declaration of political control.

2.3.3. National Identity

The question of national identity is of interest when considering parliamentary and other civic institutional architecture. Although Vale is mainly interested in the role of national identity within the parliamentary and governmental institution, his arguments find relevance in the identity of most civic institutions. Vale describes national identity as an attribute which is cultivated over time after a regime has taken power (Vale 1959: 45). As the world becomes ever smaller due to technological advances, the populace as a whole gains contact with those in power of the various civic entities, be it government or other. As a result, it has become increasingly important to nurture the affections of the public as whole and their public image and the creation of a collective identity has been seen as a positive tool. Visual imagery, such as flags and coins, as well as events, such as parades etc, helps create a symbolic identity and unity. Architecture and urban design form a dual role in this regard. The architecture through its form becomes symbolic, yet it is also through the activities associated with that space and built environment that help form a cohesive identity. The question of national identity is however questionable when it comes to architecture as well as the institution. Architectural identity can be divided into differing scales. The symbol, whether architectural or not, can define itself as based on the universal concept of that institution. However, although in a continuously globalised or unified world, there is still the question of contextualism and regionalism with cultural diversity. To place a universal symbol within a regional context may lead to that symbol being seen with irrelevance. In many instances loyalty is locally based and as such regional and national identity finds a lesser role. Lynch describes identity as the identification of an object or community in distinction from others, recognizing its individuality (Lynch 1960: 8). Crawford Young describes identity in “The Politics of Cultural Pluralism” as “a subjective self-concept or social role” and as such is “often variable, overlapping and situational” (Vale 1959: 49). In this regard identity is more superficial and irrelevant the farther it is removed from daily life of the inhabitant and thus the more localized the symbolism, the more powerful it may be in that context (Vale 1959: 49). However, a highly contextualized symbol will be exclusive rather than inclusive and as such may be divisive rather than create a national unity and identity.
Vale furthers this debate between international modernism and local cultural richness describing how some governments seek an identity in the eyes of international audience rather than a national identity (Vale 1959: 54). In this sense, a government uses buildings to express cultural stereotypes as a sanctioned billboard and thereby somewhat distancing themselves from any true connection to the society which they serve (Vale 1959: 54). In a new government the grand architectural democratic gesture is more valuable to create a central point from which an identity can be created. However, as a democracy or socio-political ideal becomes established, the need for the universal gesture is decreased. This occurs as the symbolism of those ideals becomes integrated into the general urban fabric and thus becomes easier to use context specific notions to express identity.

2.4 Perception

2.4.1 Influences in perception

Hesselgren describes the process of observation as a physical energy reaching one of our sense organs to create an electro-chemical impulse sent to the brain. It is this impulse which gives rise to an experience which is known as a sensation or perception which is intrinsically linked to psychology (Hesselgren 1969: 11). These perceptions are based on both conscious and sub-conscious wishes and feelings which influence the individual’s view of the world. The built environment forms part of the physical realm which acts as a stimulus causing this reaction in the human mind known as perception. This perception is often unconscious as a person may not observe something, but may still react in some way to the stimulus.

The stimuli can be both subjective (based on mental phenomena) and objective (physical). Both are of equal importance. As such perception is based on physical factors as well as abstract notions such as knowledge. The stimuli are received via different modalities such as the sense of smell or sight which gives rise to forms of reactions beyond just the stimulation of the modality. A more complicated process happens where meaning is given to these perceptions. The phenomenological approach seeks to understand the simpler reaction in terms of perception rather than how meaning given to the perception which is known as semantics (Hesselgren 1969: 12)
Meaning is connected to perception in three ways, though conventional meaning, associative meanings and spontaneous meanings. Conventional meaning can be seen through a national flag, which would be seen by the whole nation as a symbol of national identity, as they have all been taught to understand it as such. Associative meaning is the result of past associations which would be unique to a culture or the patterns of behavior of that culture. Spontaneous meaning is attached to perception through a natural relation as is the case with the human smile which is universally taken as a sign of happiness even though it is not taught. (Hesselgren 1969: 255)

2.4.2 Sensory Perception and Experiential Meaning

There has been a bias towards visual perception with regards to architecture, resulting in the suppression of the sensory and sensual qualities associated with other human senses (Pallasmaa, 2005: 10). Pallasmaa views the human body as the locus of perception, thought and consciousness and thus the senses play an integral part in articulating, storing and processing sensory responses and thought (Pallasmaa, 2005: 10). The body is the centre of the individual’s world, not only as the central viewing point of the central perspective, but also as the locus of reference, memory, imagination and integration (Pallasmaa, 2005: 11). Architecture thus serves to address all the senses simultaneously and furthermore creates the bridge between self image and the experience of the world (Pallasmaa, 2005: 11). In the experience of art and architecture there is an exchange between the observer and the object, the observer brings emotion and associations to the space, and the space brings its own aura which evokes perception and thought (Pallasmaa, 2005: 12).

Architecture is not experienced as an isolated visual entity, but rather as fully integrated material, embodied and spiritual essence (Pallasmaa, 2005: 12). The individual experiences the city through all the senses yet it is the individual that gives life to the city through the individuals embodied experiences. The human body is in constant interaction with the environment and as such the two are constantly informing and redefining one another. There is no body isolated from the space it inhabits and furthermore, there is no space separate from the body which inhabits it (Pallasmaa, 2005: 40). There is an intrinsic link between the human body and the space it inhabits, the space affects the body and generates associations which are remembered and imagined ((Pallasmaa, 2005: 41). “Architecture is essentially an extension of nature into the man-made realm, providing the ground for perception and the horizon of experiencing and understanding the world” - (Pallasmaa, 2005: 41). Related to this is Wolfflin’s theory of perceptual expression stating that
the “organization of our own bodies is the form that determines our apprehension of all physical bodies” (Arnheim, 1975: 212). It is proposed that the fundamental elements of architecture: matter, form, as well as gravitational weight and force, are perceived depending on the experiences of the past: “We have carried heavy loads and have known pressure and counter pressure” (Arnheim, 1975: 212).

Senses are categorized into five systems: visual, auditory, taste-smell, basic orientating system and the haptic system. All the senses collaborate to form the complete perceived world. It would appear that most perception is formed though vision, however the eye is only able to perceive what it has retrieved through the relationships which the other senses have created. The eye “feels” in that it remembers textures, solidity, resistance or protrusion that the body has felt and it gives associated value to what has been seen (Pallasmaa, 2005: 42). Vision reveals what touch already knows, they stroke surfaces and the subconscious sensation determines the success of that experience (Pallasmaa, 2005: 42). It is not only the mind through which memory, association, and perception is created, the human also remembers through the body (Pallasmaa, 2005: 45). “A building is encountered; it is approached, confronted, related to one’s body, moved through, and utilized as a condition for other things. Architecture initiates, directs and organizes behavior and movement”

2.5 KEY PRECEDENT STUDY: THE CONSTITUTIONAL COURT

1994 saw South Africa break free of the oppressive rule of the nationalist government and the apartheid law it had fought so hard to impose. This apartheid regime had brought about vast suffering and struggles to the majority of the population where basic civil rights and freedoms were made unavailable through an authoritarian, oppressive and unapproachable government. When asked to describe their feelings towards the courts prior to democracy, South African women described the institution with words such as: “injustice, exclusion, marginalization, dehumanization, fear, distrust, unfriendly and cold”. With the end of apartheid came a new democratic South Africa based on equality and freedom. As part of the negotiated settlement between the old regime and the freedom fighters, a new constitution would be drawn up to protect the human rights of all and ensure that basic freedoms were embedded in the law of the land. (Law-Viljoen 2006) This new Constitution would be housed in a new Constitutional Court, a building which was to be easily accessible to the ordinary citizen and reflect the aspirations of a young democracy while still reflecting on the troubled journey the country had endured (Law-Viljoen 2006: 07)
The site chosen for the new court was the Old Fort complex on Braamfontein Ridge. The late nineteenth century Anglo-Boer war fort was later converted to a prison. The jail, which included a “native prison” and a women’s jail, housed many political prisoners during the apartheid regime including Nelson Mandela and Mahatma Gandhi. The association of the site with war and the cruelty associated with the apartheid regime left the jail as an ominous reminder of the turbulent beginnings of the country. It was for this reason that this site was chosen to house the corner stone of the new democracy. As a site so entrenched in the past, it would be perfectly placed within the hearts of the society to bring in a new democratic vision of the future. At this site; the negative past could be acknowledged and broken whilst embracing the optimistic future. (Law-Viljoen 2006: 07). Justice Albie Sacks noted that the site had been a place where “everybody had locked up everybody” so there had been a denial of rights in a variety of different contexts. However, he also pointed out that it had been a place where there had been a continuous striving to achieve rights, through supporters, families and the planning done by political prisoners for a transformation that was to come (Law-Viljoen 2006: 15).
Of interest was Charles Correa’s comments at the inauguration ceremony of the building: He believed that new Constitutional Court had created something new and altered the idea of what court houses should be (Law-Viljoen 2006: 08). As such the building was to redefine the public cognitive image of what the institution of the Judiciary and its architecture stood for. The traditional image of an imposing, powerful building which repelled people with stringent boundaries and perimeters was to be avoided. Justice Yvonne Mokgoro stated that the building was to move away from the feeling that the court was a place that spelt trouble and towards the notion of openness, public participation and warmth. However the value of power and respect still needed to be present within the building. An example of this is the imposing scale of the triple story volumes within the building which give a sense of power and respect yet the openness and light within give balance to these conceptual requirements. (Law-Viljoen 2006: 31)

The underlying concept of reconciling a space of confinement with one of freedom (Joubert 2009: 116) began even in the urban design strategy of Constitution Hill. The goal was to reconnect the once isolated and impermeable site with the city of Johannesburg using 2 pedestrian access routes to permeate through the site. The designers wanted the people to pass through the site while going about their daily business, ensuring the buildings and the ideals it stands for were continually entrenched in the minds of the society, and moreover to keep the judicial servants continually aware of the people they serve. This was to portray an accessible, transparent judiciary in contrast to the isolated and aloof notions of justice which were engendered during apartheid. In keeping with this theme is the Constitutional Square at the centre of the complex, an open public space which encourages congregation and is designated as a freely accessible public space along the pedestrian zone. This celebrates the right to gather which was so powerfully denied during apartheid. Furthermore the prominent positioning of this complex on the hill echoes the importance of the building in the context of the city and South Africa as a whole. At the centre of the hill is Constitutional Square.
One of the primary elemental forms of the Courthouse building is the glass tower of light above the foyer area, which was also replicated above the existing stairwells of the Awaiting trial block (the remainder of which was demolished to make way for the Constitutional Square). These towers were built as beacons of light that would provide landmarks visible from afar demarcating a free gathering space and space of importance. Furthermore, these towers provide a metaphorical link to the towers which define the city skyline such as the iconic Hillbrow Tower. The Welsh Tower gives prominence to a special collection of books, the Rex Welsh Collection, and provides a dominant landmark when viewed from the south (Law-Viljoen 2006). To further symbolize the “storing of knowledge” within the library the stairwells have been clad with translucent sheeted cylinders which are reminiscent of storage towers found on farms and rural areas throughout South Africa.
An underlying concept for the entrance foyer was the notion of the imbizo or informal communal gathering, where elders resolve problems of the village, under a protective tree as experienced in traditional rural African communities. The foyer opens directly onto the public square and invites visitors out of the harsh sun with its large canopy which flows through to the foyer. This facilitates a feeling of entering for relief or protection. The perforated concrete roof and walls further resonate the theme of the symbolic tree. The mottled light and shade expressing the quality of light experienced beneath a tree. This quality of light coming from above is replicated throughout the building in various different ways; this light is reminiscent of light associated in religious buildings such as churches and serves to give an uplifting yet somewhat spiritual experience. Furthermore, the tilted large columns can be interpreted in several different ways. They are expressive of trees growing out of the ground to support the canopy of foliage above, they too are deemed to “occupy” the vast space, and lastly they are representative of the notion of power and respect associated with the large colonnades of typical court houses. The slanted columns provided an interesting point for debate between the incumbent Justices during the design process, it was questioned whether such columns were appropriate for a court. The debate showed that there was a clear preconceived notion of elements within a court.
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Figure 19. View of the foyer area showing the perforated concrete and slanted columns representing the notion of the tree (Joubert 2009: 119)

Figure 3. Design sketch showing the conceptual link between the building on the left and the notion of the tree as shelter on the right (Law-Viljoen 2006: 46)
The Foyer space is most welcoming and open and acts as an introduction to the building and to the institution as transparent, freely accessible open and light. The use of the concrete throughout is expressive of permanence and reliability; however concrete by itself could be cold and institutional. To bring warmth, texture and a cultural context to the interiors of the building, detailed mosaics, lamp shades and brickwork have been used. The brickwork has special meaning as the bricks were originally from the demolished awaiting trial block; a literal building block of a prison is now the building block of an institution built on freedom. The combination of elements mentioned above aid in the development of a positive cognitive image for the institution. Even if the subject visiting the space is unaware of the cultural symbolism expressed here, the experiential value of the space will give clear meaning that the space is special and dignified. (Law-Viljoen 2006).

Figure 20 Plan of the Constitutional Court Building (Joubert 2009: 117).
Of further interest is the planning of the connection between the foyer, the public square and the court chamber. In traditional civic, governmental or judicial buildings there is a processional route from public spaces to the more private and important spaces much like a temple. This typical planning gives importance to the deeper spaces and takes away from the open public spaces. However, in the design of the Constitutional Court, the objective was to remove this message that you are “getting closer to God” (Law-Viljoen 2006: 70) through in-between spaces and rather state that the democracy is founded on the public. To achieve this, the foyer provides an extension of the public square and the Court Chamber is accessible directly off the Foyer. This direct link without formal axis or procession clearly gives the message that the public person entering the building is an equally important player in the processes which the building houses.

