

THE PERCEPTION OF THE SELF WITHIN THE BUILT ENVIRONMENT AND ITS IMPACT ON URBAN REGENERATION

Towards the design of a Food Market in the city of Durban

By

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ABSTRACT

Street trade within South Africa contributes to a significant portion of the informal sector and is now seen as something that contributes to the economy as well as the character of the city. It plays an active role in contributing to the livelihoods of many people of the informal sector.

The informal sector has almost become synonymous with South Africa becoming a democratic entity as people that had struggled through exclusion from entering the cities, now had a platform towards citizenship to the city. Historically street trade has always been perceived as a nuisance in the city and as a result traders were marginalized to use spaces which did not present proper opportunity to support the needs of the traders.

Urban public space has become one of the most valuable assets to people entering the informal sector, therefore it is important to understand the properties that play a role in the meaning of urban public space with for the users within the informal sector. The square, the street and the buildings make up the public face of towns and cities. The street has the opportunity to become a comfortable environment when the user is able to perceive it in such a way that they are able to orientate themselves with it. Further the street can be examined as a series of integrated spaces and when the physical elements of space are ordered a central point of relation to the user develops.

The problem arises whereby urban public space in general has for some time been analyzed and interpreted from a first world viewpoint. One of the primary aims of this dissertation is to understand the various factors involved with third world developing countries, more specifically the informal sector and to understand how these factors may be supported and enhanced by the existing knowledge of place to aid in the design of meaningful architecture aiding in urban revitalization.

The case studies outlined within this paper seek to demonstrate the importance of creating architecture that acknowledges that relationships between its, cultural, economic, and environmental, contexts of which can have the ability to sensitively and positively have an impact on its surrounding urban fabric.

DECLARATION

I hereby declare that this dissertation is my own original work. It is being submitted to the School of Architecture, housing and Town Planning, University of KwaZulu-Natal, Durban, for the Master of Architecture degree, and has not been submitted before for any degree or examination at any other University.

Signed by Mark James Leith

On the

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CHAPTER 1 INTRODUCTION

1.0 INTRODUCTION

This Chapter deals with the research background, it will provide the reader with key questions involved with the research topic. It will provide insight into how research has been carried out as well as a conceptual and theoretical framework developed around key issues, providing a direction up on which research can follow.

1.1 Background

In today's current economic situation recovering from a global recession there has been a steady state of insurgent growth within the informal sector, notably within third world developing countries (Moser 1989, Tripp 1997, Freund & Padayachee 2002). Freund & Padayachee (2002: 283-287) note that street trading within the informal sector has allowed and created opportunities for income and employment since the 1970's albeit under strict regulations.

The 'spike' of the informal sector occurred in the 1990's when the South African government was in the process of becoming democratic. According to the 1996 census (two years after the introduction of democracy) the population was estimated at about 40 million with an estimated 13 million people creating the working demographic. It was further estimated that 4 million people within the labour force at the time made up the informal economy. (Lund, Nicholson & Skinner 2000: 11). The numbers have since grown significantly, this due to globalisation. It is estimated that 98% of South Africa's growth (post-apartheid) rests on the shoulders of globalisation (Loots, 2002: 12. Lund, Nicholson & Skinner 2000: 7).

"People always insert themselves practically into economic life on their own account" (Hart, Laville, Cattani, 2010: 5)

It is fair to say from the above statistics that the informal sector provides for the livelihoods of many people living in Durban. Brown (2006: 3) states that ;

"come rain or shine, their livelihoods depend on transactions for tiny sums that for some make the difference between survival or destitution, and for others provide a profitable trade".

Dealing with architecture or the built environment within the informal sector, particularly when people depend on it, brings on a question of: what does the built environment mean to the people using it, Heidegger (1971) writes about the concept of dwelling (explaining that every building is used to 'dwell', whether it be permanent or temporary) whereby the notion of meaning in meaning of architecture is examined, breaking a whole down into its parts, making it easier to interpret and understand.

Through understanding the parameters involved in urban public space within a context of a developing country, meaningful architecture can only then be created.

1.2 Motivation/Justification of Study

Much thought and exploration has been given into the perception of architecture throughout time, this is evident when looking at works dating back to as early as the construction of the Egyptian pyramids. The pyramids were designed in such a way to be perceived to represent the gods and the power associated with them (Whyte, 2006: 166). It is obvious that the perception of space and the forms within them have a very powerful impact on a person.

Several authors have explored the idea of how humans perceive architecture and the built environment, Kevin Lynch (1960), having explored the field of Urban Design looks at how the city is analysed/perceived as a whole with the main concern being with the legibility of how the city is read. Lynch implements the "*5 elements of a city*" as easily readable parts interconnecting and influencing each other to form a complete mental picture. William Whyte (1988 :10) explores the city and perception of it in a social sphere, stating that humans are social beings and the success or failure of a public place is determined by its social life. Whyte, Lynch and several other authors have all put forward valuable thinking in the way humans perceive the built environment, but this is however limited in the appropriateness for this study. Although previous literature does look at the perception of the user, it is carried out within a different social and physical context. Having been focused on first world developed countries.

The focus of this study lies within the "*informal sector*" of third world developing countries, by the very nature of the context alone, the study will carry a very different dynamic to that of

Lynch(1960) and Whyte (1988) per say. The term "*informal sector*" is a term first used by Keith Hart (1970, 1973, 2010) in his analysis of people in Ghana working outside the formal labour market who were predominantly self-employed. Harts key thesis was that workers, previously described as 'marginal', were entrepreneurs in their own right (Brown, 2006).

Not much research has been administered into understanding the dynamics of street trading as an economic entity within third world developing countries. The lack of research makes it difficult to pinpoint precise numbers of currency exchanging hands. This partially because of the quite volatile nature street trading has adopted. Furthermore one must not disregard the potential street trading has in the fight against urban poverty reduction (Brown, 2006: 4).

The current state of the informal sector is growing due to opportunities available to create livelihoods for many who don't have the means to otherwise do so. Globalisation has also had an impact on the growth of this sector as it has affected society in almost every way. However strict governmental rulings have dictated unstable working conditions in the past, for the people working with the informal sector, from as early as the 1930's (Freund & Padayachee 2002).

It must be understood that the informal sector has had a somewhat unstable nature historically. This was due to South Africa not being a democracy pre 1994, as a consequence the oppressed demographic created the informal sector (Freund & Padayachee 2002).

As a result from these struggles an architectural representation or identity has never been able to be truly developed. A common trend around the world, with most contemporary modern buildings, is that there is an ignorance surrounding the issue of the human condition and human needs involved in such architecture. As Heidegger (1971) explains; buildings can only be classified as buildings if they are used to 'dwell'. Disregard of this notion leads one to create buildings that carry little meaning for their users. Acknowledging this notion leads to architecture which respects it's contextual, cultural and social influences.

Food has been sold on the street ever since people have lived in town settlements. Encouraging social exchange and interaction, the public consumption of food brings vitality and conviviality to urban life. Viewing trade and food as a system, even an urban system, brings many needs and opportunities to the fore (Castle, 2005:5).

1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES

1.2.1 Definition of the problem

Street trading in South Africa exists within the “informal sector”. Due to the unpredictable nature of the informal sector there is little to no job security for street traders. Historically the informal sector within South Africa has had a somewhat restricted existence (Bhattacharya, 2008). Due to the Apartheid regime and strict rulings dictating where people could trade and how they could go about trading, a large demographic of the South African working force were left without essential entrepreneurship ability and skills(Bhattacharya, 2008). This has left the informal sector and street trading with an identity that has been created out of struggle and as a result South Africa's markets are currently negatively perceived, perceived as unsafe and dedicated to a single demographic(Lund, Nicholson & Skinner 2000: 11).

The primary problem of this study is of how architecture can be perceived in a common light whereby it acts as a tool to bring people together, enhancing a common meaning or identity, creating a stable working environment for many people within the informal sector and ultimately better lives for generations to come.

1.2.2 Aims

This dissertation seeks to determine, through the process of understanding the Concepts and theories involved with perceptions on architecture and their impact on social interaction. A need for evaluation on how well architecture can influence perception and ultimately encourage social interaction would be of great benefit to further develop a set of criteria and a resulting process for the reversal or change of perceptual quality.

1.2.3 Objectives

This dissertation, throughout its discourse endeavors to:

- Understand the historical development of street trading within the informal economy in the city of Durban.
- Understand how street trading has an impact on people socially and economically and subsequently what street trading means to its users.
- Develop an architectural language to further understand how buildings are read in their context (Contextual theory) as well as the context and background of the user (Hermeneutics). This will further break down the variables involved with creating a meaningful architecture (identification and abstraction)
- Establish criteria or standards by which the meaningfulness contained within these factors can be determined as successful or unsuccessful architecture.

1.3.0 SETTING OUT THE SCOPE

1.3.1 Delimitation of the Research Problem

The researcher intends to

- Explore a part within the informal sector dealing with the marginalised or survivalist informal urban sector. This sector contains activities such as: street hawking, rickshaw pulling, roadside vending, cobblers and the like (Bhattacharya, 2008). Not as much emphasis has been placed on the workers within the informal sector sub-contracted to the formal sector/economy.
- Define the construct of the human condition within a specific culture.
- Explore a meaning in architecture through a Hermeneutical construct.
- Develop a set of criteria with which to reinterpret meaning through architecture.
- Where it has been acknowledged that the apartheid regime has had a major impact on street trading within South Africa and the development (or lack thereof) of the informal economy. Apartheid in its entirety will not be explored but only the impacts of the regime on street trading and the informal sector respectively.
- Explore a context of place keeping in mind that 'place' will exist within an urban environment.

1.3.2 Definition of Terms

Economic Dualism- A way of conceptualizing the existence of two (sometimes more) separate but symbiotic sets of economic processes or markets within the same political or national social framework. In Third World societies, for example, a dual economy is formed by the coexistence of peasant subsistence agriculture and cash production of basic commodities or industrial goods for the international market. An analogous division exists in highly industrialized economies between the corporate core and peripheral firms and labour-markets.

Informal Sector- The informal sector within a South African context consists of those businesses that are not registered in any way. They are generally small in nature, and are seldom run from business premises. Instead, they are run from homes, street pavements or other informal arrangements (LFS 2007)

Informal Economy-According to Keith Hart (2011), the informal economy arose as a label for economic activities that escape state regulation. The informal economy may make reference in the notion of economic dualism to exist outside of the formal economy (Bhattacharya, 2008).

Post Structuralist- A collective term for any theories or methods of analysis that were derived as a direct result of structuralism.

Cartesian Subject- An individual's ability to be rational, scientific, united in consciousness and have an awareness of self.

Built environment- The built environment refers to the architecture of built form in addition to its overall surroundings including; surface treatment, street furniture, pathways, public open spaces, landscaping, temporary structures, street lighting etc., roads and infrastructure in close proximity and relating to the building itself.

Linguistic Sign-One of the natural units into which linguistic messages can be analyzed

Hermeneutics- The study of the theory and practice of interpretation.

1.3.3 Stating the Assumptions

- The way in people interpret the world and objects within it is specific to the individual by varying degrees.
- All acts of interpreting meaning happen through a process of Hermeneutical Understanding
- Places carry different meanings to different people in different parts of the world.

1.3.4 Key Questions

1.3.4.1 Main Question

The main question of the dissertation aims to respond primarily to the research topic, questioning the ability perception has on architecture, of which has an impact on an identity within architecture and subsequently an impact on social interaction.

1.3.4.2 Secondary Questions

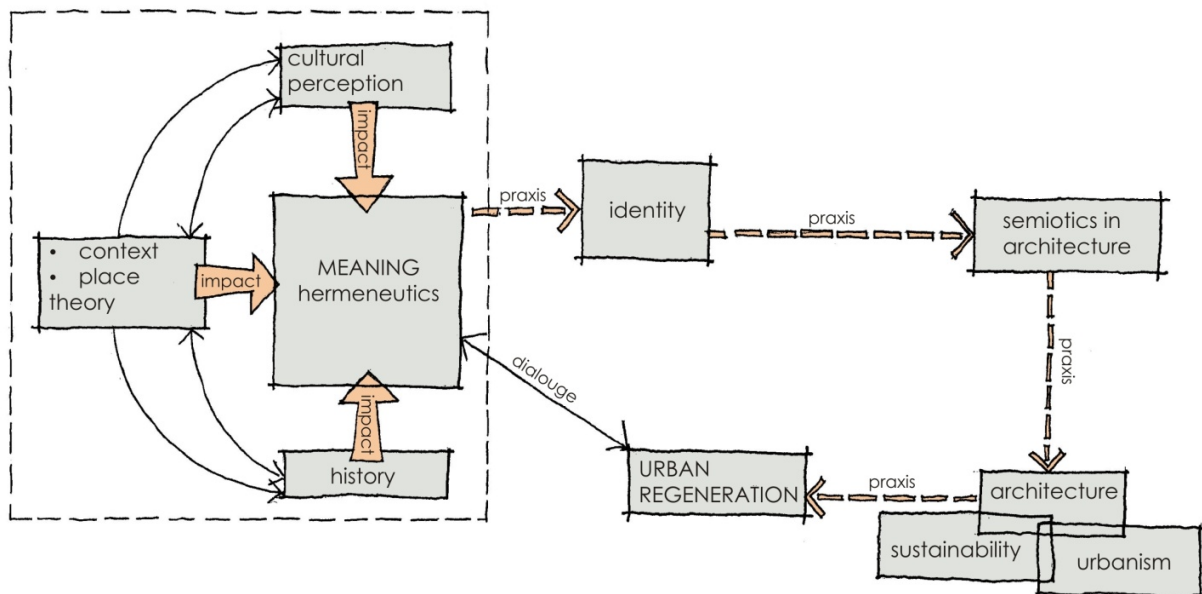
- How is meaning interpreted?
- What is the definition of public urban space?
- How is public urban space viewed both in the first world as well as the third world?
- What circumstances have led to the current perception of street traders and markets within South Africa?
- What does public urban space means to its users?
- How is a meaning of architecture translated into architectural form?
- How does a meaning in architecture contribute to an urban regeneration?

Hypothesis

Through understanding the parameters involved in urban public space within a context of a developing country, meaningful architecture which bears a positive impact not only on its direct users but also on its surrounding urban context can be created.

1.4 CONCEPTS AND THEORIES

The concepts and theories used within this dissertation are outlined in further detail in the literature review section of the document. The following section establishes the fundamental qualities of the concepts and theories in order to give the reader an introduction to how a framework to the document has been constructed. By developing an understanding of the framework employed, key principles will be emphasized and conclusions drawn which will guide the design approach towards an urban regeneration within the urban informal sector.



Theoretical and conceptual framework

Figure 1- Diagram illustrating the various concepts and theories used within the dissertation and their relations to one another as well as relations to the overall framework.

Street trading contributes a large portion to the informal sector of which employs up to 4 million people of the 13 million people working in South Africa. The problem is that with the volatile nature of street trading, many livelihoods are at stake. It is not uncommon practice that one street trader will be supporting families of up to 8 people (Lund, F. Nicholson, J. Skinner, C., 2000).

These livelihoods depend heavily on public urban space. A better understanding of this dimension will be explored through a place theory.

The first obvious question is: What circumstances led to the current perception of markets in South Africa? A historical study of street trading within South Africa and various other impacts need to be understood. An understanding will be achieved through studying the informal sector within South Africa, the impact of modernism on third world developing countries as well as other social impacts that may have had an impact such as apartheid

After having an understanding of how street trading has come to be it makes sense to then to start looking at the current state of street trading and asking the question :How is public urban space viewed (perceived)? Both on a global perspective as well as in the developing third world? What similarities and differences do both have? This will be explored initially through Hermeneutics. A further understanding of these parts will be explored through concepts and theories which have had a direct influence from hermeneutics, but all dealing with various issues of interpretation at various levels. Namely the theory of phenomenology and Heidegger's (1971) notion of dwelling

1.5 RESEARCH METHODS AND MATERIALS

Research Methods

Primary Sources: Information gathered from primary sources is representative of the true nature of the research. The following methods will be used to accumulate data for the analysis of the perception of urban public space in Durban as well as gaining an understanding of the inner workings of the informal sector:

- Case studies:

The Markets of Warwick- Warwick Junction in Durban is an important area of study as it is widely considered to be the "heart" of Durban. Findings from the study of this area would prove to be valuable as it incorporates several types of markets into one area: the Bovine Head Market, the Early Morning Market, the Muthi Market, the Brook street market and the music bridge market are just a few which contribute to the make-up of Warwick junction. Through understanding of this area one can start to understand the dynamics involved with street trade as it incorporates almost every sphere of street trading. It will also help the researcher to understand the identity linked to street

trading. The importance of this market is that it has developed through an informality whereby the architect has facilitated rather than implemented

Verulam Market- The Verulam market will be studied as a comparative study against Warwick Junction. It deals with a very similar demographic as is found in Warwick Junction but instead of being a sensitive implementation of informality it takes the shape of a formalized, implemented market. The findings and comparisons will suggest the correct route in creating meaningful architecture in the realm of street trading.

- Unstructured interviews with professionals within professions involved with the built environment as well as professionals involved in the informal sector

Rodney Harber- Architect based in Durban who holds valuable knowledge about the history of Durban as well as having completed works within the informal sector.

Doung Jahangeer- an architect/artist who has been heavily involved with the Warwick Junction area for a number of years as well as having an involvement with the exploration of theories involved with place arising from space.

- Questionnaires to gain a better understanding from the general public to allow a more humanistic and honest approach to the research. A sample of a total of 30 adult occupants will be selected from both of the case studies. The people questioned will be primarily people working as traders gaining livelihoods from the spaces, this will give the researcher insight into what these spaces mean to the traders. A smaller percentage of the sample will be given to people purchasing from the traders, this will give the researcher insight into the public perception of street trading in Durban.

Secondary Sources: This will be made up of mainly relevant published research in the form of books by various authors, academic papers and journal articles. The information gathered in this manner will be utilized in the construction of the conceptual and theoretical framework making

up the literature review, which will be used to provide background information on the relevant design tools required for public urban space and the informal sector.

1.6 CHAPTER OUTLINE

CHAPTER 1 : INTRODUCTION

To include background information, justification of the study, definition of the problem, aims, objectives, delimitation of the research problem, definition of terms, stating the assumptions, hypothesis, key questions, contribution to knowledge, concepts and theories, research methods and materials and conclusion

CHAPTER 2-3 LITERATURE REVIEW AND FRAMEWORK

To include: public urban space, meaning in architecture, hermeneutics in architecture, language of architecture, urban regeneration and sustainable growth

CHAPTER 4 CASE STUDIES

To include introduction, justification of the case study, location, historical and social context of the case study, empirical data and conclusion

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

To include summary of dissertation with emphasis on results obtained, contribution made by results, recommendations and suggestions for further research)

1.7 CONCLUSION

In summary, this chapter has established, by means of the research background and methodology, research and design parameters for the dissertation. Techniques used by the author have been documented and the information collected has set out the theoretical and conceptual framework which will be referred to and drawn upon throughout the dissertation. The primary and secondary research undertaken in Chapters Two through Six will be a constructive source of information which should inform and guide the future designs within the informal sector, notably street trading.