Figure 21. The quiet private contemplative courtyards adjacent to the judge’s chambers (Law-Viljoen 2006: 110).

This clarity of relationships is continued through the building; the public spaces (Foyer connecting walkway and library) are clearly accessible, approachable and vibrant with a sense of openness. On the other hand the private spaces are filtered from administrative to Judges Chambers which are symbolically the most independent or autonomous from the public. The Judges Chambers overlook a private courtyard which is intended for staff use only. These somewhat isolated and quiet courtyards and chambers are intended as places of introspection for the judges to consider, almost in a religious fashion, the importance of the work they do. This gradient to privacy helps ensure that each subject, either public person or the Judge, is acutely aware in his own mind of his role or relationship with the institution. This definition of social interaction helps create a coherent cognitive image within the subject. (Law-Viljoen 2006)
The Court Chambers are also infused with meaning. In terms of materiality, the use of the recycled bricks from the Awaiting Trial block, not only pays homage to the past, but also portrays an honesty and openness of the justice system. The long ribbon window at the exterior ground level which surrounds half of the court Chambers exemplifies the notion of transparency within the judiciary, the outside being invited in, and the inside out. Furthermore, the height of the window only allows views of the ankle to thigh; this view is non-racial and non-sexist, especially in winter. To the people outside, this window is a reminder that they are a part of the process within the important building. The Court Chamber is based on an arc, this shape is symbolic of equality, this is reminiscent of the legend of Knights of the Round Table where each was equal in the eyes of the next. The judges are seated so that their eye levels when seated are about the same as council when standing representing the sense of equality under the constitution. However, there is still a height difference in the benches large enough to ensure the Judges and their functions are respected within the institution.
The ideal of transparency, which the new Constitution and Judiciary hope to achieve, is a concept which is reiterated throughout the building. Beyond the obvious choice of glazed facades, perforated screens provide a further link to transparency. Where in glass one is not “aware” of a divide, a screen allows for a more powerful sense of depth. The subject can be aware of both the possible divides between spaces or institutions, but can still clearly connect with that on the other side of the divide, as such theses screens although partially enclosed speak volumes about a new democracy breaking through the social and political divides of the past. The relationship between things becomes apparent. (Law-Viljoen 2006: 147).

The Constitutional Court precinct has attempted to redefine the public perception of what a Courthouse should be through the careful consideration of various aspects. The designers have successfully managed the use of conceptual metaphorical form without being too literal when making links to the notion of a tree (it must be remembered that the building is mostly rectilinear in contrast to the preconceived organic notion of a tree). There has been a clear understanding of the function and progression of space from public to private and how to integrate the socio-political message of the institution into the planning as well as the detailing such as the ribbon window in the court chamber. Furthermore, the complex has been reintegrated into the city becoming a clear beacon in the urban scale for rejuvenation and democracy without isolating itself. The combination of all the elements discussed have resulted in a building which not only reinvents the nature of a courthouse but also successfully helps redefine the image of a historically unjust judicial system into a new free and democratic system. All this is achieved through providing a powerful emotional and visual image within the minds of the various subjects experiencing the building.
CHAPTER 3 CASE STUDIES

3.1 INTRODUCTION

As this research aims to understand the importance of the cognitive image created through architecture, and primarily in the civic realm, the case studies were chosen from a single civic institution to have the same function yet differing messages. Both the Durban Magistrates Court (completed in 1976) and Ntuzuma Court (due for completion in May 2012) serve the same role, that being to house the Judiciary of South Africa. However, as this research will show, the differing social and cultural contexts have a great impact on how the public perceive these buildings and the institution which they house, and the differing social context also influences the differing message these buildings of similar functions portray. Of interest will be how these building fit into the greater urban design of their regions and how they influence the urban space and thus the experiences and perceptions of the people. Furthermore, the form of the buildings will be analyzed to understand the link between function and form as well as meaning and form and how this influences the perception of those interacting with the building. Of further interest will be the planning, along with the sensory and experiential value of the spaces within the buildings and how these elements influence the perception and thus the cognitive image of the building and the institution.

3.2 DURBAN MAGISTRATES COURT

3.2.1 Historical and Social Context of Case Study

This building has its roots deeply embedded in the turbulent socio-historical context of South Africa. To truly understand this building and what it stood for, the building should be placed within its appropriate context. Completed in 1976, but conceptualized nearly 30 years prior to that, the building was bore out of the apartheid regime of the time. Apartheid, or complete separation, officially became policy after the Nationalist Victory in 1948 but the foundations of this ideal had been laid nearly half a century earlier through the policy of segregation implemented by the previous government run by the British Governmental officials (Readers Digest 1988: 312). In the early beginnings of the country even bitter enemies during the Anglo-Boer war, the Brits and Afrikaners, were united on a single issue: That white domination had to be maintained (Readers Digest 1988: 312). Thus by the 1960’s and 1970’s these oppressive policies, which removed the basic human rights of the majority of the population, were deeply
entrenched within the civic structures of South Africa, including the judiciary. After the 1948 National Party victory the policy of Government was shaped around the preservation of white power, and the tool used to achieve this was the policy of apartheid.

The policy of apartheid, born out of minority white and Afrikaner fear, infiltrated all aspects of life and was to be a monumental social engineering project. The government drafted into legislation many laws specifically aimed at separating the races and more specifically to oppress the non-whites. All people were registered according to their race through the Population Registration Act. The Mixed Marriages Act of 1949 and Immorality Act of 1927 made it illegal for people deemed to be of different ethnicity to have sexual relations or to be married. The Group Areas Act required that all races live in separate residential areas and the Reservation of Separate Amenities Act of 1953 meant that separate public amenities would be made available for whites. In this regard toilets, walkways, bus stops, beaches and trains were all either designated “White” or “Non-White” and as such every part of public or civic life was racially segregated (Readers Digest 1988: 376).

The judiciary however was not completely at fault for these unjust laws. Based on the Roman-Dutch law system, introduced to South Africa by Jan van Riebeeck, overlaid with certain aspects of British law, the common law system of South Africa was completely colour blind, treating all as equal. As such many Acts put forward by government were denied on these grounds. However, in 1951 the government introduced the High Court of Parliament Bill, making parliament the highest court of the land, and giving it the power to overturn any judgment made by a lower court. Through this the government gained control of the judiciary to use as a tool in the implementation of the apartheid regime (Readers Digest 1988: 395).

Throughout the apartheid era, the regime faced opposition from various different fronts, led by resistance from political organizations such as the ANC and the PAC, however most resistance campaigns were met with brutal retaliation by the government. Once again, through a number of new security laws, the governmental led judiciary gave security forces greater power to deal unequivocally with any dissent. In 1960, 69 people protesting the Pass Laws were killed by security forces during what was to be called the Sharpeville Massacre. Through the 1960’s the resistance campaigns intensified with the ANC and other organizations resorting to violence. Leaders of these organizations went into exile in neighboring African countries whilst the government continued to quell ever increasing civil unrest. The collapse of the Portuguese colonies of Mozambique and Angola as well as increasingly strained international economic
relations put further pressure on the government and its authoritarian, oppressive and racist policies. This time of increased protest and resistance was to provide the setting for the new Magistrates Court in Durban, a symbol of the power of the apartheid regime. (Readers Digest 1988).

3.2.2 Justification of Case Study

As discussed, the Durban Magistrates Court was conceived during a turbulent time in the history of South Africa. The government of the time was eager to entrench the unjust laws of the land and the judiciary, as a public institution, played an important role. This building was thus chosen as a relevant case study to understand if and how the social context of the time influenced the design of the building. The case study provides an opportunity to analyze what tools were used to impart a message to the public of the time and if that message is appropriate in current South Africa where the system of government has vastly changed. Furthermore, standing as such a grand building, of interest will be how powerful the cognitive image the public have of it is. Vale stated that to judge a public building, an understanding is required of the politics as politicians use architecture and urban design as political instruments (Vale 1959: 275).

3.2.3 Location and Urban Design

The Durban Magistrates Court is located just to the north of the centre of Durban. The site of the Court House was originally on the site of an old police station and part of an Indian School (Durban Map Proc. No. 27/04/1973). The new Court was needed as the old Court House at Masonic Grove had grown too small. The project was the brainchild of architect J.C Simpson and carried through by Messrs, Geoffrey Lesuer & Partners in collaboration with Messrs Chick, Bartholomew and Poole. The project was sited just beyond the city centre in a relatively open tract of land which was acquired through dealings between different governmental bodies. The then Mayor of Durban, Mr. Dixie Adams, hinted that this was to become a civic node and that the building was “a major step taken in replanning this portion of Durban”.

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The building, sited over the road from the Durban Railway station, was soon joined by the CR Swart Police Station and a large residential block to the North which was part of the land agreement. These 3 towers were to be the catalyst for the development of the area. However, as with many modernist planners, the buildings were built as islands in the environment. The vast grounds around each of these buildings, especially the courthouse, were meant to house beautiful gardens; however they resulted in isolated buildings heavily set back from the streets. The image below shows informal traders on the street edge with the Courthouse looming in the distant background. In this example there is a clear disconnection between the street life and the building, it can be argued that due to the security concerns that this was reasonable, however for a building of this stature to have little or no impact on the street seems inappropriate. The only time the building has real influence on the streets is through its dominating mass which is noticeable when entering and leaving the city northwards along Stalwart Similane Street.
The isolation of the courthouse is evident when the grand scale and symmetry is used as a means to define an axis related to the building. When analyzing a building of this nature one would expect a grand axial route giving processional importance to the building and the authority of the institution which it houses. However, as shown in the aerial view below, the axial lines created by the centre lines of the building have no direct relationship to any transport routes or landmarks in the area. The building seems completely random, with the exception of a possible visual link to the train station to the west. This lack of interaction with the urban fabric decreases the potential of the large form of the building to impact on the sensibilities of the people. As discussed earlier, Bacon describes the importance of space over mass on an urban scale, and of further importance, that the space be infused with the spirit of the society. In the case of the Durban Magistrates’ Court mass has been used at the expense of public space. The building fails to add to the spaces around it, in today’s democratic society and in the context of a new integrated judiciary this seems very inappropriate. However, in the original societal context of the court, this isolation from society and separation was in keeping with the segregated society of the time. Furthermore, when viewed from above on a small scale the group of buildings find a little cohesion, however, this gives an idea of how the complex of buildings were designed. In keeping with the authoritarian Nationalist regimes almost God-like social engineering, the buildings seem to have been designed from the viewpoint of the disengaged entity from above, rather than the individual at ground level. Of interest when considering the urban design of this precinct is the fact that the Courthouse is surrounded on 3 sides by the Police Headquarters to the north.
and the dog unit to the west. This may raise questions as to the relationship between the police and the judiciary.

Figure 27  Aerial view showing position of court and axis (source: author)

Figure 28. Guard tower from the apartheid days (source: author)
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 29 Arial view showing overall site in white. The court is the red block at the bottom. The flats at the top, and the police station in the middle (source: Google Earth)

Figure 30. Aerial View (source: Google Earth)
3.2.4 Form

The array of speeches at the opening ceremony of the building alluded to the powerful form of the building. The Minister of Justice at the time, Mr. JG. Kruger spoke about the hostility which the Republic had faced by its enemies but that those enemies could not cast doubt over the administration of Justice in the Country. He had hoped the building would become an icon of Durban and a monument to Justice. Chief Magistrate, Mr. McKay, commented on how pleased he was with the imposing new edifice whilst the Mayor, Mr. Dixie Adams, hoped that the building would enhance the stature of the justice system and engender public admiration for the institution.

![Figure 31. View of the imposition building when leaving the city northwards. (source: author)](image1)

![Figure 32. View of the police station in the foreground and courthouse behind when entering the city (source: author)](image2)

The building is made up of a 2 storey high podium with a large courtyard at its centre. Within this “courtyard” a 12 storey tower has been placed. This initial conceptual arrangement is representative of an internalized organization which is repelling public participation. The exterior of the podium building further exemplifies this notion. The ground floor is nearly completely impenetrable except for the various entrances on all four sides. The entire ground floor facade creates an extra podium through the use of black marble cladding. The scale of this podium dwarves people at ground level, imposing the building and its institution as superior to the individual.

![Figure 33. Schematic plan showing how courtyard building tends to repel and be introverted (source: author)](image3)
scale. Furthermore the dark, reflective and smooth nature of the marble pushes people away from the building. Above this material “podium”, the 2nd floor of the podium building is compromised of small openings articulated with “colonnades” which are punched out of the façade. These colonnades are somewhat symbolic of the powerful colonnades associated with classical architecture demonstrating power and importance. However, in classical examples the colonnades help to define the importance to the space within, and draw people into the space. The colonnades of the Durban Magistrates Court, although beautifully detailed, have the opposite effect, in that they push people away, hiding the openings rather than framing them. The human mind could find a mental link between these colonnades and security bars used over windows. The rhythm of the colonnades increases towards the centers of the facades indicating the 4 entrances on each side.