CHAPTER 2 LITERATURE REVIEW

2.0 INTRODUCTION

This chapter aims to introduce the reader to the theoretical framework involved primarily with meaning and how it can be used as a tool towards understanding a self perception (identity). Further an understanding of interpreting meaning will be analysed through the theory of Hermeneutics, which will be translated into an interpretation of architecture. The primary aim is to illustrate how meaning can influence an identity and ultimately impact on a positive sustainable growth within the built environment. All methods of interpretation within Chapter 2 are to be treated as being universal, whereby any type of building within the built environment can be interpreted.

The theory of Hermeneutics dictates that an understanding of historical and cultural impacts are necessary in order to gain a true interpretation. These two elements will be discussed in detail (focusing on the third world and South Africa respectively) within the next two chapters in order to gain a true interpretation relevant to a South African architecture. Hermeneutics also further dictates that one must analyse the context of an object/word etc. in order to obtain a true understanding of how that object/word sits within the context, of which a relevance to architecture will be explained in further detail further along in the dissertation.

"Man acts as though he were the shaper and master of language, while in fact language remains the master of man" (Heidegger, 1971: 146).

2.1 Understanding Meaning

2.1.1 Introduction & Development of Hermeneutics

"Hermeneutics is derived from the Greek word hermeneuein, meaning to interpret and its derivative, hermeneia meaning interpretation" (Detmeterio III, 2001: 01).

The word 'Hermeneutics' originated from the Olympian messenger Hermes who acted as an interpreter, interpreting messages from the gods (Detmeterio III, 2001: 01).

Although there have been many theorists involved in the search of a true understanding on the Study of Hermeneutics, the ideas of five of the 'modern' theorists (Martin Heidegger, William Dilthey, Hans-Georg Gadamer, Edmund Husserl and Friedrich Schleiermacher) will be explored in this dissertation. All of the five mentioned authors have proven to be pioneers within the Field of Hermeneutical interpretation (Rutt, 2006: 01).

Dilthey (1972) gives a historical outline of the theoretical development of Hermeneutics from methodology to scientific praxis. It is important to understand how the hermeneutical approach has progressed and developed in order to be able to develop an understanding of interpretation, as this is the nature of hermeneutics.

For the past 150 years Hermeneutics has been used as a basis for a methodology and Praxis of interpretation of scripture and other difficult texts (Detmeterio III, 2001: 01 & Rutt, 2006 & Dilthey, 1972). The original source of interpretation of texts came out of the need for an understanding of biblical texts. This early era of interpretation was known as a pure praxis, which will be outlined in further detail later in the chapter. At this early stage hermeneutics as a means of interpretation had not yet come to life.

However, during the time of the Renaissance period saw the rise of the interpretive method of reading texts. One must keep in mind that, during the beginning of this period interpretation was still limited to an understanding of a literal meaning (Dilthey, 1972).

There was however a will to further understand the concept of interpretation as the thinking of one notable writer of the Renaissance displays this. Theodorus of Antioch, "did not accept a double meaning in the texts themselves, but only some more spiritual relationship among the

various events involved” (Dilthey, 1972: 236). This spurred on Philo, Clement and Origen, authors who distinguished pneumatic and literal meanings within text itself (Dilthey, 1972).

"There now took place yet another step forward in the development from interpretive practice towards that hermeneutic science which gives practice a scientific formulation, and from this struggle emerged the first fully worked out hermeneutical theories which have come down to us"

(Dilthey, 1972:236)

Towards the end of this period saw perhaps one of the most profound works towards developing the act of hermeneutical interpretation. This was the Clavis of Flacius (as stated by Dilthey, 1972), otherwise known as the Clavis Scripturae Sacrae, 1567 by Matthias Flacius. Flacius for the first time took the essential rules for interpretation (the basis of preceding hermeneutical theory) and merged them with a systematic doctrine, of which the result was a universally valid comprehension (Dilthey, 1972:237).

Through Flacius's study of trying to prove a universally valid interpretation through hermeneutics, he discovered new techniques involved within hermeneutical interpretation. It was furthermore understood that there was a much deeper meaning of a psychological or technical principle of interpretation, of which formed parts of a greater whole (Dilthey. 1972: 238).

As far as modern hermeneutics as it is known today is concerned, it was first realised by the works of Friedrich Schleiermacher (known as the father of Modern Hermeneutics). Dilthey believed that for Modern Hermeneutics to have taken as big of a step it did it needed a capable mind, and that was Schleiermacher: (Rutt, 2006: 2)

"An effective hermeneutics could only develop in a mind where virtuoso practice of philological interpretation was united with a genuine capacity for philosophical thought. Such a one was Schleiermacher." (Dilthey, 1972: 240)

Schleiermacher believed that understanding and interpretation are instinctual to each person and within every sphere of everyday life, where their fulfillment is mutually inspired by their author/creator (Dilthey, 1972:241). More detail on the influence of Schleiermacher on modern hermeneutics will be covered in the next section of the chapter titled *Modern Hermeneutics*.

2.1.2 Modern Hermeneutics

As previously stated Hermeneutics had taken a dramatic turn from methodology to scientific praxis with the influence of Schleiermacher, this section will discuss how Schleiermacher had brought hermeneutical inquiry/interpretation onto a general level and a more universal application (Rutt, 2006), and furthermore outline the influence it had on subsequent literature within hermeneutical inquiry.

Several other authors will also be discussed such as Edmund Husserl for the impact he had on developing a phenomenological interpretation and Hans-Georg Gadamer for bringing hermeneutical understanding to a universal level whereby it can be applied not only to text and literature but to, as Rutt puts it, “all disciplines of life”(Rutt, 2006:3).

It is important to note that where the act of hermeneutical understanding had sought to engage only at a level of understanding, the main aim of modern hermeneutics had now sought to gain understanding of meaning (Rutt, 2006).

Schleiermacher, considered to be the ‘Father of Modern Hermeneutics’ played a valuable role in taking the theory to an entirely new level. He had changed the traditional methodological Biblical hermeneutics into a general hermeneutic which acknowledged that texts of all kinds could have the potential for a meaning to be interpreted. By doing so, it is said that, Schleiermacher had opened up interpretation to a new world of understanding and explanation (Rutt, 2006: 2). Hermeneutics had now become a methodology for various ‘human sciences’.

Schleiermacher’s brilliance had stemmed from an education within transcendental philosophy, which as Dilthey(1972:242) states,” provided the first adequate conceptual instruments for the general apprehension and solution of the problem of hermeneutics”.

Schleiermacher had introduced a notion of comparing texts to a dialogue in conversation, whereby the reader plays the parts of the author and the recipient of the information. He believed that this notion would give the reader a deeper understanding of the text whereby the reader was intended through this process of dialogue to understand the thoughts of the original author, Gadamer had an issue with this notion but did not fully disagree with it as will be discussed later in this section.

This notion started to push Schleiermacher towards new methods of understanding meanings of texts. He did this by emphasizing two elements within interpretation: being the elements of grammatical and psychological interpretation (Rutt, 2006:2).

“The grammatical interpretation method involves the understanding of texts, which requires the comprehension of the words and common language. One must examine the words in relation to the sentences, and the sentences in the contexts of the paragraphs, and so on until an understanding of the text can be accurately reached” (Rutt, 2006:2).

Schleiermacher refers to this as the hermeneutic circle; (This hermeneutical method implies a back and forth movement, encouraging more movement until a better understanding is achieved)

“We cannot understand meaning of the whole text apart from understanding the meaning of the individual sentences, and even words, in the text. On the other hand, we cannot properly understand the individual parts apart from some grasp of the whole” (Stiver, 1996: 89).

Heidegger writes: 'It is not to be reduced to the level of a vicious circle, or even of a circle which is merely tolerated. In the circle is hidden a positive possibility of the most primordial kind of knowing. To be sure, we genuinely take hold of this possibility only when, in our interpretation, we have understood that our first, last and constant task is never to allow our fore having, fore-sight, and fore-conception to be presented to us by fancies and popular conceptions, but rather to make the scientific theme secure by working out these fore-structures in terms of things themselves' (Heidegger, 1962:153).

The psychological interpretation deals more directly with developing an understanding of the author of the specific text, otherwise known as 'authorial intent' (Stiver, 1996: 88).

“Psychological exegesis begins by a projection into the creative inner process, and proceeds onward to the outer and inner forms of the work, and beyond that to an intuition of its unity with the other works in the spiritual stance of its creator” (Dilthey, 1972: 244).

According to Schleiermacher, the interpreter must develop an understanding of the authors life. Familiarity of the biographical and historical contexts of the author is the prerequisite for the psychological interpretation method. He goes to further explain that the ultimate goal is to better understand the author than the author understood himself (Dilthey, 1972 & Rutt 2006).

Gadamer also explored the use of hermeneutical interpretation within all disciplines of life and showed how the hermeneutical method was fundamental for all human understanding. Gadamer grounds his theory on the truth of three different fields: art, history and language (Rutt,2006:3).

"In art he finds the essential matter of thought" (Rutt, 2006: 3). The second impact is that of history, Gadamer claims that people have to have an understanding of the historical context linked to the subject matter being interpreted in order to have an objective understanding.

"History and tradition prepare us to know and understand" (Stiver 1996: 93). Gadamer also believes this to be applicable to the author whereby understanding and reconstructing the social, political, religious and economic interests of the author, and understanding that the reader belongs to a paradigm in time that will in the future be the past, a more complete understanding can be obtained. The third impact is that of language whereby Gadamer believes that all understanding is rooted in language.

Through making this realisation of the three discourses outlined above. Gadamer claimed that understanding arises when text and interpreter are viewed under the same light. This approach in turn makes "understanding very personal and subjective and readings of text will differ from person to person" (Rutt, 2006: 4). The importance of Gadamer's method in relation to this dissertation is that it allows the interpreter to develop a perception of the self in relation to the interpreted.

Hermeneutics, Edmund Husserl had explored the theory of Hermeneutics from a phenomenological standpoint. Martin Heidegger had later further developed the work of Husserl formulating the theory of dwelling (Rutt, 2006).