Figure 34. Black marble podium below a facadal colonnade (source: author)

Figure 35. Eastern façade separated from the street with rhythm of columns indicating the old non-white entrance (source: author)

Figure 36. Impressive columns on the northern tower façade (source: author)
This idea of the classical colonnade often associated with buildings of prestige and power is continued through in the form of the central tower building. The north and south facades have been articulated with rows of massive columns which stretch the entire height of the building. These are very powerful elements which express a verticality and authority. However, from a distance this powerful expression is somewhat lost, it is only when viewed from the central courtyard area that this powerful element becomes successful. The problem with this is that the central courtyard is designated for parking and service. By distancing itself from the street and the public, the effectiveness of these powerful forms have been decreased. These columns are repeated in a less imposing manner on the east and north facades, they are however covered by sunscreens. This as well as the setbacks on the north and south facades gives an indication that climatic response was taken into account, however, there is minimal glazing on the north and south facades whilst the east and west facades have plenty, thus the response has been somewhat futile for the hot Durban climate.

Figure 37. Powerful symmetry and axis, viewed from a car park across the road (source: author).
The eastern and western facades of the tower are marked by a large solid frame which in some way creates a giant arch. The archway being significantly linked to notions of grandeur and power throughout history as exemplified in the Arch De Triumph. However, the Arch de Triumph becomes powerful through its connection to a strong axis. The “arch” of the magistrate’s court has no such axis and as such is not able to impinge on the cognitive image the public hold of the city, the institution or even the building itself. In contrast to the austere modernist façade treatments, which surround most of the building, the southern edge of the western lower podium is treated in a sensitive almost humane scale. The tree alongside beautifully detailed screens in the façade, provide a pleasant environment for the person walking by. This permeability gives the feeling of transparency and approachability. However, this small section is overwhelmed by the rest of the building which speaks a different language.

Figure 38. Beautiful screen element on the west façade (source: author)

3.2.5. Planning and Interior Experience

As a public building, designed during the height of the apartheid regime, the buildings planning was required to implement the segregation laws of the time. The laws of the time required that all people of colour not interact with the white population. This segregated society is clearly evident in almost all the planning. On the ground floor the building had 4 pedestrian entrances. A white entrance (now the only public entrance) was located on the South side, a non-white maintenance entrance to the north and 2 non-
white public entrances on the west and east. In this way Indians, blacks and whites could all be separated. As a result the main south entrance of today has become very confusing even though it received a later addition to more clearly mark it as the main entrance. The uniformity of the facades without a clear hierarchy has made the position of the main entrance unclear to the public. In terms of the planning as one enters the main foyer, the eye is met by a security gate and then a bathroom door before the subject is able to establish the location of the stairway and circulation. The information and reception desk is situated on the 1st Floor at the centre of the building adding to the confusion. Upon leaving the experience is just as confusing. The foyer of the now unused “non-white” entrance off Stalwart Similane Street is less confusing and probably more appropriate for a building of this stature.

The other entrances are now used as storage or for maintenance; their use has been usurped with a changing society. The planning was repeated throughout the building, on all floors there were separate circulation routes, stairs, lifts and ablutions for the different races. All courts had to have at least 2 separate entrances to prevent the mixing of races. The creation of all these separate circulation routes resulted in a building which is dominated by long passages with very little natural light; furthermore, these passages all
end abruptly with nothing to orientate people within the building. This environment adds to the oppressive nature of the building, giving subjects the feeling of restriction and disorientation. The planning of the lower podium levels gives very little differentiation between spaces of differing hierarchy. Courts, Judges Chambers, Prosecutors Offices and even ablutions all lead directly off these passageways; the public person would not be able to decipher the difference between a door leading to a court, or that opening to a bathroom, without the signage provided. These most public parts of the building are ultimately the most confusing and more importantly there is no filtering of public from private to public spaces, which is of concern considering that there are security issues. This confusion does not engender an image of authority or power, but rather gives the public a sense of distrust in the workings of the institution.

The upper floors of the central tower blocks, whilst still divided by race, offer a more appropriate experience to some of the public at least. Every second floor houses four regional courts with the alternate floor housing admin and prisoner holding cells. This arrangement clearly separates the different functions within the minds of the public. On the court floors, rather than long, narrow passages, the white population enters a central foyer, and on either side stairs and ramps, which almost seem
processional in nature, lead towards the court room entrances giving importance to the court rooms and their functions. However, the non-white circulation on the outside continues with the more deprived experience. Although the court floor is more appropriately designed to give respectability to the court rooms, the theme of segregation is still evident.

![Diagram showing different racial circulation routes](image)

**Figure 45. Schematic plan showing the different racially divided circulation routes (source: author).**

Having followed the narrative of the public person through the building and taking note of how these experiences shaped the image of the judicial system in their minds, the next step was to understand the experience of the awaiting trial prisoner. Of interest, was if this experience would reiterate the theme that a defendant is considered innocent until found guilty. The prisoner is driven into a basement offloading zone. Almost completely devoid of natural light, this introduction to the building is very oppressive. One can create links in the mind to the notion of being taken down into a dungeon. Beyond this, the prisoner is led into various holding cells; this journey is taken through long dark passages and stairways with the prisoner never seeing sun light and always acutely aware of the steel gates which separate him from the public. This oppressive theme is continuous through the prisoner’s experience of the courthouse. Although it must be stated that many of these design features are made out of necessity for security.
Although the oppressive nature of their experience is obvious, it was an experience during the narrative of a prisoner which could be one of the most uplifting within the building. Having descended into the dungeon like environment, the prisoners gradually make their way up through building to the courthouse and their meeting with justice. Having arrived at the 5th floor holding cell to await his hearing, the prisoner is then lead up a long straight stairwell into the court room. As he walks up the stairwell he is met with a soft glow of light coming through opaque windows. One cannot help but wonder if this journey may give the prisoner a sense of hope in the justice system. It is unknown if this experience was planned for by the architect or was merely a coincidence.
As previously mentioned, the lower floors housed prosecutors, judges, courts and the public. When speaking to a magistrate working within the court house it was made apparent that the visual distinction of certain functions within a court room was needed. The concern lay with the Judge’s Chambers being next to the prosecutors’ offices. In terms of the justice system, the judge is meant to be completely independent of the prosecutor or even the defense council for that matter. The magistrate in question queried how the public might perceive the spatial proximity between the judge and the prosecutor, this may remove the image of an autonomous judge presiding over their matters, and thus remove any trust they may have. This is an example of how spatial layouts can influence perception of society.

The most important rooms within the building are the actual courtrooms. Here the relationship between the various participants in proceedings is portrayed primarily through the use of height. Depending on the court type, the judge is raised appropriately above the public. In the equality court and children’s courts, all parties are almost level, and in the case of the equality court, all are seated around an oval or round table removing hierarchy to an extent. Within the magistrates or regional court rooms where more severe cases are heard, the judges’ are raised by about 500 mm above the public giving the judge symbolic power and respectability. To further emphasize the importance of the judges seat, full height timber paneling with the emblem of the justice department furnish the centre of the wall behind the judge. When speaking to a magistrate’s judge on the topic of the courtroom, it became apparent that the solemnity of the materials within the courtroom has importance. The simple timber benches and cladding (which has an acoustic property) provide a calm solemn environment in which to meet out justice. This solemnity was of great importance to many judges.
3.2.6 Empirical Data

Of interest to my research was how the people with different roles responded to this building. To ascertain their perceptions of the Building, and how this related to their perception of the judiciary as a whole, an interview process was undertaken. The groups of people interviewed included lawyers, judges, complainants, general public and police officers. It was hoped that this array of different backgrounds would give an understanding of how personal circumstance and ones position in society influences how a person perceives the built environment. During my time at the Durban Magistrates Court I interviewed a series of people, using the facilities, on a one on one basis using a standard interview questionnaire.

Having analyzed the building through the mind of an architect, and understanding the given meaning associated with the building based on its socio-political history, it was of interest to see how the views of the participants correlated with this analysis. Lawyers are highly educated individuals who have a deep understanding of law and its processes; however, they are independent of the judiciary. Magistrate judges are also highly educated and even more embedded within the justice system as they make decisions based on the laws of the society. The public waiting to have their matters heard in the court room may not have a great understanding of the law, but they are personally invested in the outcome of the proceedings. Police officers are an intermediary between justice system and the public and may have a less idealistic view of the system than that of the magistrate.

a) General Perception of the institution of the justice system:

As asked whether or not the respondents thought the justice system lived up to its vision as a transformed and accessible system, the results overall were inconclusive. However, there was a tendency for the public to have less faith in the institution and its processes with an overall consensus throughout that the system was somewhat disconnected from society. This demonstrates that although the people responsible for and knowledgeable about the institution are happy with its service, the institution has not created a positive enough image of the institution within the minds of the lay public.

b) The Preconceived Notion of a Court house:
Next the subjects were asked if they had a preconceived idea or mental image of what a courthouse should look like. The majority of applicants had a similar response of columns and a grand building. Moreover, the simple elements such as the higher position of the judge were most important in their minds. Of interest was the fact that this mental image also tended to be experiential in nature, words such as formal, professional and somber were the words used to describe their ideas by the lawyers and judges. However, the public persons generally did not have a mental image of a court at all. Remembering that justice and the courthouse is a civil service, this showed the disconnection between the public and the institution and showed that the only reason that the professionals had a mental image was because it was part of their everyday life experience. As such one cannot generalize about a society, the individual and his own personal situation within that society can influence how that institution or building is perceived.

c) The Durban Magistrate Court Buildings Clarity:

As a civic building, described as a beacon for the justice system upon completion, it would be presumed that this building formed part of a clear understandable map within the minds of all the subjects. However, the overwhelming consensus was that the building was difficult to find and that most of the subjects had not previously known the function of the building prior to having to use it. As previously discussed, this can be attributed to the isolation of the building within the urban context. In general the subjects believed this building could easily be mistaken for a generic office block. This could be attributed to the understated detailing of the facades which are blank as with modernist ideals.

Furthermore, when asked how the building made them feel when approaching it, the words listed were mainly “powerful, oppressive and disconnected”. This perception would have been a pleasing result for the administrators during the time of construction as it fitted in with how the government wanted to control society. However, there was also a tendency for subjects to have no emotional link to the exterior of the building at all. It would seem the lack of axis and large scale has made the building to some extent unreadable by the people using it.

In terms of the internal experience of the subjects within the building, this seemed to have some of the most powerful responses. The long dark passages and lack of clearly articulated circulation lead to nearly all subjects describing the experience as confusing, intimidating, cold, and dark. The only real discrepancy was the experience of the police officers who generally seemed to find the experience pleasant. This may be attributed the desensitization of these individuals, through continued exposure to prisons, and the darker
elements in society. With the exclusion of this anomaly, the experience would have been appropriate for the justice system of the past but not so much in a new democratic and fair judiciary.

The final but most important question posed to the respondents was: What message the building gave the participants regarding the justice system? The general consensus with this question was that the building made the judiciary seem unapproachable, untrustworthy and inhumane. This aligns with the descriptions of the courts during the days of apartheid through emotive words such as “injustice, exclusion, marginalization, humiliation, fear, repulsion, rejection, distrust, unfriendly, cold, ugly, austere and stern” (Law-Viljoen 2006: 32). It would thus seem that the building has successfully imparted this image of justice associated with the society of its time. However; in the new democratic South Africa where the judiciary has realigned itself to the ideals of transparency, accessibility, fairness and freedom; this building finds itself portraying a message contrary to that of the institution. From the participants answers it is apparent that buildings entrenched in the old society may be doing damage to the image of the transformed institutions they now serve. Although elements such as the apartheid planning and separation of races no longer exist, the confusion of those spaces in current use is still decaying the new notion of justice.
3.3 NTUZUMA MAGISTRATES COURT

3.3.1 Historical and Social Context of Case Study

The new Ntuzuma Magistrates Court, tabled to open in the middle of 2012, is located within the area of Kwa Mashu 25km north of Durban. Although constructed nearly 20 years into the life of the new democratic South Africa, the building cannot be completely separated from the apartheid regime. The history of Kwa Mashu has its roots in 1959 where it was established as part of the Group Areas Act. The Group Areas Act sought to separate Indians, Africans and Coloureds who lived together in places such as Umkhumbane or Cato Manor in Durban. Many people, who moved to Kwa Mashu, were originally from Cato Manor (wiki.ulwazi.org). Historically this area was marginalized, cut off from proper economic and social infrastructures. This marginalization has lead to an area which is now rife with social decay with large amounts of crime and violence.

Figure 50. Location of Ntuzuma Magistrates Court (source: Google earth)

In response to this a Development known as Bridge City was started to link the communities of Phoenix, Inanda, Ntuzuma and Kwa Mashu together and link them together into the urban system. This new town is envisioned as the socio-economic centre to these areas, giving access to civic amenities that have
historically been hard to come by in these communities. The development is to house a hospital, inter-modal transport facility, a regional government hub, a shopping centre and the basis for this research: The Regional Magistrates Court. (www.bridgecity.co.za). According to the development framework the Bridge City is to create a civic node which is easily understandable to the public, with institutional developments being set along the eastern edge overlooking the vast amounts of housing. Bridge City is to be the visual and economic heart of these areas around which the rejuvenation of these areas is to begin. (Iyer Rothaug Collaborative et al 2007). The original Ntuzuma Court was housed in an old prefab school which functionally was inappropriate for the purposes of a court. Furthermore, small prefabricated buildings were visually not demonstrative of the importance of the institution. It could be argued that this may have helped create an image in the people minds of a weak and incapable judiciary which could not serve its needs. In the context of social decay, the law is a fundamental institution which can be used as a visual and social catalyst for rejuvenation.