Edmund Husserl has been widely considered as the 'father of phenomenology'. Husserl had suggested that "there is always a piece of phenomenology present and at play in hermeneutics" (Rutt, 2006: 1). Rutt (2006) brings forth the argument that neither phenomenology nor hermeneutics can exist without the other. Where hermeneutics acts as a means of interpreting a meaning, phenomenology provides a context to be interpreted. "Hermeneutics without phenomenology is interpretation without context, without situating in it in the world. Phenomenology without hermeneutics is arguably nothing but a facade" (Rutt,2006:1-2).

2.1.3 Hermeneutic Systems

Demeterio III (2001) has managed to organise a vast number of modern hermeneutic systems into just five groups of hermeneutic systems. Each system having a level of appropriateness to a related text. The systems are classified according to the three main components of interpretation itself, namely; the interpreter, the object and the goal of the interpretive act, which is classified as either truth or meaning.

- Romanticist Hermeneutics
- Phenomenological Hermeneutics
- Dialectical Hermeneutics
- Critical Hermeneutics
- Post-Structuralist Hermeneutics

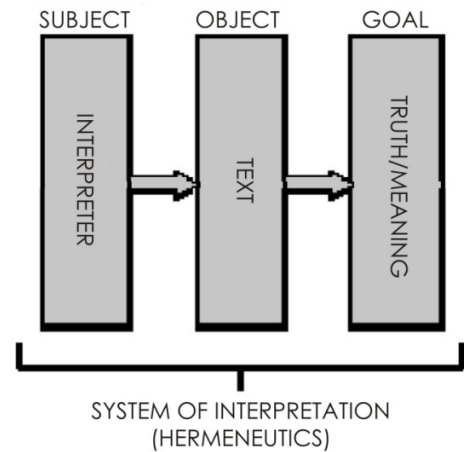


Figure 2: System of Interpretation
Demeterio III, 2001: 3

2.1.3.1 Introduction to the Scientific Praxis

As previously stated and explained through an understanding of the development of Hermeneutical interpretation, Hermeneutics has over time grown to become a much more universal method of interpretation, whereby it is not only limited to text and literature and used to convey fairly literal meanings, but now has been used to interpret other spheres of theoretical discourse, Namely; symbols, rituals, practices and customs, myths, structures of power, kinship and social set-ups, art and furthermore architecture. Hermeneutics has evolved “from pure unreflective praxis that is solely concerned with religious themes to a highly systematic and reflective praxis that can be applied to any text or text-analogue” (Demeterio III, 2001:01).

It was through the work of Schleiermacher that Hermeneutics developed into a Scientific Praxis where it could be applied to a broad category of ‘theoretical spheres’ (Rutt, 2006).

The diagram below shows the development of Hermeneutics from 'Pure Praxis', dealing with literal meanings, to 'Scientific Praxis (a method of understanding and interpreting multiple meanings/layers within a text)' (Demeterio III, 2001: 2) .

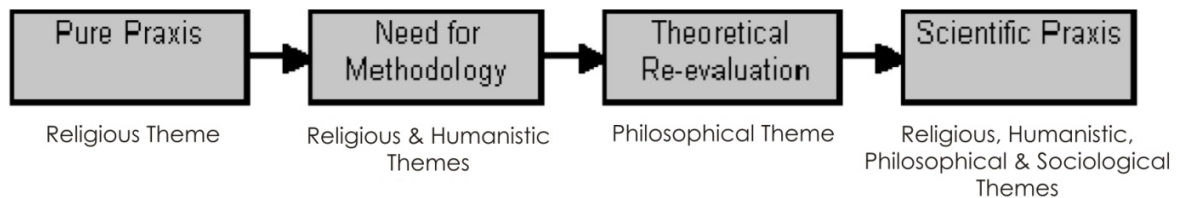


Figure 3: Progress in the Development of Hermeneutics
Demeterio III, 2001: 2

2.1.3.2 RomanticistHermeneutic system

Schleiermacher and Wilhelm Dilthey were the people responsible for the development of the romantic system of interpretation (Demeterio III, 2001).

"Schleiermacher had a first hand experience of the recurrent vagueness of texts, prompting romanticist hermeneutics to conceptualize textuality as some sort of a floating signifier that is incomplete without its temporal and cultural contexts" (Demeterio III, 2001: 3).

The goal of romanticist hermeneutics is to uncover the truth of the 'text', which is defined in terms of the original 'authorial intent' (Demeterio III, 2001) . This is applicable to an architectural application whereby the authorial intent would be that of an architect's intent of a meaning within architecture.

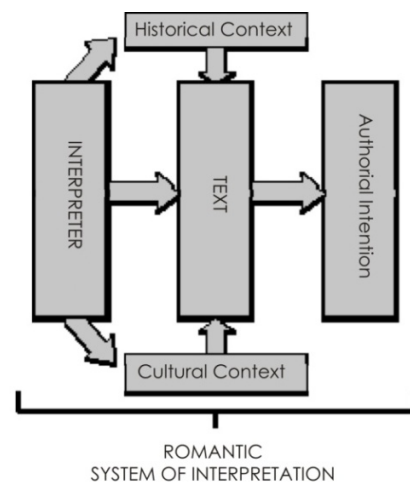


Figure 4: RomanticSystem of Interpretation
Demeterio III, 2001: 4

"The process of interpretation, represented by the arrows, has to emanate from the interpreter through the text, and from the interpreter through the text via the historical and cultural context, in order to recapture the original authorial intention" (Demeterio III, 2001: 3).

2.1.3.3 Phenomenological Hermeneutic system

Edmund Husserl was responsible for the development of phenomenological hermeneutics and said to be the father of hermeneutics (Demeterio III, 2001).

"Husserl's philosophy of the subject remains Cartesian. Like the romanticist hermeneutics, phenomenological hermeneutics also assumes that in order for the object to be fully interpreted, a proper context, or a mental frame is needed. But instead of considering the extraneous historical and cultural contexts, phenomenological hermeneutics argued that the text reflects its own mental frame" (Demeterio III, 2001: 4).

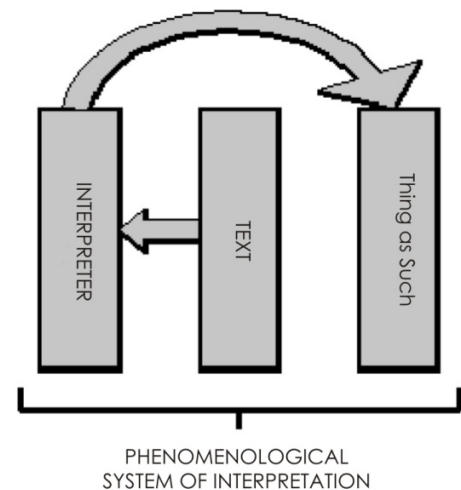


Figure 5: Phenomenological System of Interpretation
Demeterio III, 2001: 5

The goal of phenomenological hermeneutics is to capture the truth of the text as it is. (Demeterio III, 2001). When applied to an architectural viewpoint one only has to turn to the theory of phenomenology of which examines the physical and ephemeral worlds from a viewpoint of the self (Norberg-Schulz, 1980).

The process of interpretation, again represented by the arrows, has to emanate from the text through the interpreter to come up with the truth of the text as such. From the phenomenological point of view, interpretation is not something that a reader does, but something that happens to the reader (Demeterio III, 2001).

2.1.3.4 Dialectical Hermeneutic system

It is considered that romanticist and phenomenological hermeneutics overlooked the notion of the Cartesian subject. Dialectical Hermeneutics sought to examine the notion of the Cartesian subject of which Martin Heidegger was responsible (Demeterio III, 2001).

"Heidegger constructed a new subject whose mind and being are totally immersed in the subject's life-world, such that understanding and interpretation would always proceed from the perspective of the subject's life-world. The Heideggerian subject is a subject that is formed by the biases and presuppositions of his/her life-world making him/her incapable of attaining full self-consciousness and objective knowledge" (Demeterio III, 2001: 4).

The goal of dialectical hermeneutics is to first of all acknowledge that an, object or text can contain an infinity of meanings whereby the intention of dialectical hermeneutics is not interested in capturing a single and unified meaning, but instead in an existential meaning, the meaning of the here and now (Demeterio III, 2001).

The process of interpretation, again represented by the arrows, has to be circular, symbolizing the conversation between the world of biases and presuppositions of the reader and the world of biases and presuppositions of the text (Demeterio III, 2001).

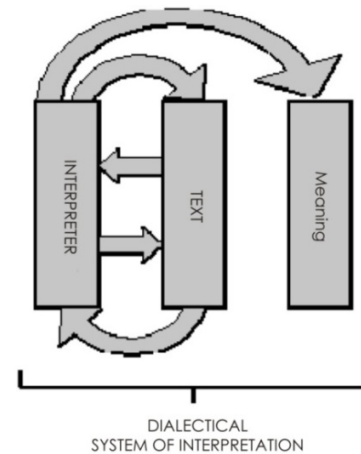


Figure 6: Dialectical System of Interpretation
Demeterio III, 2001: 6

2.1.3.5 Critical Hermeneutic system

Karl Marx, Friedrich Wilhelm Nietzsche and Sigmund Freud were responsible for the development of a critical hermeneutic (Demeterio III, 2001).

“Marx argued that textuality can be warped by capitalist and class-based ideologies; Nietzsche, by cultural norms; and Freud, by the unconscious”(Demeterio III, 2001: 5).

The goal of this hermeneutic system is to obtain a truth whereby the reader/ reader's personal background have as much as an impact as the text itself. It is argued that every person has a different viewpoint and will ultimately read that text in a different light (Demeterio III, 2001).