3.3.2 Justification of Case Study

So far, this research has studied how the principals of the old authoritarian apartheid regime had been manifested and perceived through the architecture of The Durban Magistrates Court. Furthermore, through literature, the architecture of Constitutional Court has been examined as a cornerstone expressing the new democratic values of the judiciary. However, the constitutional court is unique among courts in that it does not encounter many of the functional problems associated with court hearings. As the constitutional court only makes decisions about the constitution, it is not exposed to security risks associated with holding criminals etc. As such the architecture of the constitutional court can viewed as somewhat idealistic as it does not have to completely take into account the realities of the South African justice system. The new Ntuzuma Regional Magistrates Court, designed in collaboration between TGA and DGIT Architects, finds relevance in this study as it seeks to engender the principles of the new democratic justice system. It also finds relevance as a comparative study to the old Durban Magistrates Court, both in terms of social context and the responsiveness of the architecture.

3.3.3 Urban Design

The Bridge City development is situated at the heart of a vast residential landscape and is located opposite to the Phoenix industrial park to the north. The sitting of the precinct and specifically the courthouse at the visual centre of the residential area, gives the site prominence. This importance is exemplified by the sitting
of the Courthouse on the edge of the precinct overlooking the residential area. Furthermore, the courthouse is situated at the top of a hill at the confluence of main transport feeder routes. This prominent position is reminiscent of ancient Greek temples sited on the top of hills. The sitting of the building invites the building to act as visual landmark for the precinct and is furthermore appropriate for a building such as the courthouse which will serve an integral part in the security of the surrounding public. The position of the building will help create a clear cognitive image in the minds of the public, firstly establishing the node as an important civic centre and secondly, the judiciary as powerful institution which serves the community.

![Figure 51. Location of the site within the vast residential landscape (source: Google Earth).](image1)

![Figure 52. The powerful presence of the building viewed from whilst approaching the precinct (source: DGIT Architects).](image2)
As stated, the building is situated at the confluence of major transport feeder routes. When entering the Bridge City precinct, the courthouse acts as a symbolic marker of the precinct you are entering. As you are driving, the building seemingly grows out of the dense landscape giving an immediately powerful image above the green hills. The building serves as an orientating tool for the public giving clarity to the winding roads and hills of the area. In terms of the buildings connection to the street and the public, the building is set back from the street. However, in contrast to Durban Magistrates Court, the landscaping and over sailing canopy reach out and engage with the public on street level. When driving in the opposite direction towards the court, the entrance seems to invite people directly off the road. The large entrance canopy allows for an extension of civic space onto the site. Rather than repel interaction with the judiciary, the entrance seeks to encourage human interaction and engagement with the institution. This civic gathering space was intended by the architects to be a space for rest, for demonstration, and discussion. These elements are truly indicative of a judiciary which is transparent and accessible.
3.2.4 Form

As with the constitutional court, the underlying concept behind the form of the building was the symbolic representation of the traditional African system of justice under the tree. The over sailing entrance canopy is representative of the leafy canopy of a tree, giving shade to passersby and acting as a natural gathering point. The large round tilted colonnades which mark the entrance under the canopy give the impression of the tree stump mightily holding up the canopy. Moreover, these impressive 6m high columns represent power and authority, an important element, crucial to the success of the judiciary. Unlike the Durban Court, which has colonnades along the hard façades of the building, this colonnade frames important space and the entrance way. Through this the colonnade invites the public in a clearly marks the point at which they able to connect with the judicial system. As such there is no confusion as to where the entrance is situated and whether or not the public is welcome. The canopy is also pierced by a large upper level courtyard, adding drama and light to the space, raising the human spirit and giving the space an ethereal feel.
Figure 55. The over sailing tree like canopy of the entrance (source: DGIT Architects).

Figure 56. The North Façade (source: DGIT Architects).

Figure 57. Tilted columns at entrance (source: DGIT Architects).
The east and west basement and ground floor facades adjacent to the entrance are made up of hard impermeable surfaces finished with course textures which give a clear feeling of enclosure and solidity. This is a visual representation of the functions behind, namely the holding cells and other private functions. Furthermore, this creates a solid plinth, as is typical with many classical buildings, upon which the rest of the building and, symbolically, the judicial institution can rest. The upper floors are clad with a physically, and visually much lighter material in aluminium. The cladding is in the form of ribbons wrapping around the building with many gaps perforating the façade. Not only does this give the public spaces and offices a lighter enclosure, it also continues the theme of the tree, as branches reaching out of the building. The cladding is continued underneath the canopy too. The northern cladding grows from the base at the centre and tapers away towards the ends. This can be viewed as the tree canopy thinning as it spreads further out. On the other hand it is also reminiscent of wings. Both these images do give the impression of upliftment.

In order break up the diagonal and horizontal bulk of the building and to give a powerful verticality to the building, the lift shaft is expressed through a glazed vertical element. The verticality ads impetus to the importance of the building and the glazed elements give transparency to the façade. One of the most powerful forms of the building is the diagonal screened wedge on the east façade which overlooks the residential area below. This dynamic shape acts as a landmark and expresses an authority of the institution.
3.2.5. Planning and Interior Experience

As previously stated the entrance to this facility is grand and very clear and accessible. Upon entry the foyer clearly separates the public between the security entrance to the right and the exit to the left on either side of the security booth. Once through the foyer, the subject enters a large atrium around which all circulation and activity is based. This atrium is triple volume with ample clear story natural lighting at the very top. This quality of a high volume with light from above creates an almost religious uplifting experience. The vertical pendant lighting further enhances this uplifting experience. Within the atrium, the main form of circulation is a ramp which runs the entire length of the atrium. This ramp provides easy disabled access, but also provides a very clear form of open circulation which aids in giving the perception of an easy accessible, approachable and transparent justice system; it guides the people through the building and the system. The clarity of space gives the public a pleasant calming experience in a time where they may be stressed. The high volume also gives the space a somber respectability. The materials used throughout the building are hard wearing due to the high volume of traffic in the building. However, the materials are based on natural neutral tones using travertine, stone and marmoran to give a calm but respectable interior.

There is a further clear definition of space and function through the filtering of public to private vertically. The ground floor, to either side of the ramp houses administrative functions such as pay points and smaller family and equality courts, with a canteen at the end of the passage in the wedge shape element. The ramp then takes the subject up to the first floor where the court houses are found along the circulation route. It is
at this level the public journey visually and physically ends. The second floor houses the judge’s chambers and prosecutors offices which are only accessible through private staircases; this is of course due to security concerns. However, the public can still see the judges and admin staff using the circulation routes above. This vertical separation not only separates the judges physically, but in a metaphysical realm too. The vertical separation acknowledges the authority of the judges and the role they play in the institution. The judge’s chambers are situated around the punched hole in the canopy above the entrance. Symbolically speaking, this can be seen to continually remind the judges of the society they serve as they watch the public pass by below. At the same time it could be argued that this is a reminder that the judges are a part of the public realm too. The judge’s boardroom opens out to an internal “garden” which overlooks the internal atrium. This connection further ensures that the judges are aware of their responsibilities to the public who are putting their trust in them within the institution. Unfortunately as a result of security concerns, judges have their own circulation routes down to courtrooms, however these are not accessible to the public and do not cause confusion as is the case in the Durban Magistrates Court.

Figure 61. Interior of courtroom (source: DGIT Architects).

Having designated the importance of different functions and space through vertical division, the final detailing of entrances to different spaces was still not very clearly articulated. As with the Durban Magistrate Court, all doors, even those leading to court rooms were articulated in the same manner. This would seem to be due to budgetary constraints, however, a larger scaled or more highly articulated door, or entrance to a court would help indicate the importance of the court room space within. Within the court rooms, the courtrooms follow the same formula as that of the Durban Courthouse. Simple wood paneling
with the judge raised above the audience to give a formal respectable feel to proceedings with the judge’s authority acknowledged.

When considering the experiential narrative of the prisoner within building, it is clear that understandable security risks, such as possible escape, take precedent over imparting the ideal of innocent until proven guilty. The prisoners arrive via vehicle at the opposite end to the public entrance, from where they are moved to a processing foyer and then directly into cells via a ramp. The processing area and ramp leading the prisoners to their cells are very well naturally lit, however, as the prisoners move into the cells, the daylight disappears and the steel gates and bars along with long passages become the prisoner’s reality. Considering this is similar to that of the Durban Court it shows that some principles cannot overcome functional problems such as security. At the same time, this experience ensures the prisoner knows the severity of the situation in which he finds himself.

![Figure 62. Ground Floor Plan (source: DGIT Architects).](image-url)
3.2.6 Empirical Data
As the building has not yet been officially opened, there was no opportunity to interview the various different role players on their perceptions of the building. However, an interview with the chief magistrate of the building gave insight into his perception. The magistrate felt that not only is the building user friendly and easy to understand for the public, but it is also a courthouse where the employees are enabled in their service of the community. The building gives the employees a sense of pride and responsibility in the institution they serve. Furthermore, he feels that the building serves to connect the surrounding society to the judiciary whilst still portraying power, transparency and approachability, aligning itself with the vision of the institution.
CHAPTER 4 CONCLUSIONS AND RECOMMENDATIONS

As stated in chapter 1, the hypothesis for this research is as follows:

*In order to create meaningful spaces, where a symbiotic relationship is created between the public and civic entities, positive cognitive imagery will best be established through the appropriate use of both form and experiential symbolism.*

The research compiled within the document has supported this hypothesis as it has defined how meaning is given to the built environment. Within the research it is apparent that the perception of a building is linked both to the social context of the subject and also to the individual circumstance of the subject. The differing experiential narrative of each person affects how they perceive an institution and architecture. As shown in the case studies, a prisoner will have a different relationship and experience of the building than that of a judge or a complainant. The socio-political and cultural influences of the time are probably the most important influences of architecture and its meaning. Firstly, the socio-political context influences the relationship between the institution and the public as epitomized by the influence of apartheid on the judiciary and the public. The research has shown that where a building is not successfully aligned with the principals of the institution, as is the case with the Durban Magistrates Court, it may result in increased tension with the public and a misunderstanding of what the institution stands for. The building thus undermines the institution.

The primary research question was to understanding whether the physical form is more important than the experiential value of space in creating meaningful symbolism and positive cognitive imagery within the built environment?

The relevant questions to answer this problem were set out as follows:

1) How does perception influence symbolism and meaning?
2) How does sensory experience through spatial and 3 dimensional planning create a symbolic meaning in architecture?
3) What is meaning?
4) How does architecture communicate meaning through form?
5) What is the role of symbolism in architecture in civic society?
6) What is the importance of creating a positive cognitive image, through the built environment, within the minds of the public?

In answering these questions, the role of meaning in architecture was found to be a broad principle. It can be either based on the individuals personal framework or a larger communities cultural background, furthermore, meaning can be given and received intentionally or meaning may be interpreted where none was intended. As such the importance of meaning in architecture is of fundamental importance. To create a completely meaningless space is near impossible, any interaction or human activity will surely give substance to that space, giving memory and association to the building. Perception plays an important role in how people understand the built environment. Scale, colour and texture are physical elements which form part of the basis of how people perceive their environments. These help to establish the non-tangible feelings which an individual may have towards an object. Furthermore, perception, or the way in which a person interprets their environment, is further established by their personal, socio-political and cultural backgrounds. As such, people of differing backgrounds may interpret the same element differently. The experience of a building which includes its planning is also a conveyor of meaning. The planning of a building is, as discussed, the expression of a social hierarchy. Public spaces are designed to express a welcoming nature, yet when these bleed to more private spaces, they will be less inviting and should express to people where they are acceptable. This is of particular importance with civic institutions such as police where security and privacy need to be finely balanced with a welcoming presence. The three dimensional form can also be very expressive of meaning, the form is once again connected to perception of scale and other contributing factors to express to the individual the relationship the building has with society. This is clarified when considering a glazed building which is inviting in contrast to a large concrete vertical mass which may be imposing. Of further importance was the perception of the built form in relation to the surrounding context, it was found that the positioning of the architectural object in the urban fabric is a clear indication of that institutions position in society and even of the society of the time. Furthermore, elements such as the speed of the movement past and the surrounding built form can form important design components.

Of interest in the study is the effect of cultural symbolism as epitomized by the traditional image of justice under the tree used in the Constitutional Court and the Nyuzuma Magistrates Court. Although this conceptual approach gives the design a grounded justification within the cultural setting of South Africa, it is not clear that the lay person in the public will be able to interpret this imagery through the metaphors
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

used in the architecture. However, the spaces and forms created out of this symbolic imagery are still conveying the intended messages. Rather than the form of the tree being of importance, it is the emotions and experiential value associated with the mottled light and canopy of shelter that are what give the subject meaning. The past experiences and the context of the subject will influence how that symbolism is interpreted. The research also shows that planning and the progression of people through space as well as the function given to space further formulate an image of the subject’s role in society in their own mind.

Through the research the following design guidelines have been shown to be applicable for a civic building in the current socio-political climate:

- The building should engage with the street edge and public, ensuring that the public are visually kept aware that the institution is approachable and integrated within the society.
- Large volumes and elements such as colonnades are appropriate to establish the authority of the institution, the building should engage but the institution should always be respected.
- Spatial experience is one of the most powerful means of expressing meaning to the subject within the building. The amount and quality of light as well as the nature of the materials used can help contribute to a positive image within the mind of the subject.
- In terms of site selection and urban design, the building should be placed in a prominent position which is able to act as an orientating element within the urban context. By taking cognoscente of the transport routes and engaging with other landmarks and buildings, the civic building will be able to impinge on the sensibilities of the public and allow a more powerful image within their minds.

Having studied links between the judiciary and the architecture of the Durban Magistrates Court, an understanding was gained of the influence social relationships have on interpretation and that beyond these relationships; certain elements can determine a universal message to the public. However, with the case study of the Ntuzuma Court, the building had not yet been occupied for use and the surrounding precinct had not yet been developed. Future research into the perception of the public once the building comes into use will be valuable. Also of interest will be how the building influences the urban fabric as the civic node grows within in the precinct. It is presumed that the building, having fully engaged with the public realm, will encourage the growth of a vibrant integrated civic node.
The research topic was initiated through interest in the public image of the South African Police Services and the role architecture could play in the redefining of this image within the context of a new democratic South Africa. However, within the realm of the South African judiciary and its architecture, the study was able to find clear links between an institution, the socio-political context and the individual subject and their interpretations. The judiciary, having helped define Apartheid regime and also having played an important role in the new democracy of South Africa provided a platform to study the methods used in the portrayal of differing social messages in different historic settings within the same country. Furthermore, this study clearly defined how a public cognitive image of an institution can be redefined through the use of architecture. Moving towards the design of a police facility, the lessons learnt within the context of the judiciary can be used to successfully incorporate the democratic and free ideals of the country into the architecture and furthermore create a positive working relationship with the public. As discussed in the literature review, the police, being a national entity with a national identity, may require a building which serves the greater national context of the police rather than a highly contextualized and exclusive symbol of the local context.
APPENDIX A: Research Questionnaire:

Topic: Exploring the Importance of the Creation of the Cognitive Image through Architecture: Towards a New Police Headquarters for Durban

I am a Masters architectural student at the University of KwaZulu-Natal and am doing a study which aims to understand how architecture influences the public perception of civic institutions. The following questions and your participation will help establish a data base of differing human perceptions of the built environment.

You are under no obligation to answer any questions and your personal details will be kept strictly confidential.

Name:
Date:

Interview Questions:

1. The vision for the Department of Justice is as follows:
   “A transformed and accessible justice system which promotes and protects social justice, fundamental human rights and freedom.” (www.justice.gov)

   The mission statement is: “We commit to provide transparent, responsive and accountable justice for all.”

   Does your personal perception of the institution align with these goals set out by the Justice Department?
   Yes/No

   Please select 1 or more of the following which best describes your personal perception of the Justice System:
   a) Transparent
   b) Accessible
   c) Trustworthy
   c) Corrupt
   d) Untrustworthy
2. What is your reason for being in the building? Please select:
   a) Judge/Magistrate
   b) Lawyer
   c) Defendant
   d) Complainant
   e) Staff Member
   f) Other, please specify ________________________________________________________________

3. Is this your first experience in a courthouse? Yes/No

4. Did you have any preconceived notions of how a courthouse should look or feel? Yes/No.
   Please elaborate:
   ___________________________________________________________________________________
   ___________________________________________________________________________________

3. Before you needed to use this courthouse, did you have a clear idea of where the building was and what it looked like? Yes/No

4. If you had seen it before, did you know then what the function of the building was?

5. What was your first impression of the building from the outside? Please select:
   a) Powerful
   b) Oppressive
   c) Disconnected
   d) Welcoming
   e) Uplifting
   f) Transparent

5a) Do you think the form of the building is appropriate for this function and does the form mean to you?__________________________________________
6. Which function do you feel is most suitable for the form of the building?
   a) Office block
   b) Residential block
   c) Civic building
   d) Courthouse
   e) Prison
   e) All of the above

7. Is the entrance clearly identifiable? Yes/No

8. How would you describe the entrance to the court? Please select:
   a) Confusing
   b) Intimidating
   c) Welcoming
   d) Understandable

9. What would best describe your experience of the walkways / circulation of the building? Select 1 or more of the following:
   a) Confusing
   b) Intimidating
   c) Pleasant
   d) Understandable
   e) Dark
   f) Cold
   g) Light
   h) Warm

10. Which would best describe how being within this building makes you feel within the Durban context? Please select:
    a) Connected to Durban community and its society
b) Isolated and disconnected

11. What would best describe what this building says to you about the justice system?
   a) Transparent
   b) Free and fair
   c) Approachable
   d) Corrupt
   e) Unapproachable
   f) Untrustworthy
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1. What was the brief given to you by the department of public works / justice? Did they require you to express any specific qualities or ideals of the Justice department in this project?
2. What was your inspiration for the design of the Ntuzuma Magistrates Court with the dynamic forms and “weaved” facade? And through the use of this interesting tectonic, what message did you seek to impart on the public?
3. Does the tectonic of the building express the quality of spaces within?
4. What importance did the existing social/cultural context of the area play in the design of the building?
5. Did you feel it important to design a building which clearly identified itself as a court house through preconceived notions of what the public knows of a courthouse, or rather to design a new tectonic which over time becomes synonymous with justice?
6. What influenced your choice of materials for the project? Was it aesthetic, climatic, functional? Do you feel the materials were an important part in conveying your message to the public?
7. What sort of experiences did you want to create in the various spaces? And did quality of light play an important part in this design?
8. When considering the different users of the building, did you feel it appropriate to design different experiences for differing users? I.e. should a prisoner have a different sensory and emotional experience to that of a witness or victim?
9. How did you deal with the issue of public spaces of a civic building linked closely to private spaces such as the magistrate’s offices etc? Was there a scaling of public spaces? And was it an intention to make the layout easily understandable for the public?
10. This vision of the Department of Justice is:
   “A transformed and accessible justice system which promotes and protects social justice, fundamental human rights and freedom.”
   Do you feel the Ntuzuma Magistrate Court aligns itself with this vision?
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PART 2: DESIGN REPORT

CHAPTER 1 INTRODUCTION

1.0. INTRODUCTION

1.1. Introduction

The preceding theoretical study of the importance of the cognitive image in architectural design revealed; through literature, case studies and precedents; the importance of a cohesive message between the architecture of an institution and the principles of the institution it houses. In the post-apartheid South African context where socio-political policies have widely changed, and the role of public institutions such as the Judiciary and the police have been re-invented, it has become increasingly important to re-align the architectural message of these institutional buildings accordingly.

Having broadly discussed the importance of the cognitive image in part one of the document, this chapter uses the theoretical framework established to describe the client and their requirements. Subsequently a brief, schedule of accommodation and conceptual design approach are discussed and formulated in response to the issues raised in correspondence with the primary theoretical framework of part one.

1.2. Project Description


1.3. The Notional Client

1.3.1 The Clients Organisation

The client for this project is the South African Police Service under the Ministry of Police. The specific client is the SAPS Kwazulu Natal Provincial division. This division controls the police within the Kwazulu Natal region. It oversees 183 police stations compromising 24178 sworn officers and 5578 civilian officers. The head of this regional division is Lieutenant- General BM Ngobeni. Funding for the project will be allocated by the Governments Budgetary allowance with the approval of the Minister of Police and National Police Commissioner. (www.saps.gov.za)
1.3.2 The Clients Requirements

The Regional Headquarters of the South African Police Service for the Kwazulu Natal region currently occupies the Servamus Building in Durban central. The lease agreement for this building made news headlines last year with allegations of corruption being leveled at top ranking police officials such as Bheki Cele, the then National Police Commissioner. According to allegations, the proper tender process was not followed and the relationship between property owner, Mr. Shabangu, and Cele was questioned. Hereby the leadership of the police was brought under scrutiny. It is believed that the lease agreement for the Servamus building along with another building came to the region of R1,8 billion.
Furthermore, the building accommodation has been found to be unsuitable for the function of Provincial Headquarters. Security, parking and space requirements have not been adequately made provision for. The building is a standard modernist office block which does not suitably uphold the authority and stature of the police service. Furthermore, it does not provide a positive image of the police service within the minds of the public; it could be argued that the bland uniform façade decorated by Coca-Cola murals provides no engagement between the SAPS and the public. The building has a brutalist appearance and being 30 floors higher than the surrounding built context, is isolated and possibly contributes to a negative and disengaged public image of the SAPS. In light of the scrutiny surrounding the lease of the Servamus building and the inept nature of accommodation provided, for an institution such as the Provincial Headquarters of the SAPS, the client has requested the design and construction of a New Provincial Headquarters for the SAPS in Kwazulu Natal to act as their psychological and physical centre and to replace their leased accommodation at the Servamus Building. The Regional Headquarters is to provide an administrative role, as well as housing specialist units such as the HAWKS. Furthermore, the client has requested a memorial park be included on the site, as well as a Police Museum to pay homage to fallen officers and the history of the service.

Figure 3 The Servamus Building is the current SAPS headquarters (source: Cameron Finnie)
1.3.3 Detailed Client Brief

The New Provincial Headquarters is to serve both the public and the police service. It is envisioned that the building will help redefine the public image of the SAPS. As stated in chapter 1 of part 1, the SAPS have been used historically as a tool to enforce the unjust laws of apartheid. Furthermore, the police image has suffered as the media has drawn attention to apparent brutality. A building which engages and provides a positive image of the police is required. The building is to provide a positive working environment for the hierarchy of the police service, it is important that the police share a positive image of their institution. The building needs to inspire them to continue to do their work and to believe in their purpose.

The existing electrical substation buildings on the site are to be demolished and removed from site. The building is to accommodate 2000 people working in the various departments throughout the administrative headquarters. Furthermore, the building is to engage with the public through the provision of a Police Memorial in honour of fallen officers. Remembering that the police put their lives on the line every day, it is important that homage be paid to their bravery and sacrifice. Provision is to be made for a public police history museum attached to a cafeteria. These public facilities will play an important part in breaking down the hard unapproachable image that the police currently have. This follows in accordance with efforts such as the National Police Day. This is a day where the South African Police Service (SAPS) remembers the sacrifices that the members of the SAPS have made and continue to make as they provide safety for all who live in South Africa. They pay special homage to the bravery shown and to those whose efforts have been met with death in service. The memorial park would provide a suitable venue to hold memorial events on such days. It will provide a place for all to give recognition to the police services efforts. It will also serve to bring the police and community involvement into the forefront of the public minds.

National Police Day is held annually and all police stations will engage the families and friends of police and civilian employees at events arranged at the various stations. This effort aims to give recognition to members' families for the sacrifices they make as their sons and daughters engage in efforts to curb crime daily. It also serves to mobilise communities in a partnership against crime. An intensive week-long programme focusing on the well-being of employees, as well as improving service delivery nationwide follows Police Day. (www.saps.gov.za/events/nat_polday2008.htm)
The most important task is to try improve the perception the public have of the police. The Police service has been at the forefront of negative publicity due to corruption, nepotism and brutality. As a result the public do not trust the very people who are meant to be keeping them safe. It is important that this relationship be healed so that the police and communities can work together. The negative publicity has been heightened by top officials such as Jackie Selebi and Bheki Cele being fired for corruption. Not only does this destroy the faith of the public, it also creates uncertainty within the police service as a whole.

The following quote explains the importance of public image in the police:

“Wearing a police badge is not easy. As law enforcers, police protect the defenseless in times of crisis. However, the information age has made society suspicious of the uniform and what it stands for. Guns kill the innocent as easily as the criminal. The abuses of power by those we trust undermine institutional authority. Police have an uneasy presence in our society, their institution is under siege. It is this status that has lead to a positive public image being viewed as important as responsible action. Doing a job well on its own is no longer good enough, appearing to do the job well, and being willing to share the experience have become equally important. In this context, the space of architecture carries with it added responsibilities.” (Kapelos 1996: 18).
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 7 A cartoon from the Mercury Newspaper dated Friday September 7th. This cartoon is a reference to the massacre at the Lonmin Mine in Marikana, where over 30 striking mine workers and several police officers were killed in violent clashes. This episode is the latest of many incidents where the image of the police was damaged through the media. The public image and perception of the police has been that of a brutal and non-performing force which is a war with society rather than with criminal elements. It is this perception and image that needs to be changed and architecture needs to form part of this solution (source: The Mercury September 7, 2012 page 7)

Figure 6 Figure 4 A cartoon depicting making reference to the underhand dealings and corrupt behaviour practiced by the high ranking SAPS officials (Source: http://southafricanpoliceservicecrimes.blogspot.com)
Furthermore, the reputation of the police has been ruined by a history of transgressions. During apartheid the police were used as instruments of enforcement of a cruel and unjust government. It was often the police that were used to intimidate and suppress people of colour. Although South Africa is now a democratic and free country, the memory of those oppressive times is still fresh in many minds. As the police were such a prominent part of the old regime, their image is still very much tainted by the transgressions of their predecessors.
The police needs to redefine their image to one where service is primary rather than force. They should be seen as the public defenders rather than bullies. People should have pride in the police and be grateful for their sacrifices rather than looking at the ineptitude of some. The envisioned public perception is one where the organization is seen as a transparent and accountable organization based on a mutual respect between public and the police service. The following images give an indication of what the public image should consist of.

Figure 11 A organized and well structured service depicted through an orderly march (source: http://www.saps.gov.za/_images/events/memorial04/DSC_4168.jpg)

Figure 12 A friendly approachable police service who has a connection with the public (source: http://www.kent.police.uk/join_us/pcko/pcko.html)
This poem named “Ambushed” by William Ernest Cox gives an indication of what the public should feel for the members of the SAPS who lay their lives down:

Protect And Serve - Not Die
My four brave buddies in BLUE
Today the Country salutes you
You were all an inspirational light
Keeping your mission and zest bright
Little did you ever know
What seeds of evil against you could sew
On Sunday 25th June 2006 you were on duty
Little knowing what was expected of you
To come up against the trained forced of evil
Lead to your fate by Lucifer, the Devil
You were outnumbered, outgunned and slain
Like pigs going to their slaughter
Out numbered, not once, out spirited
You stood your ground like heroes
You carried your cross like disciples
You paid the supreme price with your flesh
You have all earned a place in heaven
While your enemy will languish in HELL!”