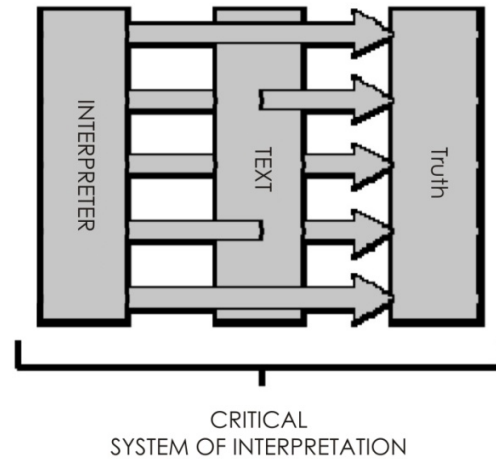


Figure 7: CriticalSystem of Interpretation
Demeterio III, 2001: 7

The process of interpretation, represented by the arrows, has to emanate from the reader from various points penetrating deeply into the linguistic fabric of textuality, through this process of ‘enlightenment’ a truth of the text becomes personal to the interpreter (Demeterio III, 2001)

2.1.3.6 Post-Structural Hermeneutic system

“The radically new philosophy of the object generated by the path-breaking thoughts of Marx, Nietzsche and Freud, were pursued further by the post-structuralists in the sphere of the philosophy of the subject, thereby giving birth to the post-modern subject”(Demeterio III, 2001: 7).

Post-Structural Hermeneutics examines texts from a viewpoint whereby the text does not form the primary impactor, but rather acts as an element within a whole filled up with parts of socio-economic, cultural, political and historical impacts (Demeterio III, 2001).

“Postructuralist hermeneutics also adheres to a philosophy of the object that is similar to that of the critical hermeneutics: texts are warped by power and ideology. In addition to this critical conception of the object, post-structuralists also adhere to the idea of dialectical hermeneutics that texts may contain an infinity of meaning” (Demeterio III, 2001: 7).

First, like critical hermeneutics, the goal of post-structural hermeneutics is to diagnose the hidden pathology of texts and to free them from their ideological distortions. Second, like dialectical hermeneutics, the goal of post-structural hermeneutics is to not be interested in capturing a single and unified meaning, but instead in an existential meaning, the meaning of the here and now (Demeterio III, 2001).

The process of interpretation, again represented by the arrows, does not follow a linear process but instead involves a method of constant reflection of various elements/impacts. This process enables the interpreter to always have the bigger picture or whole in mind while still dealing with each element or impact individually (Demeterio III, 2001).

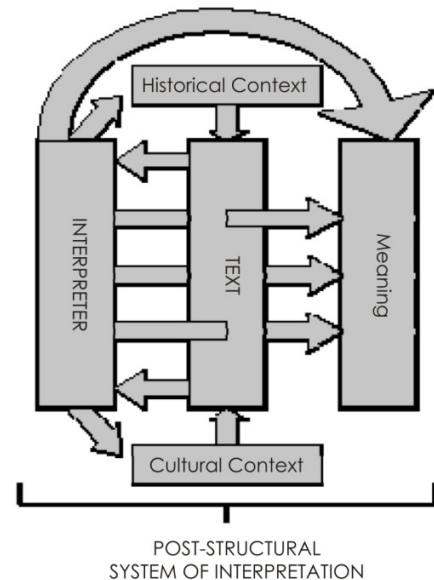


Figure 8: Post-Structural System of Interpretation
Demeterio III, 2001: 8

2.1.3.7 Summary

Through the study of hermeneutics (the history of interpretation and the various systems involved) one can start to apply the understanding to various spheres within the world, from reading of texts to the physical world itself. As far as architecture is concerned Hermeneutics can play a valuable role in beginning to understand an overall meaning of architecture. The various hermeneutical systems discussed above can be applied to aid the researcher in understanding the steps that need to be taken in order to understand and interpret a meaning within architecture. If one follows the above mentioned systems as a guideline towards the creation of meaningful architecture, one can apply the systems so that: The Romantic system stresses the importance of cultural and historical impacts, when applied to an architectural context an understanding of the historical and cultural impacts involved in the context of the site, building, object etc. are necessary. The Phenomenological system stresses that the physical and ephemeral worlds from a viewpoint of the self have an impact on meaning; this is further explored through the works of Norberg-Schulz. The Dialectical and Critical systems both acknowledge that the person as an existential being bears significant importance on meaning; this notion is further outlined in Heidegger's notion of dwelling which is further applied to the architectural studies of Thiis-Evensen and Christopher Alexander.

2.2 Meaning in Architecture

2.2.2 Applying Hermeneutics to Architecture

“Architectural history as we know it has been written tacitly adhering to the crudest version of the paradigm of communication: all the attention has been focused on the design of the new forms, none on their interpretation. It is time to realize, that even within the limits of the paradigm of communication, there should be a history of meaning, not only a history of forms.”

(Bonta. 1979: 232)

As discussed above, one can start to apply hermeneutics to architecture through the application of various concepts and theories, which have over time branched off from or have had a direct influence from hermeneutics itself; they are phenomenology and the notion of dwelling. However this is not enough to truly ground hermeneutics in architecture as both only touch on broad issues relating to architecture. Primarily hermeneutics, phenomenology and the notion of dwelling all act as a means of interpretation. It therefore makes sense to take an approach as an introduction to examine an interpretation of architecture.

Before trying to understand how architecture can be understood through interpretation it is imperative to take a hermeneutical viewpoint whereby the beginnings of interpretation stemmed from the interpretations of texts (Demeterio III, 2001). It is said that language is the root of all culture and it can be furthermore said that culture has a direct impact on how places are conceived (Wyatt, 2011; Cooper, 1990). The aim of this section is to understand how to interpret meaning within architecture whereby it can be applied to create architecture of relevance.

Architecture in a sense of a praxis of design, building and finally interpreting a finished product should be understood as a series of translations and not as a way of direct reading (Whyte, 2006). By taking this standpoint through an analytical observation of architecture. Hermeneutics plays a dominant role in how one interprets the building. Understanding "through a series of translations", encourages the interpreter to engage in a dialogue with the building, of which takes a dialectical hermeneutic approach in understanding.

Jahangeer (2008, 2012) further breaks down the notion of reading text from parts by explaining how sentences are structured out of words, letters and spaces. Unconsciously people write and structure sentences in order to make them legible by combining a set of parts to create a readable whole. One part cannot exist without the other. The structure of the visible and the 'unseen' play an important role in how one reads objects. This notion is further outlined in the following diagram:



Fig 9: Structure of text

Jahangeer (2012) explains that the physical world operates in much the same way whereby everything exists within a structure, be it naturally or man-made as well as the importance of understanding that the world in which humans live in is a whole constructed of parts and that the metaphorical 'spaces in-between the letters' carry an equal amount of importance than the letters themselves. To gain a true understanding of meaning within the world, one must understand the physical (of which is seen) and metaphysical (of which is not seen at first glance) components that create the structured whole. A large component of this dissertation has been dedicated to understanding the several components that construct place.

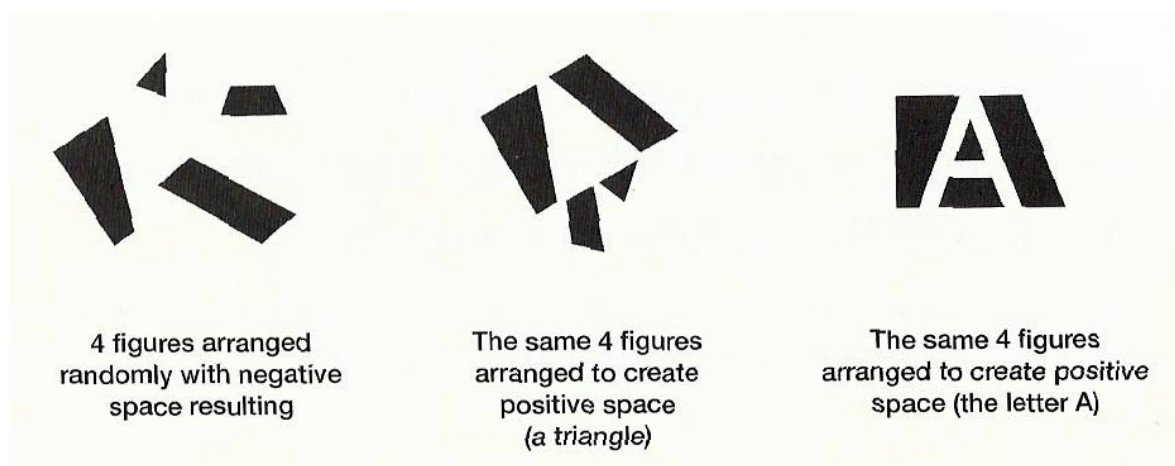


Fig 10: The Concept of the Figure Ground

Architecture through the ages has made attempts to deal with human experience and meaning. Ancient architecture was intrigued by man's relationship with the universe and paid tribute to the gods and the rulers of their time, late century architects attempted to refine the architecture of their predecessors, but it wasn't until the modern movement of the early 1950's that human value once again entered architectural theory. Modernism, in its attempt to "repair the fracture between thought and feeling", failed to relate to built form with the environment and became an architecture of image. This period heavily influenced an architecture of working within boxes, whereby if one looks at the above figure ground, focus would have been on the so called positive spaces creating an architecture that ends up being rather introverted and disconnected to the other positive spaces, creating a 'negative' space in-between carrying a negative value to its users.

Jahangeer (2008, 2012) argues that modernism is not in fact dead, whereby architecture in its existence is an image that relates to a bigger network or environment, much like how a pixel creates a picture with the help of other pixels. A building can be treated as a pixel that sits within a bigger picture. The argument is valid in the sense that modernism is not dead but in fact the boundaries and outcomes have shifted considerably. Several attempts have been made to understand the world and how things relate to one another. The writings that have had a phenomenological influence had served best at providing such an explanation.