(2011: Shoot to Kill: Inside A south African Police Death Squad)
## 1.3.4 Schedule of Accommodation

### SCHEDULE OF ACCOMODATION

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<td>Central Circulation / Break Away</td>
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<td>Gym</td>
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**TOTAL AREA**: 46240
Budget:
Offices – 23000m² low rise standard/prestigious office accommodation @ R8000/m² = R185 million
Structured Parking – approx. 22000m² parking @ R3000/m² = R66 million
Museum: approx. 500m² @ R9000/m² = R4.5 million

Approx Total Budget = R255.5 million

CHAPTER 2 SITE SELECTION, SURVEY AND ANALYSIS

2.1. INTRODUCTION

The site selection process was intrinsically linked to the objective of the study and the project, that being to redefine the public image of the police through architecture. In order to achieve this, the building would need to act as a beacon of safety/security and justice for the city and for all the surrounding police stations which it served. It also needed to be visually and psychologically accessible creating a connection to the community and as a point which defines the police as a public or civil service.

As a result the site was required to be easily accessible, close to transport routes for both SAPS members and the public alike. Furthermore, it was required to be linked to a civic precinct. Not only is this important in establishing the SAPS as a service which is provided rather than a force, it also links to the next requirement of legibility. Placing the new headquarters in a prominent position within a civic precinct will enable the institution to be easily orientated within the urban environment. Furthermore, placing the headquarters within a judicial complex or police compound may be beneficial to creating a well orientated urban landscape.
2.2. SITE SELECTION AND DISCUSSIONS

2.2.1. Option E

Figure 15 Image showing position of Site option E (source: author)

- **Stalwart Simelane / Florence Nzama Street (15000sqm)**
  - **PRO’S:**
    1. Very prominent site
    2. Can act as entrance beacon to city
    3. Easily accessible
    4. Close to train station
    5. Close to municipal precinct and institutions such as UNISA
  - **CON’S:**
    1. High speed traffic on both sides, may be isolated.
2.2.2. Option H

- **OPTION H: Bhejane Street (Bridge City) (Bridge City) SIZE: 6500m²**
- **PRO’S:**
  1. Opportunity to provide service to previously marginalised community
  2. Acts as the 2nd gateway to the civic precinct
  3. Close to transport routes
  4. Visually prominent site
- **CON’S:**
  Isolated from the city centre and central stations
  Site may be too small
2.2.3 Selected Site

The selected site was Option E on Stalwart Simelane Street and Florence Nzama Street. The site was chosen for its close relationship to the existing Durban Magistrates Court and the Durban Central Police Station to the north. This site allowed the possibility of the creation of a judicial precinct. Furthermore the close link to the Durban train station allows for easy access. The municipal complex and Metro police headquarters to the west also make this site highly appropriate as it falls into an existing precinct. The surrounding buildings are also institutional in nature such as the SABC, UNISA and various banking headquarters, this typology will suit the new SAPS headquarters.

2.3. SITE INFORMATION

2.3.1. Location

The address is 250 Stalwart Simelane Street. The site is located in Durban, Kwazulu Natal in South Africa. The site is located just north of the CBD between 2 main roads being Stalwart Simelane Street (leaving the city) and Florence Nzama Street (entering the city).
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 18 Macro position of the chosen site (source: author)

Figure 19 The site compromises 2 municipal land parcels A and B (Source: Author)
2.3.2. Description of Existing Site Conditions

Site A is currently used as a municipal storage yard whilst site B is the existing old fort substation. The prominence of this site at an entry point to the city, makes these existing uses inappropriate. The site is also essentially flat. The current zoning is General Business although it is currently used as municipal land. The land will need to be zoned as institutional as per surrounding buildings.

Site Area: Site A= 5000m², Site B= 9300m², TOTAL=14300m²
F.A.R: 8
Coverage: N/A
Building Lines: 4.5m from vehicular centre line (side and rear not applicable)
Height Restrictions: 59 deg angle from opposite side of street or 110m with a setback of 5m at every vertical 15m.
2.4. SITE ANALYSIS

2.4.1 Zoning

Figure 22 Site in relation to business district (source: author)
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 23 Site in relation to Entertainment zones such as the ICC, sentrum, and Suncoast (source: author)

Figure 24 The site is located centrally to transport nodes (rail and bus station to the west and taxi ranks to the south) (source: author)
Figure 25 Site in relation to light industrial zones (source: author)

Figure 26 Site is located over the road from Hoyt park to the east, a park that may be used for police activities and team building (source: author)
Figure 27 The municipal zone to the west and the court and police zones to the north (source: author)

Figure 28 Residential zoning (source: author)
The site is located within an institutional zone housing the SABC, UNISA as well as various other Banking Headquarters. This makes it an appropriate site for a Police Headquarters. Furthermore, the close proximity to the municipal precinct as well as the existing judicial precinct means that this building will further establish this area as a clearly identifiable node.
2.4.2 Movement Routes

Figure 31. Main vehicular routes at a macro scale. Site is situated on Stalwart Simelane and Florence Nzama Rds; it is easily accessible and highly prominent along these priority routes. (Source: author)
Figure 32 Micro Vehicular Traffic analysis. High volume, high speed traffic along Florence Nzama and Stalwart Simelane isolate the site however they do provide easy access to the city and outbound routes. (source: author)

Figure 33 High speed traffic along Florence Nzama Street creates a pedestrian unfriendly hard edge (source: author)
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 34 Pedestrian routes, pedestrians walk from the city centre to the train station along stalwart Simelane Rd and Kingsmead Way as well as from the beach to the station (source: author)

Figure 35 Pedestrian / vehicular conflict along Stalwart Simelane, there is a need for crossings and traffic calming (source: author)
The high speed traffic on both edges of the site has resulted in dangerous encounters between pedestrians and cars. No Crossings have been provided and the site has been isolated as a result: Traffic calming and robots are required.
2.4.3 Block Sizes

Figure 38 The large block sizes immediately surrounding the site give the precinct a low walkability and add to the vehicle dominated transport (source: author)
Figure 39 Hoyt Park, highlighted in green, provides a physical BARRIER to pedestrian circulation as it is fenced off with no thoroughfare. Furthermore, the park breaks the link to the ocean, the ocean is a key prim ORIENTATING element within Durban, and linking back to the ocean would aid LEGIBILITY and prominence of the site (source: author)

2.4.4 Building Heights

Figure 40 The surrounding buildings are approximately 5 levels high, the new headquarters will have to be at least this high in part to achieve prominence (source: author)
2.4.5 Edge Quality

Figure 41 The precinct is dominated by hard / harsh and unwelcoming edges. This has resulted in very little street activity and island like and isolated blocks. To soften the edges both hard and soft landscaping will be required. (source: author)

2.4.6 Existing Police Entities

Figure 42 Map showing the central location of the proposed site for the headquarters in relation to the existing satellite police stations (source: author)
The existing satellite police stations within the Durban Central precinct are generally housed within existing buildings including old industrial warehouses and residential looking buildings. This is inappropriate for an important institution such as the SAPS as it does not create a positive or impressive image of the police. Furthermore the public would surely not feel comfortable entering such buildings and the officers working in such buildings will feel demoralized and the importance of their task will be lost. As such it is important that the new regional headquarters provide a central point around which the Durban SAPS can congregate and find inspiration and motivation.
CHAPTER 3 DESIGN DEVELOPMENT AND RESOLUTION

3.1. CONCEPTUAL AND THEORETICAL ISSUES

3.1.1 Urban Design Concept Development

Figure 49 Visual connection to the Moses Mabhida Stadium: INSPIRATION (source: author)

Figure 50 AXIS along Kingsmead way can reconnect with axis towards beach front giving PROMINENCE to the building. Extension of pedestrian friendly route from station to beachfront. (source: author)
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 51 Visual connection to Durban Magistrates Court: Respect the relationship between the 2. (source: author)

Figure 52 Visual connection and close proximity to city. Remind the police of the society they SERVE: INSPIRATION (source: author)
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 53 The new site is clearly visually separated from the existing Magistrates Court by Stalwart Simelane Street. This gives clarity of the autonomy of each institution. However, they are linked in the same judicial precinct so their working relation is respected. (source: author)

Figure 54 The close connection to the park creates an opportunity for pleasant calming views over the greenery. It also provides an opportunity for use as parade grounds and team building exercises such as Police Sports teams. (source: author)
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 55 The site provides an excellent opportunity to establish the headquarters as a prominent landmark marking the entrance to the city. Furthermore, it provides an opportunity to establish the SAPS within the hearts and minds of the public. (source: author)

Urban Design Concept:

- Judicial Precinct to include separate Hawks building and Prosecutors building. The physical and visual separation of entities is important to ensure their roles and independence are clearly defined. The prosecutors need to be independent of the judges and the Hawks and internal investigations need to be independent of the SAPS Headquarters.
- Regeneration of pedestrian friendly edges.
- Recreation of the previously cut off axis from beach through Hoyt Park and the site towards the station. This will give prominence to the site.
3.1.2 Architectural Precedents Studies

3.1.2.1 Carrum Downs Community Police Station

The perforated yellow brick tower at the public entrance to this community police station acts as an abstract billboard clearly identifying the police station in its context (Walker 2011: 84). At night the effect of a beacon of light and safety is emphasized as the light filters through the brickwork. This gives a simple yet powerful image within the minds of the community.

Figure 56 Perforated screen tower becomes a beacon of light and also hints at a feeling of transparency (source: Walker 2011: 84)

3.1.2.2 Gauteng Provincial Headquarters for SAPS

ARC Architects
Johannesburg, South Africa

Figure 57 The elevation of the building gives no indication of the stature of the institution it houses (source Gauteng Provincial Headquarters for SAPS. 2004: 74)
The Gauteng Provincial Headquarters was sited within the boundaries of the inner city. By citing the building within the inner city, it was easily accessible to commuters and furthermore it aimed to increase the safety of the entire precinct by providing a physical and psychological presence of law enforcement. The 13000m² building is composed of mainly cellular office offices, with 200 parking bays for state vehicles in a naturally ventilated semi-basement, staff vehicles were excluded. The 3 floors above the basement are laid out in a figure of 8 shape. The building depth is 11.5m allowing for natural ventilation. (Gauteng Provincial Headquarters for SAPS 2004: 75)

The overall arrangement naturally allowed for internal planted courtyards which are used as entertainment areas, pause spaces and break away spaces for training rooms. Furthermore, 2 bar areas were included, 1 for commissioned, and another for non-commissioned officers. Considered important in the design of this facility was the centralization of services and a flexible layout, both of which will allow for the easy reorganization and or resizing of departments.
The design of the building is a bland face brick Tuscan-esque office block with a simple hipped roof placed on top. This building could essentially serve any business and could be sited in any office park. The only element identifying it as a police Headquarters is the police emblem at the entrance. As such the building fails to provide that physical and psychological presence of law enforcement in the minds of the public. The building has not created a powerful enough image within the minds of the community to successfully capture the ideals of a competent, powerful and trustworthy police force, in fact, it could be argued that this building describes the police as a simple business. Furthermore, the building seems disconnected from the urban fabric, engaging with a green field rather than the city, further removing itself from the mental image of the urban fabric with the minds of the people.

The only element within the building which has attempted to create an identity for the building is the decorated entrance wall. A local artist turned the entrance wall into an artwork of mosaics and pigmented cement attempting to create a “rich African experience”. This attempt seems like an afterthought and in the context of the entire building seems inappropriate.

In considering the role of the Regional Headquarters in housing the top police officials and being a psychological centre for the police of region, it is questionable whether this standard office block serves to inspire its constituents. This building fails to create a place where police officers aspire to be or a place which inspires pride in the service they provide.
3.1.2.3 Ontario Provincial Police HQ  
Dunlop Farrow Architects & W.M Salter and Associates  
Orillia, Ontario, Canada

The architects of the Ontario Provincial Police HQ decided to engage with issue of the image of police and the reality of authority, and noted the importance of image and appearance where authority is under scrutiny (Kapelos 1996: 18). The architects were asked in their brief to create an image of a caring and responsive police, where the public are able to see how they operate. On the other hand they were asked to create a secure and private place where the police were able to do their work unhindered. Kapelos described it as “simultaneously physically secure while psychologically open… a metaphor for police in this age” (Kapelos 1996: 18).
In planning the building, a public interior walkway is provided along the length of the building linking public functions. Furthermore, this walkway provides visual glimpses for the public of the actual police workings of the building. This gives the appearances of connectedness to the public giving insight into the soul of the police (Kapelos 1996: 21). The public walk along the walkway and are able to look into the separate secure atria within the office blocks, but little important activity is visible, most police circulate along separate corridors parallel to the atria. This is a criticism of the design, it would possibly be more appropriate to see more of the police activity. It is important that the notion of the suggestion of openness yet denying it should not highlight a disconnection between police and public.

Along the public promenade are auditoria, a souvenir shop, a police museum and a cafeteria. The museum gives the story of the Ontario Police through the use of simple displays. The atmosphere is cold and hard, much like evidence, here respect is paid to the severity and importance of the role the police play. The museum does not however idolize the police service, instruments of torture, weapons and archival photos give a true account of the somberness of their history. By the police opening these artifacts to public scrutiny, it is making itself accountable.
Throughout the building the careful line between authority and openness is straddled and careful control of the image, access and appearance are kept. Somewhat symbolically the cafeteria is the point where the divisions are completely swept aside. It is at the cafeteria where the public and the police, served and servant can eat side by side sharing common views. (Kapelos 1996: 25). The building has made a start in engaging the notion of public scrutiny of public offices which is important in a democratic country. The task of merging the security requirements of the police and this ideal of openness has been achieved in an interesting way through this building.

The form of the building makes use of large glazed atria as well as a glazed walkway which make the building permeable to the eye. The angled protruding skylights furthermore link to the notion of the beacon of safety. Furthermore, the architects have broken down the building into separately roofed elements which breaks down the normally monumental and imposing scale of these types of buildings. The public walkway also diminishes the scale of the building as seen from the outside. The architects moved away from the image of the existing Toronto Headquarters which has a bright blue cupola and shiny granite veneer which gives the message of authority without compassion. As such the Ontario Police Headquarters is a positive gesture less obsessed with symbols of power, but rather a desire to change (Kapelos 1996: 25).
Figure 65 Plans (source Kapelos 1996: 24).
3.1.2.4 Police Memorial Building: Jacksonville Police Headquarters
William Morgan Architects
Jacksonville, Florida, USA

Urban landscaping makes the civil service which is the police, a civil amenity such as a public park. This softens the public image of the police and forces engagement with the public on a physical and psychological level. The Police Memorial Building in Jacksonville maintains a secure environment whilst still allowing public permeability.

Figure 66 View Of public landscaped pathway over the police headquarters (source: Breaking Down the Battlements: Jacksonville’s New Police Headquarters. 1978: 117)

Figure 67 Aerial view showing landscaped roof headquarters (source: Breaking Down the Battlements: Jacksonville’s New Police Headquarters. 1978: 117)
3.1.2.5 Minneapolis Police Headquarters

Julie Snow Architects
Lyndale, Minneapolis, USA

The brief for this project was to design a building of contradictions, to open a traditionally closed building to the public whilst maintaining the required levels of security. The building aims to accommodate community policing and community functions within the traditional station house in order to foster an increased positive police presence within the community. To clearly identify public from private or secure zones within the building, 2 distinct volumes have been created. A double height glazed pavilion houses the community room, whilst a rectangular more solid appearing brick structure contains the police functions. The community room is visually accessible to the urban context and provides a strong connection to the community and street. The building was required to not be a fortress yet it still needed to be a defensible space for police operations. To find this balance, the architect simply raised the whole building, including the surrounding platform on to a plinth. This plinth elevates the police station giving it stature; however, it also provides a psychological and physical separation to protect against being crashed into during a vehicular attack.
3.1.2.6 Hollenbeck Police Station
AC Martin Architects
Los Angeles, USA

In an effort to convey a more welcoming presence and foster better relationships with the community, the architect made the glass façade the prominent feature of the new police station. The glass facades give the notion of transparency and accountability during the day yet also act as a lantern at night echoing the notion of a beacon of safety and increasing the stations presence after dark. The image of light and good and dark and evil are prominent in this design. Furthermore, rather than a single solid mass, the screens break up the façade and therefore make the building less imposing.

Although the glazed façade may appear to leave the building as a security risk to the police, the detailing of the façade has overcome that problem. As indicated in the section above, bullet proof glass has been used as cladding, ensuring the building appears open yet is still physically secure.
3.1.2.7 New South Wales State Police Headquarters

Bates Smart Architects
Sydney, New South Wales, Australia

The brief for the NSW Police Headquarters was to create a polished corporate image for police. The objective was to show that government agencies are meant to function as highly efficient, well managed organizations where accountability and performance are meant to match those of the private sector, and as such the architecture of their workplace should reflect that (Goad 2004: 62).

In this example the architect wanted a governmental building to be an example of how a commercial building might be planned where the image of governance is redefined as a carefully negotiated measure of civic authority (Goad 2004: 62). The building’s design makes use of two tower blocks using a rational method of office design to set sizes etc, furthermore, the rational design is linked by a central core. The design is centered on efficiency. (Goad 2004: 62)

Figure 72 The clean crisp glazed façade gives an efficient corporate image (source: Goad 2004:62)

Figure 73 The screen façade on ground floor gives the feeling of being inside the building even when not (source: Goad 2004:62)

Figure 74 Massive round columns give the image of strength and stability (source: Goad 2004:65)
At ground floor the towers are linked by a podium level defined by its glazed entrance screen which was inspired as an abstraction of the patterns created by DNA detection devices. At ground floor the grand monumental columns provide the notion of authority and grandeur of the police. Internally the ground floor provides a massive double story volume which houses press briefing rooms and a crèche at ground level and staff lobby, gymnasium, seminar rooms and a restaurant on the mezzanine, all of which are visible from the ground floor. The interior of the building makes use of bright and warm finishes such as the travertine floors, pendant light fittings and soft couches to soften the uniform nature of the aluminium curtain walling systems that can be associated with office buildings. The heavy double barrel revolving doors and steel frame surrounding the podium level act as bomb protection for the building. It is evident that security is a high concern for these buildings. The exterior of the podium level also houses a police memorial and reflecting pool for fallen officers. (Goad 2004:68)
Figure 76 Schematic Plans (source: Goad 2004:66)
Figure 77 Typical Office Plan (source: Stephan 2005: 112)

Figure 78 Section (source: Goad 2004:67)
3.1.2.8 Australian National Police Memorial

Liam Proberts Architects
Canberra, ACT, Australia

Figure 79 The names of fallen officers mounted on the memorial wall (source: http://www.uap.com.au/art/civic/australian-police-memorial)

Figure 80 Simple low lying structures are very effective in the use of memorial walls in a park environment. The walls do not provide a visual barrier (source: http://www.uap.com.au/art/civic/australian-police-memorial)
3.1.2.9 LAPD Motor Transport Division and Main Street Parking
John Friedman Alice Kimm Architects
Los Angeles, California, USA

Figure 81 The stainless steel mesh allows an ever-changing façade which appears to glow at night. It also gives the building an interesting play on transparency (source: www.archdaily.com/139804/lapd-mtd-msp-john-friedman-alice-kimm-architects)

Figure 82 The detached screen allows people to move within the building without actually being within the building (source: www.archdaily.com/139804/lapd-mtd-msp-john-friedman-alice-kimm-architects)
3.1.2.10 Fuencarral-El Pardo Police Station

Pablo Rodríguez Mesa
Calle del Mirador de la Reina, Madrid, Spain

Figure 84 The mesh screen allow light in and views out but provide a partial visual barrier to the outside which is required for secure spaces like the police (source: http://www.archdaily.com/255186/fuencarral-el-pardo-police-station-voluar-arquitectura)

Figure 83 The building has been set back from the boundary providing a security barrier and also allowing a pleasant urban landscape to be created which will engage with the public in a positive manner (source: http://www.archdaily.com/255186/fuencarral-el-pardo-police-station-voluar-arquitectura)

Figure 85 The light shines through the mesh at night creating a beacon of light and a symbol of safety (source: http://www.archdaily.com/255186/fuencarral-el-pardo-police-station-voluar-arquitectura)
3.1.3 Architectural Design Concept Development

Figure 86 CONTINUATION OF AXIS (source: author)

Figure 87 PRIME "ADVERTISING SPACE: VERTICAL ELEMENTS FOR PROMINENCE (source: author)

Figure 88 BREAKING UP THE LARGE BLOCK (SCALE): North facing Blocks allow more light and provide pleasant private spaces for the police "community (source: author)
SECURITY VS APPROACHABILITY

The police rely heavily on the support of the public and a good working relationship is essential in the day to day work of the police. However, relations have been strained with the public and an effort engage with the public is required. Rather than creating an image of an aloof and completely authoritative institution, the public need to feel as though they have some part to play in the institution. Furthermore, transparency and permeability are key to giving the perception of an accountable and well run institution. The security concerns of the building make it impractical to completely open the building to the public.
The western facade facing onto Stalwart Simelane has the most foot traffic, to allow the public to feel as though they are welcome "within" the building; the hard facade of the building has been set back with a screen element projecting out over the pedestrianised walkway. By doing this the public are involved with the institution rather than completely isolated.

![Figure 92](image1.png)

Figure 92 Soft screen façade to allow people “within” the building whilst still maintaining a secure environment (source: author)

The eastern facade along Florence Nzama Street is much quieter as it faces onto Hoyt Park. On this elevation, the public are confronted by a series of hard concrete facades separated by private treed courtyards which are set up on the podium level. This highlights the permeability and accessibility through the open courtyards in a visual manner, in vast contrast to the hard surfaces of the building which are indicative of the old police image.

![Figure 93](image2.png)

Figure 93 Solid vs. void and transparent vs. solid edge (source: author)
The use of solid fingers reaching out to the public acts in contrast to the open courtyards overlooked by all the accommodation. This allows people walking by to feel the solid presence of the police whilst still being able to see the SAPS members going about their business above the courtyards.
The west façade consists of steel mesh screens which wrap around the curved façade. This allows differing amounts of transparency to the building depending on how close or at what angle the person is. Furthermore the screens are staggered allowing the passerby the feeling that they have filtered within the building without having caused a security breach.

**Figure 96** The west façade (source: author)

**SURVEILLANCE**

Surveillance is an important part of securing neighbourhoods and an integral element within policing. The commissioner’s office will overlook the precinct from the most prominent part of the building. The main glass façade off the atrium space has glass that seems to move past the floors, walls and roofs. This is an attempt to reach out to the public. Furthermore, the tilted façade hints at a building surveying its surroundings and keeping the neighbourhood safe.

**Figure 97** Surveillance and verticality at north and south ends (source: author)

**Figure 98** The main atrium glass façade (source: author)
FORCE VS SERVICE & AUTHORITY VS PARTICIPATION

Hard vertical concrete elements are juxtaposed to “transparent” light screen elements to highlight issues of force, service, authority and participation.

The importance of a podium: The creation of a podium level upon which the rest of the building sits is to give the building a sense of power, integrity and authority, a status which the police needs to protect and enhance. Furthermore, the podium acts as a security buffer for the SAPS, being a high priority building with high security risks, protection from cars attacks is also a consideration.
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

NORTH LIGHT
The courtyards allow for well lit and ventilated office blocks

PRIVATE OUTDOOR SPACES FOR THE POLICE
It is important that the police have a pleasant working environment that promotes pride and reaffirms the importance of the work they do.

ORDERED POLICE STRUCTURE VS NATURAL SOCIETY
The building aims in part to express the structured nature of the police, based on linear rank and order. This is in contrast to the more disorganised and curvilinear nature of the public society. Furthermore, the meeting of these 2 vastly different worlds will be expressed in the meeting of the 2 forms, the curve meeting the square is by nature a conflict and this is expressed via a gap.
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban

Figure 104 Nature of society vs. order of structure of police (source: author)

Figure 105 The conflict between society and the structure of police (source: author)

VERTICAL LANDMARK & BEACON OF SAFETY

Figure 106 the vertical landmark and beacon (source: author)

Figure 107 Conceptual elevation (source: author)
3.2 FINAL DESIGN PROPOSAL

3.2.1 Urban Design and Architectural Design Drawings
Exploring the importance of the cognitive image through architecture: towards a new regional headquarters for the SAPS

Opportunities

Visual connection and close proximity to city. Honed the police of the society they serve.

The new site is chosen visually separated from the existing Magistrates Court by Stellenbosch Street. This gives clarity of the autonomy of each institution. However, they are linked to the same public plaza so their working station is respected.

The close connection to the park creates an opportunity for pleasant walking area over the greening. It also provides an opportunity for use as picnic grounds and team-building exercises such as Police Sports teams.

Existing Police

The close connection to the park creates an opportunity for pleasant walking area over the greening. It also provides an opportunity for use as picnic grounds and team-building exercises such as Police Sports teams.

The site provides an excellent opportunity to establish the headquarters as a prominent landmark marking the entrance to the city. Furthermore, it provides an opportunity to establish the SAPS within the hearts and minds of the public.

Contextual Analysis

Existing Police

EXISTING POLICE STATIONS

PROPOSED POLICE STATION

The servus building housing the existing SAPS Regional HQ

(adequate?)
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE:
TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

1.4.7 Australian National Police Memorial
Jami and Torch Architects
Canberra ACT, Australia

1.4.7 Australian National Police Memorial
Jami and Torch Architects
Canberra ACT, Australia

1.4.6 LAPD Motor Transport Division
and Main Street Parking
John Friedman Alice Kimmel Architects

(highly efficient & accountable institution)

1.4.8 Minneapolis Police Headquarters
Julie Snow Architects
Lyndale, Minneapolis, USA

(solid foundation)

(transparency)

1.4.3 Ontario Provincial Police HQ
Dupont Farrow Architects & W.M. Salter and Associates
Orillia, Ontario, Canada

(physically secure but psychologically open)

1.4.5 Minneapolis Police Headquarters
Julie Snow Architects
Lyndale, Minneapolis, USA

Orillia, Ontario, Canada

1.4.2 Gauing Provincial Headquarters for SAPS
ARG Architects
Johannesburg, South Africa

1.4.1 Carrum Downs Police Station
Korsh Thompson Architects
Melbourne, Australia

1.4.4 Police Memorial Building:
Jacksonville Police Headquarters
William Irgen Architects
Newtown, Florida USA

(PRECEDENT STUDIES)

This building is a landmark and symbol of the department's identity. The building is designed to be a symbol of the department's values and to reflect the department's commitment to excellence. The building is designed to be a symbol of the department's commitment to the community.

The design of the building is based on the concept of a beacon. The beacon is a symbol of guidance and direction. The beacon is designed to be a symbol of the department's commitment to the community.

The building is designed to be a symbol of the department's values and to reflect the department's commitment to excellence. The building is designed to be a symbol of the department's commitment to the community.

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EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

CLIENT AND BRIEF

The client is the South African Police Service (SAPS) under the Ministry of Police. The specific aim is to create a new public image that addresses the financial crisis, historic relationships, and emerging patterns of the SAPS. The design was developed in response to the non-profitable economic atmosphere, the adversarial relationship with the community, and the need to reflect a new perception of the SAPS.