Phenomenology has become a useful interdisciplinary theory for psychologists as an enquiry into the meaning of objects of our man-made and natural environments. Phenomenology approaches matters and actions with the same naturalness of which they present themselves, absent of preconceived notions or scientific reason (Stechyshyn, 2005). "Phenomenology reveals the objects of our consciousness irrespective of whether they actually exist physically. Every situation in life is perceived through our relationship with some form of object. What these objects mean to us and how people perceive them is of useful knowledge to architecture" (Stechyshyn, 2005).

Several authors have explored the notion of phenomenology with regards to place-making from an urban scale and architecture namely Kevin Lynch, Christian Norberg Schulz, Christopher Alexander and further Thiis Evensen, all of which will be described in greater detail later in this dissertation. Husserl explains that phenomenology differs from science as it aims primarily not to

explain phenomena but instead acts as a tool in which it enables humans the ability to see or focus clearly on the phenomena. This thinking involves the process of perceiving things for what they are (Flynn, 2009) "The stated goal of phenomenology is to describe lived experience without obscuring the description through misapplication of scientific concepts" (Wyatt, 2011).

Views on interpreting an architecture through a phenomenological viewpoint have seen countless debates, ranging from the works of Christian Norberg-Schulz (1980), Juhani Pallasmaa (1986), Kenneth Frampton (1974), Tadao Ando to name a few. Each with varying viewpoints of what a phenomenological interpretation should be. Seamon (2010) writes through the ideas of Herbert Spiegelberg that there is no set definition of phenomenology and, "that there are as many styles of phenomenology as there are phenomenologists" (Spiegelberg, 1982: 2).

A grasp on the concept of Existentialism helps one to further ground a viewpoint of interpretation of the self within a phenomenological paradigm. Existentialism is a philosophical and literary movement that came to fruitarian shortly after World War II, "broadly defined, is a set of philosophical systems concerned with free will, choice, and personal responsibility. Because humans make choices based on their experiences, beliefs, and biases, those choices are unique to them — and made without an objective form of truth. There are no universal guidelines for most decisions, existentialists believe. Instead, even trusting science is often a leap of faith. Existentialism is, at its core, individualistic" (Wyatt, 2011).

"Mankind is the only known animal that defines itself through the act of living. In other words, first we exist, then we spend a lifetime changing our essence. Without life there can be no meaning, the search for meaning is the search for the self" (Earnshaw, 2006: 2). This thinking has been explored in Heidegger's notion of Dwelling, whereby man only experiences and interprets through existence, Norberg-Schulz argues that, "architecture represents a means to give man an existential foothold" (Norberg-Schulz, 1980:5). This founding has been further explored by writers, Kevin Lynch (1960) and Christopher Alexander (1977), through issues of legibility of the city, way finding etc., all of which explore the city from the viewpoint of the user and the self.

Through the above findings in hermeneutics it is apparent that man cannot interpret an architectural element unless there is an interaction between the text (element) and the interpreter, further man does not have an 'existential foothold', if he cannot interpret his surroundings (Lynch, 1960; Norberg-Schulz, 1980; Alexander, 1977; et al) . Being able to read and interpret anything, be it texts, symbols or objects all require a language/process of a similar nature in order to obtain a meaning/truth (Demeterio III, 2001).

"We communicate via images, sounds, and touch. For most of us, what we think is converted to a form of "unspoken speech" in our minds. This means we can only understand and explain things in some form of spoken word. Philosophers dealing with ideas of deconstruction and postmodern linguistics have come to appreciate the limits of language and the social implications of words."(Wyatt, 2011; Cooper, 1990).

"If you have a new idea for a tool, the idea exists before the object you intend to create. However, you can understand your idea only via words or symbols already known. This means all comprehension of 'essence' is limited by existing language"(Wyatt, 2011; Cooper, 1990).

A brief outline according to Wyatt (2011), on existentialism is given below in order to better understand how the perception of the self can fit within the built environment:

Themes of Existentialism

Despite encompassing a staggering range of philosophical, religious, and political ideologies, according to most scholars the underlying concepts of existentialism are:

- Humans define themselves through the act of living (and dying).
 - Living is a series of interactions with other humans and their choices.
 - Alienation is a condition of modern life we cannot avoid.
- Humans have free will and with that comes despair.
 - Free will implies responsibility for choices and actions.
 - Free will also means that life itself is a choice, once one is self-aware.
- Life is a series of choices, creating anxiety and stress.
 - Decisions seldom are without any negative consequences.

- One must commit to decisions, or they aren't authentic decisions.
- Some things are irrational or absurd, without explanation.
 - Life either has no meaning (atheists) or the meaning cannot be understood (theists).
 - Events are random and even cruel, as opposed to a belief in Karma and universal justice

2.2.1 The notion of 'Dwelling'

Heidegger writes that "what is within the world is also within space" (Heidegger, 1971:151), claiming that the primary purpose of architecture is to make the world visible through the creation of space. Heidegger goes on further to state that, "only if we are capable of dwelling, only then can we build" (Heidegger, 1971: 160). What is meant by these two statements is that there is meaning within space and once that meaning is understood and interpreted to its users a sense of dwelling can occur. Heidegger's term 'dwelling' refers to an ontological sense of being whereby several factors have been examined through an etymological investigation to interpret a whole (Seamon, 2000). Dwelling having the meaning of remaining or staying in place.

"The crux of dwelling, Heidegger argues, is sparring and preserving- the kindly concern for land, things, creatures, and people as they are and they can become"(Zimmerman, 1983).

"As human beings, we cannot fail to dwell, for dwelling, ultimately, is the essential existential core of human being-in-the-world from which there is not escape" (Seamon, 2000: 1).

Through the understanding of dwelling Heidegger had taken an etymological route whereby a hermeneutical approach was taken to understand the word history of the German word "bauen", meaning in English: "to build", and it's link to dwelling. Heidegger has argued that one needs to view building not as an art or technique of construction but building as a realm to which everything that exists has belonging (Heidegger, 1971 & Seamon, 2000 & Harman, 1951).

Heidegger (1971) writes of Bridges, hangars, stadiums and the like, as not being literal places of dwelling but yet still having the ability to create a domain where dwelling in an ontological sense can exist, implying that dwelling is not just limited to the dwelling place (home). "The truck driver is at home on the highway, but does not have his shelter there..."(Heidegger, 1971: 145).

Dwelling therefore implies that for the environment to carry meaning as an inhabitant of life and it must not be viewed as a space but rather as a place (Norberg-Schulz, 1980: 5).

Heidegger introduces the concepts of earth and sky (emphasizing the notion of place) and states: "Earth is the serving bearer, blossoming and fruiting, spreading out in rock and water, rising up into plant and animal..." "The sky is the vaulting path of the sun, the course of the changing moon, the glitter the stars, the year's seasons, the light and dusk of day, the gloom and glow of night, the clemency and inclemency of the weather, the drifting clouds and blue depth of the ether..." (Norberg-Schulz, 1976). This was the beginning of what Seamon (2000) argues forms the practical side of dwelling. Heidegger had further developed the notion of the 'fourfold', whereby, "the gathering of the fourfold-the coming together of earth, sky, people, and a sense of spiritual reverence, or 'the gods'," (Seamon, 2000: 1). served as not just, "an extension of existential space or place; rather, it becomes itself the fundamental human activity, in the light of which both place and space find their first clarification" (Jager, 1983: 154).

People achieve meaning on earth as an existence as individuals, living between as Heidegger (1971) puts it, heaven and earth, developing a sub-conscious understanding of the worldly environment.

The philosophy of Heidegger has proved to have been the catalyst in Norberg-Schulz's work, whereby Norberg-Schulz states that "Existential foothold" and "dwelling" are synonyms, and "dwelling" in the existential sense is the purpose of architecture"(Norberg-Schulz, 1980: 5).

Seamon (2000) argues that the built environment acts as a tool, capturing an 'embodied world' much of what is defined by Heidegger's concept of the "fourfold".

The theory of existentialism outlines that there is a personal experience of space to the concept of place, " An existentialist position is that we exist within the world and not as a separate entity" (Stechyshyn, 2005).

Existentialism also helps one understand how the "self" or individual sits with and environment or the world whereby existential space can be examined in layers, beginning with the immediate environment. If people are not satisfied with their natural environment or it does not meet their existential needs, be it for religious or functional reasons, they have the intelligence as human

beings to adjust it to suit their needs in order to create their own being (Stechyshyn, 2005). It is important to acknowledge that this thinking runs in direct parallel the theory Heidegger had proposed in his *notion of Dwelling*. Heidegger (1971) had stated that humans, "coexist among all that exists", and that "To build in itself is already to dwell" (Heidegger, 1971: 146), meaning that humans will adapt their environment in order to exist in harmony with all that already exists.

The Nazareth Baptist Church, otherwise known as the Shembe named after the founder: Isaiah Mdlwamafa Shembe, located within the region of Kwa-Zulu Natal, South Africa practice a religion which acts as a branch off of Christianity. The religion dictates that its people have a respect for the land and all that live off the land. It is common practice around Kwa-Zulu Natal that one finds Shembe circles inside of parks and other grassy areas within cities (Clarke, 2006).

The Shembe circle is where worship takes place giving this cluster of rocks significant meaning. These rocks represent a boundary between inside and outside, the dominant theme of which Heidegger (1971) argues is a key aspect of dwelling. On the inside of the circle the ground is holy and shoes may not be worn as being barefoot provides a deeper connection to the land. One may also only enter the circle not by just stepping over a rock, as that is considered a bad omen, but must enter through set entrances at specific points of the circle (Clarke, 2006).

The Shembe people have adapted a space through their belief systems creating a place which carries a multitude of meanings through a notion of dwelling.