THE EMPLOYING ORGANISATION

In response to the Non-Profitable Police Services (NPoMS) Act, the SAPS created a Professional Police Services (PPS) sub-section. The design department of the PPS was established to manage the transformation of the SAPS into a professional police force.

THE CLIENT'S GOALS

There was a need for a new public image that addresses the financial crisis, historic relationships, and emerging patterns of the SAPS. The design was developed in response to the non-profitable economic atmosphere, the adversarial relationship with the community, and the need to reflect a new perception of the SAPS.

CONCEPTUAL DEVELOPMENT

The new public image is a multi-faceted approach that addresses the need for change within the SAPS. It includes a restructuring of the organisation, a new approach to crime prevention, and a new approach to community engagement.

DESIGN VS APPROACHABILITY

The design was driven by the need for change within the SAPS. The objective was to create a new public image that reflects a new perception of the SAPS.

THEORETICAL FRAMEWORK

COGNITIVE IMAGE: Architecture
Changing the public perception of the SAPS:

Identity
How is a message conveyed and received through architecture?

Values
Expressing the identity of the SAPS

Security/Enclosure vs Permeability

(Peakedness/public participation)

The concept of peakedness is about understanding the building's physical relationship with the environment. The goal is to create a public space that is open to the public, yet secure fromhaving a public space that is open to the public, yet secure from

(client concept)

EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

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(client concept)
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

DURBAN MAGISTRATES COURT GARDNENS

NEW HAWKS AND INTERNAL INVESTIGATIONS BUILDING

KINGSMead BUSINESS PARK (BANKING HQ’s)

NEW PUBLIC PROSECUTOR BUILDING

EXISTING MOYT PARK TO BE USED AS PARADE GROUNDS AND FOR POLICE TEAM BUILDING

PROPOSED PEDESTRIAN LINK TO BEACHFRONT

UNISA

8000sqm

SITE PLAN
SCALE 1:500
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE:
TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

375 Parking Bays
11000sqm

BASEMENT LEVEL -2 PLAN
SCALE 1:200
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE:
TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

332 Parking Bays
11600sqm

BASEMENT LEVEL -1 PLAN
SCALE 1:200
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE:
TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

MICHAEL MADDEN 20599925

8000sqm

PODIUM LEVEL PLAN
SCALE 1:200
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE:
TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

LEVEL 1 PLAN
SCALE 1:200

3700sqm
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS

LEVEL 2 - 3 PLAN
SCALE 1:200

4500sqm
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS
EXPLORING THE IMPORTANCE OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE:
TOWARDS A NEW REGIONAL HEADQUARTERS FOR THE SAPS
View along Florence Nzama street showing the western facade. Hard concrete elements reaching out to the street are juxtaposed against recessed private courtyards.
View along Stalwart Simelane Street showing the eastern facade. A steel mesh screen undulates along the pavement allowing pedestrians to pass beneath it and "inside" the building. Furthermore a vertical landmark is also expressed.
View showing the pathway through the fallen police officers memorial park. A memorial wall inscribed with the names of the deceased officers runs through the park towards the headquarters.
View showing the main entrance to the Regional Police Headquarters. A contrast is achieved between the idea of security (spine wall) and permeability (steel mesh screens)
3.2.2 Physical Model
EXPLORING THE IMPORTANCE OF THE CREATION OF THE COGNITIVE IMAGE THROUGH ARCHITECTURE: Towards a New Police Headquarters for Durban
APPENDIX A: Police Rank Structure:
APPENDIX B: Example of Schedule of accommodation for Police
<table>
<thead>
<tr>
<th>SERIAL NO</th>
<th>DESCRIPTION OF ROOM</th>
<th>PROPOSED PER PU</th>
<th>NORM PER PU</th>
<th>ASM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ASSIGNABLE AREA (80%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SERVICE POINT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>COVERED VERANDAH</td>
<td>15.00</td>
<td>15.00</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>WORK AREA IN FRONT OF COUNTER</td>
<td>40.00</td>
<td>40.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Including helpdesk for certifying of documents)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>WORK AREA BEHIND COUNTER</td>
<td>20.00</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>AREA FOR TAKING DOWN OF STATEMENTS</td>
<td>12.00</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>TAKING DOWN OF SENSITIVE STATEMENTS</td>
<td>12.00</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>REST ROOM FOR MEMBERS WORKING</td>
<td>24.00</td>
<td>24.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SHIFTS (With shower, washbasin, toilets &amp; lockers)</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>PARADE ROOM</td>
<td>16.00</td>
<td>16.00</td>
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<tr>
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<td>KITCHEN</td>
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<td>4.00</td>
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</tr>
<tr>
<td>1</td>
<td>RADIO ROOM</td>
<td>12.00</td>
<td>12.00</td>
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</tr>
<tr>
<td>1</td>
<td>STATIONERY STORE (With shelves)</td>
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<td>6.00</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>FINGERPRINT AREA (With washbasin)</td>
<td>4.00</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>CAS TERMINAL OFFICE</td>
<td>12.00</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>CRIME OFFICE</td>
<td>16.00</td>
<td>16.00</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>TEMPORARILY SAP 13 STORE</td>
<td>6.00</td>
<td>6.00</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>CSC COMMANDER</td>
<td>12.00</td>
<td>12.00</td>
<td></td>
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<tr>
<td></td>
<td>PUBLIC TOILETS</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>MALE</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FEMALE</td>
<td>1.00</td>
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<tr>
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<td>DISABLED</td>
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<tr>
<td>1</td>
<td>VICTIM FRIENDLY &amp; SUPPORT CENTRE</td>
<td>42.00</td>
<td>42.00</td>
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<tr>
<td></td>
<td>Consisting of:</td>
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</tr>
<tr>
<td></td>
<td>Reception &amp; Waiting Room</td>
<td>16.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Counselling Room</td>
<td>12.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bathroom</td>
<td>4.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Treatment room</td>
<td>10.00</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>OFFICE ACCOMMODATION</td>
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</tr>
<tr>
<td></td>
<td>GENERAL (Director-General)</td>
<td>40.00</td>
<td>0.00</td>
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</tr>
<tr>
<td></td>
<td>LIEUTENANT-GENERAL (Deputy DG)</td>
<td>32.00</td>
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</tr>
<tr>
<td></td>
<td>MAJOR-GENERAL (Chief Director)</td>
<td>28.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRIGADIER</td>
<td>24.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLONEL (Deputy Director)</td>
<td>20.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIEUTENANT-COLONEL (Asst Director)</td>
<td>16.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAPTAIN</td>
<td>12.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MEMBER</td>
<td>12.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MEMBERS / OPEN PLAN OFFICE</td>
<td>8.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TYPISTS (Pool)</td>
<td>6.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SECRETARY / TYPIST / PAC</td>
<td>12.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SECRETARY WITH WAITING AREA</td>
<td>16.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WAITING AREA NEAREST TO SECRETARY</td>
<td>8.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADMIN CLERKS</td>
<td>8.00</td>
<td>0.00</td>
<td></td>
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<tr>
<td></td>
<td>CABINETS</td>
<td>0.90</td>
<td>0.00</td>
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<tr>
<td></td>
<td>PHOTO COPY MACHINE</td>
<td>4.00</td>
<td>0.00</td>
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<tr>
<td>SERIAL NO</td>
<td>DESCRIPTION OF ROOM</td>
<td>PROPOSED NORM PER PU</td>
<td>ASM</td>
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<tr>
<td>-----------</td>
<td>--------------------------------------------------</td>
<td>----------------------</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RECEPTION WITH SWITCHBOARD</td>
<td>0</td>
<td>16.00</td>
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</tr>
<tr>
<td></td>
<td>SOCIAL WORKER</td>
<td>0</td>
<td>12.00</td>
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<tr>
<td></td>
<td>MEMBERS WORKING SHIFTS</td>
<td>0</td>
<td>6.00</td>
<td>0.00</td>
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<tr>
<td></td>
<td>INTERROGATION ROOM (Soundproof)</td>
<td>0</td>
<td>12.00</td>
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</tr>
<tr>
<td></td>
<td>FINGER PRINTING OFFICE (With wash basin)</td>
<td>0</td>
<td>4.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>POTS ROOM</td>
<td>0</td>
<td>12.00</td>
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<td></td>
<td>SWITCHBOARD</td>
<td>0</td>
<td>12.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>COMPUTER SERVER ROOM</td>
<td>0</td>
<td>12.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>LIBRARY</td>
<td>0</td>
<td>?????</td>
<td>?????</td>
</tr>
<tr>
<td></td>
<td>COMMITTEE ROOM</td>
<td>Number of persons</td>
<td>1.80</td>
<td>?????</td>
</tr>
<tr>
<td></td>
<td>CONFERENCE ROOM</td>
<td>Number of persons</td>
<td>3.50</td>
<td>?????</td>
</tr>
<tr>
<td></td>
<td>LECTURE / TEA ROOM</td>
<td>First 30 persons</td>
<td>1.40</td>
<td>?????</td>
</tr>
<tr>
<td></td>
<td>LECTURE / TEA ROOM</td>
<td>Next 20 persons</td>
<td>1.20</td>
<td>?????</td>
</tr>
<tr>
<td></td>
<td>LECTURE / TEA ROOM</td>
<td>The remaining</td>
<td>1.10</td>
<td>?????</td>
</tr>
<tr>
<td></td>
<td>TEA ROOM</td>
<td>Number of persons</td>
<td>0.50</td>
<td>?????</td>
</tr>
<tr>
<td></td>
<td>KITCHEN</td>
<td>Number of persons</td>
<td>0.05</td>
<td>?????</td>
</tr>
<tr>
<td></td>
<td>FIRST AID ROOM</td>
<td>0</td>
<td>4.00</td>
<td>0.00</td>
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<tr>
<td></td>
<td>TRAINING ROOM (Computers)</td>
<td>Number of persons</td>
<td>3.00</td>
<td>?????</td>
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<td></td>
<td>RECREATION ROOM</td>
<td>0</td>
<td>24.00</td>
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**GARAGE**

<table>
<thead>
<tr>
<th></th>
<th>Number of persons</th>
<th>8.00</th>
<th>?????</th>
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<tbody>
<tr>
<td>MECHANICS (Work Niche)</td>
<td>0</td>
<td>72.00</td>
<td>0.00</td>
</tr>
<tr>
<td>SERVICE LIFT</td>
<td>0</td>
<td>40.00</td>
<td>0.00</td>
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<td>OFFICE FOR MECHANICS</td>
<td>0</td>
<td>112.00</td>
<td>0.00</td>
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<tr>
<td>DOUBLE WORK BAY</td>
<td>0</td>
<td>12.00</td>
<td>0.00</td>
</tr>
<tr>
<td>COMPRESSOR ROOM</td>
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<td>10.00</td>
<td>0.00</td>
</tr>
<tr>
<td>BATTERY ROOM</td>
<td>0</td>
<td>40.00</td>
<td>0.00</td>
</tr>
<tr>
<td>CHANGING OF TYRES</td>
<td>0</td>
<td>0.12</td>
<td>?????</td>
</tr>
<tr>
<td>TYRE STORE</td>
<td>Number of tyres</td>
<td>0.27</td>
<td>?????</td>
</tr>
<tr>
<td>LIGHT VEHICLE</td>
<td>Number of tyres</td>
<td>1.06</td>
<td>?????</td>
</tr>
<tr>
<td>HEAVY VEHICLES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CASPIR</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TECHNICAL WORKSHOP</td>
<td>0</td>
<td>30.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(Air conditioner must be provided)</td>
<td>0</td>
<td>??????????</td>
<td>10.00</td>
</tr>
<tr>
<td>CLOCK ROOM( With Showers &amp; lockers)</td>
<td>0</td>
<td>10.00</td>
<td>0.00</td>
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</tbody>
</table>

**DOG UNIT**

<table>
<thead>
<tr>
<th></th>
<th>Number of persons</th>
<th>6.00</th>
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</thead>
<tbody>
<tr>
<td>DOG HANDLERS</td>
<td>0</td>
<td>16.00</td>
<td>0.00</td>
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<tr>
<td>DOG FOOD STORE</td>
<td>Number of dogs</td>
<td>0.23</td>
<td>?????</td>
</tr>
<tr>
<td>CLINIC</td>
<td>0</td>
<td>18.00</td>
<td>0.00</td>
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<tr>
<td>KENNELS FOR SICK DOGS</td>
<td>Number of kennels</td>
<td>4.00</td>
<td>?????</td>
</tr>
<tr>
<td>DOG KENNELS (Only cement slab)</td>
<td>Number of dogs</td>
<td>18.00</td>
<td>?????</td>
</tr>
<tr>
<td>KITCHEN TO PREPARE DOG FOOD</td>
<td>Number of dogs</td>
<td>0.23</td>
<td>?????</td>
</tr>
<tr>
<td>CLOCK ROOM( With Showers &amp; lockers)</td>
<td>0</td>
<td>10.00</td>
<td>0.00</td>
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**Non Assignable area:**

<table>
<thead>
<tr>
<th></th>
<th>1.00</th>
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<tbody>
<tr>
<td>DOG DIPPING TANK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXERCISE YARD</td>
<td>1.00</td>
<td>2500.00</td>
</tr>
<tr>
<td>FREE RUNNING AREA</td>
<td>1.00</td>
<td>40.00</td>
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Viewed 04 March 2012


http://www.iss.co.za/iss_today.php?ID=1345


http://www.nelsonmandela.org/omalley/index.php/site/q/03lv02039/04lv02103/05lv02120/06lv02126.htm