Fig 11: A Shembe gathering within a Shembe Circle

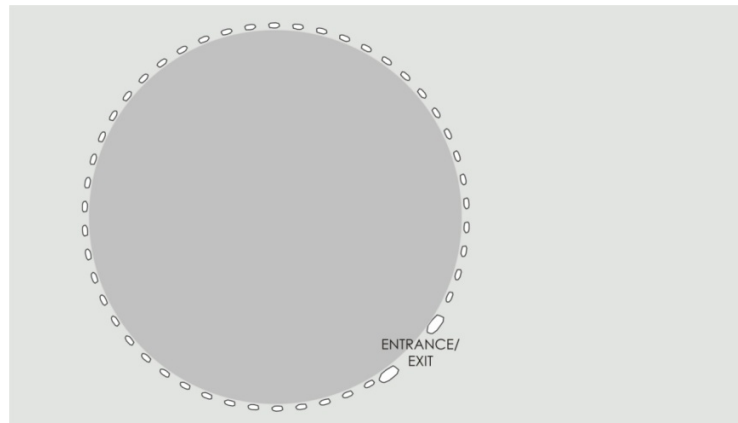


Fig 12: A generic Shembe Circle plan

Seamon argues that one is able to identify through the work of Edward Relph, a geographer dealing with the phenomenology of place, that "insideness is the hallmark quality transforming space into place and sustaining the deepest sense of dwelling" (Seamon, 2000: 2).

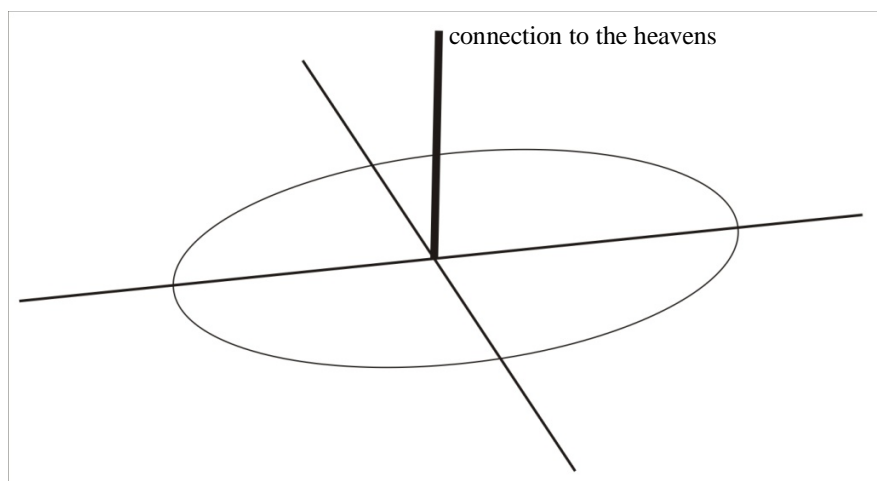


Fig 13: Existential space diagram

Norberg-Schulz (1971, 1976, 1984), applies the idea of the fourfold to an idea of space as a connection between the heavens and earth as well as the confines of the horizon or elements in-between. The above diagram demonstrates this principle.

2.2.3 Place

"We strive to understand our life by understanding our position within the world. We build our world to reflect this relationship and understanding that we have of the world. We build to create a sense of place"

Norberg Schulz (1976) writes extensively about the 'make up' of place and how it is derived.

Norberg-Schulz argues that the world is made of concrete phenomena as well as intangible phenomena of which are described as human emotions and feelings. Everything is made up of parts (concrete things). "The forest consists of trees, and the town is made up of houses"

It is further stated that these 'phenomena', that are experienced on a daily basis, whether tangible or intangible form an 'environment' and that the word environment is a way in which people concretize the idea of a place (Norberg-Schulz, 1976).

Norberg-Schulz (1976: 414) states that, "it is common usage to say that acts and occurrences take place. In fact it is meaningless to imagine any happening without reference to locality". Straight away this thinking puts the notion of the existence of place within a context, as well suggesting that place is based on human existence. Further rooting an architecture or building within the *notion of dwelling*.

Throughout history there has been a common thread whereby architects have attempted to deal with human experience and meaning in Architecture. People have always wanted to know where they belong in the world and how they relate to it as individuals as well as collectively (Stechyshyn, 2005).

So far poetry has had the greatest effect in being able to "concretize these totalities which elude science"

"A Winter Evening

Window with falling snow is arrayed,

Long tolls the vesper bell,

The house is provided well

The table is for many laid.

Wandering ones, more than a few,

Come to the door on darksome courses,

Golden blooms the tree of graces

Drawing up the earth's cool dew.

Wanderer quietly steps within;

Pain has turned the threshold to stone.

There lie, in limpid brightness shown,

Upon the table bread and wine."

George Trakl

Norberg-Schulz (1976) analyzes the poem and highlights several factors/points within the poem in order to structure an argument towards the make-up of 'place'.

The poem is successful in the way that it first of all differentiates between outside and inside, this proving to be one of the key elements in mentally creating an environment,

Norberg-Schulz argues that the psychic implications of architecture outweigh the practical implications of architecture whereby Norberg-Schulz states that the, "environment influences human beings, and this implies that the purpose of architecture transcends the definition given by early functionalism"(Norberg-Schulz, 1980: 5).

Further from that notion Norberg-Schulz views the built environment as a common ground to all people of which they belong, existentially, equally(Norberg-Schulz, 1971:16). Jahangeer (2008, 2012) shares a similar opinion by stating that, "architectural works are perceived as cultural and political symbols and works of art, by definition a public place or space is a space or a place anyone has a right to be without being excluded because of race, gender, class or any other social political categorization". Therefore architecture purely through an existential nature provides a basis for society as well as a common identity.

In order to break the idea of a 'sense of place' down into more manageable parts for analysis, Norberg-Schulz's phenomenological method has been adopted. Whereby place is broken down into two parts, The first being a *character* or atmosphere of place which deals with the forces

that are intangible. The second dealing with the physiological structure of a place which deals primarily with elements visible and tangible to people (Norberg-Schulz, 1976)

2.2.3.2 Analyzing a Structure of the built environment

Norberg-Schulz(1980) states that man can only dwell when he is able to identify and orientate himself within his environment. This thinking gives the occupant meaning within the environment.

According to Lynch(1960) perception of a city is processed in stages and through connections between nodes that are easily recognisable. The senses also have an impact on how one perceives a place or space. What fills or animates the space impacts on how the place or space is perceived. Furthermore one can consider that the image of the city being a composite of all of these elements. Legibility of all of these components is of utmost importance, being able to mentally structure ones environment. A clear image is necessary and gives the user possibility of choice which in turn also provides emotional security. Growth and development of a city also bear impact on how one perceives a place over time.

Lynch (1960) explains that each individual creates and bears his own image, it is further explained that the individuals or observers can be grouped into more specific demographics, be it by age, sex, culture, occupation, temperament, or familiarity. Through these aspects commonalities can be found leading to social interaction and integration. “It is these group images, exhibiting consensus among significant numbers, that interest city planners who aspire to model an environment that will be used by many people”(Lynch, 1960: 7).

Lynch’s fundamental theory lies in the simplification of the environmental image into 5 elements, to create a holistic image. These elements are: paths, edges, districts, nodes and landmarks (Lynch 1960, p2-45).

1. *Paths*- channels a long which the observer moves and experiences other elements of the cities environment. These are major and minor routes of circulation that people use to move about. (Lynch 1960)

2. *Edges*- boundaries between two phases- these are walls or barriers that are permeable, penetrable or at times not. These are linear elements not used or considered as paths by the observer(Lynch 1960).
3. *Districts*- these are areas with similar characteristics(Lynch 1960).
4. *Nodes*- points, intensive foci- crossings or connections, important social spaces. It is centers of attraction or activity that can be entered. A landmark by virtue of its active function (Lynch 1960).
5. *Landmarks*- reference points, buildings, mountains, sea etc. They may range in scale. Bigger landmarks give a general orientation, while small landmarks may give direction within districts or smaller sections of the city(Lynch 1960).

“Districts are structured with nodes, defined by edges, penetrated by paths and sprinkled with landmarks” (Lynch 1960, p48).

Norberg-Sculz (1976) also argues the same point about a structure of the built environment by describing that everything needs boundaries. Without boundaries nothing can exist. They provide a point for something (space/place) to begin or to end. “Their task is to assemble the complex whole, which requires a structure consisting of many aspects, contents and meanings” (van Nes, 2008: 120). Norberg-Schulz inspired by Lynch's 5 elements, devised his own system of interpreting urban space by dividing urban space into three types; "the street, the square, and the neighbourhood " (van Nes, 2008: 120).

1. The square- is the centre of the surrounding settlement. It is a place within the place. While the street is a place we move through, the square represents a kind of destination we have reached. (van Nes, 2008: 120).
2. The street is not an aim in itself. It connects one place with another. (van Nes, 2008: 120).
3. A neighbourhood is defined as a place where the buildings are closely located to one another. It is a place where one lives together(van Nes, 2008: 120).

van Nes (2008) brings to light that Norberg-Schulz's approach to describing the structure of a building is limited to a description of its shape/form. Making reference to a building proportion

in relation to various natural elements such as: relationship to heaven and earth (skies, and floor) and surrounding landscape (be it the horizon or an adjacent building).

When viewing the interior of the building from a phenomenological viewpoint as Norberg-Schulz does. A similar approach is taken in interpreting inside as is done with outside. The ceilings become the skies, the floor the earth and the walls become the "optic array" (van Nes, 2008: 122). "Norberg-Schulz tries to describe an interior's structure through the shape of the rooms. In general he makes use of two main groups; the central and the axial room. The central room rises up to heaven, while the axial room extends on the earth's surface " (van Nes, 2008: 122).

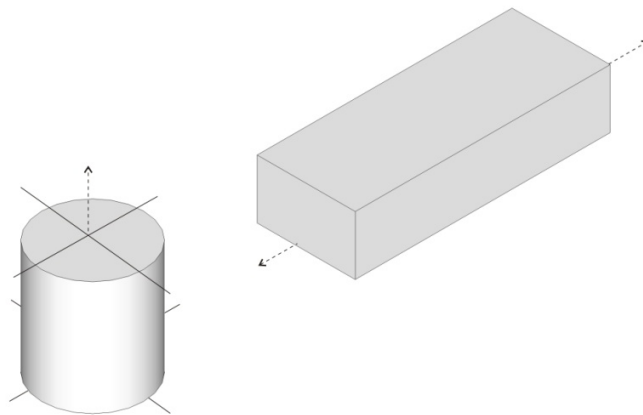


Fig 14: central and axial forms/rooms

Bryden (Hart, 2010: 249) argues that "place refers to patterns of affectively valued social relations embedded in a physical environment". If this is the case then it is very difficult for an architect to create place as this notion suggests that place cannot be planned or designed and that place itself will emerge spontaneously. This does have some truth within it but it is however limited, as Heidegger's (1971) thinking's about place dictates that for place to emerge from space it must have constructs or boundaries. Since people are physical living things but by hermeneutical and phenomenological nature, it is impossible that the places in which they live be generated purely from the metaphysical but must be a combination of the metaphysical and the physical, structure and character.

2.2.3.1 Establishing an Architectural Character

It is often commented that the writings of Norberg-Schulz in terms of place structure and character are quite vague and difficult to understand. Van Nes (2008) has interpreted the writings notably of Norberg-Schulz and has structured them in such a way in which they become much more understandable in terms of the built environment.

The way in which van Nes (2008) has structured her argument is by breaking the whole into smaller parts that are easier to grasp and understand, firstly a *character of place* is examined stating that Norberg-Schulz's grounding in understanding a character of place take into account, "how the interaction between local building materials, lighting, vegetation, landscape forms, weather conditions and colours contribute to shape place character" (van Nes, 2008: 122).



ZULU BEE-HIVE HUT



STONE BEE-HIVE, IRELAND



SYRIAN MUD HUTS



CELTIC HUT- WALES



IGLOO MADE FROM SKINS



ICE IGLOO

Fig 15: Character comparison

The above image demonstrates that very thinking, whereby through the existential need of dwelling, people have come to building various types of dwellings. Essentially all of these dwellings serve the same purpose, to separate the inside and the outside, this is known through the findings previously mentioned (Heidegger, 1971; Norberg-Schulz, 1971, 1976, 1984; van Nes, 2008). However, through the above mentioned cultural, environmental etc. influences the

somewhat similar structures have all developed in very different lights bringing on a completely different architectural character unique to their inhabitants.

Settlement or dwelling therefore determines the outcome of a place and this is only possible when "it collects and interprets the surrounding landscape" (van Nes, 2008: 122). "As Norberg-Schulz claims, it is a base for human identification and makes the settlement a possible home. The settlement is adjusted to the given natural spatial structure, either through emphasising it or by complementing it. Therefore it must interplay with the character of the landscape" (van Nes, 2008: 122). Norberg-Schulz argues that because the character (emphirical quality) has a dominant impact on the places identity and that humans through an existential need cannot exist without place, "the place's identity then becomes, our own identity" (van Nes, 2008: 122). Furthermore the character of a place has a resulting impact on a collective group of peoples identity.

Norberg-Schulz suggests that urban spaces are spontaneous, describing the human emotion of returning home or exploring a new city. Suggesting that the way in which people perceive places and spaces to be the key point in establishing an architectural character (van Nes, 2008).

"A place can be perceived as being friendly, cold, sombre, lively, enclosed, open, etc. It creates the spirit of a place and its inhabitants in the way it is expressed by the spatial structure and the architectural elements" (van Nes, 2008: 123). This suggests that the structure of the city as well as the character act in dialogue with each other.

The following set of images seek to explore an impact of city structure on the environmental character, Fig. 16 presents various figure ground studies of various 'major' cities around the world all of varying complexity and scale. In essence the structure of each city varies when presented as a 'top down' line drawing. Fig. 17 helps bring the reader closer to the character of each city and it becomes apparent that each differing structure does play a role in the overall character. For example, when looking at the figure grounds of Barcelona and Rome in comparison to that of New York and Toronto, one can clearly see a difference in the rigid and monolithic against the organic and grainy.

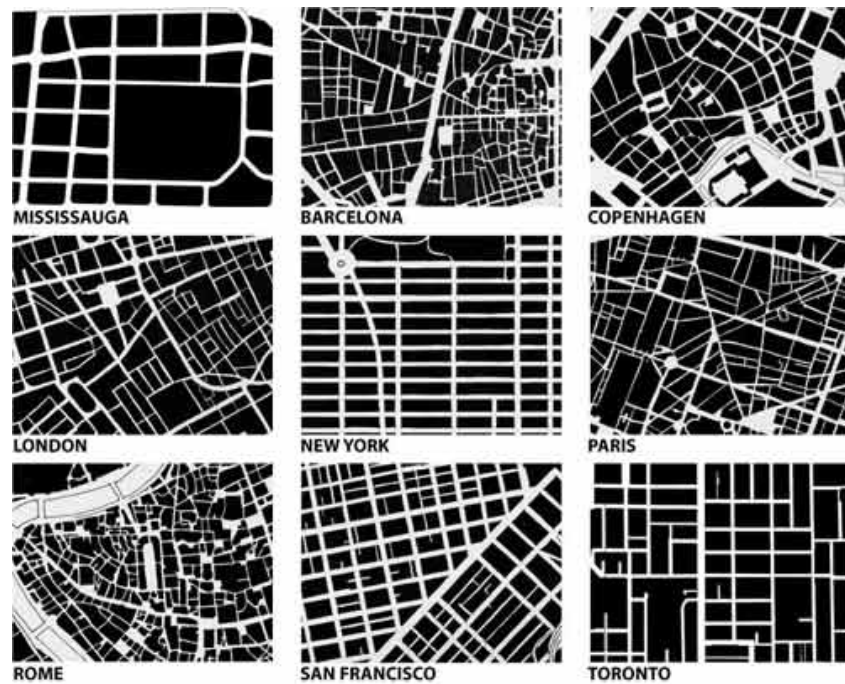


Fig 16: The impact of positive and negative space

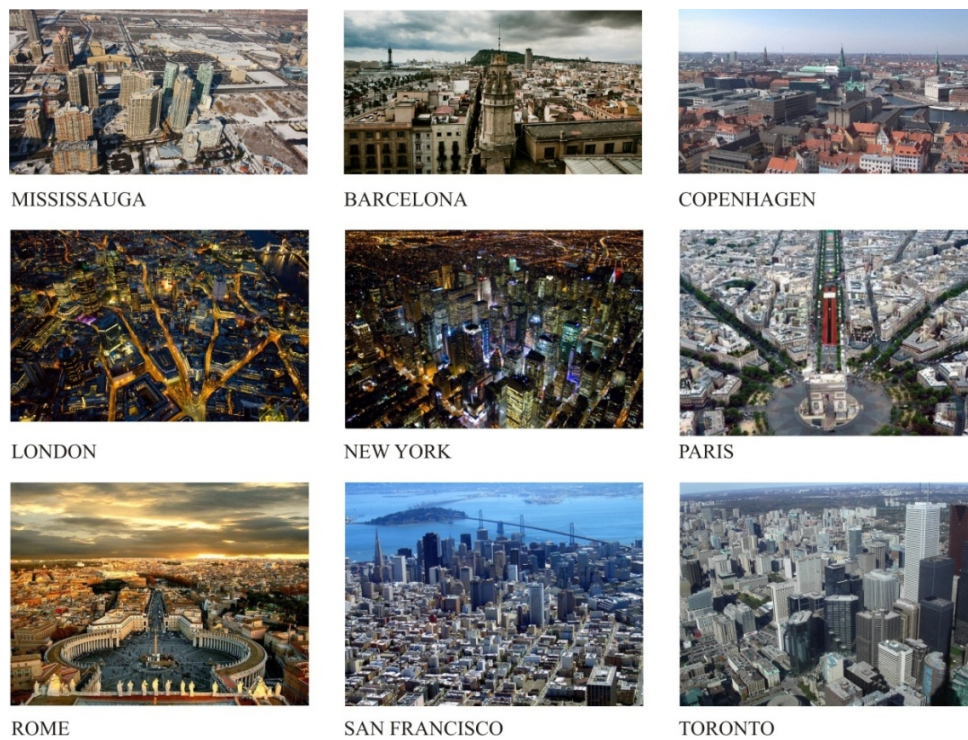


Fig 17: A visual comparison

Van Nes (2008) further examines urban space by applying the elements of the fourfold to the in-between space of the cities, for example a plaza, "An urban space has a floor and walls. The roof or ceiling depends on the changing sky. The effect on the sky can be influenced by cornices, towers, roof corners etc, which determines the part of heaven experienced from the urban space" (van Nes, 2008: 123). In essence urban space is dictated by both the internal and external worlds, the natural environment as well as the built environment.

Thiis-Evensen (1987) has explored this notion of place with regards to architecture and the built environment having an impact of both internal and external forces through his exploration of *archetypes in architecture*.

2.3 Language in Architecture

2.3.1 Reading Architecture

Normally first impressions of a building take the form of qualitative observations whereby different buildings elicit different response from the user. "One gets an immediate sense of the whole which 'overwhelms', 'establishes a mood', and which concerns the architectural expression or atmosphere" (Thii-Evensen, 1987: 15). Thiis-Evensen (1987) argues that function of the building does not play a key role in order to deduce a 'spirit of a building', rather one can deduce that 'spirit' by observing and interpreting several parts of the building. It is further added that "Artists have similarly come to the conclusion through their works that adopt specific forms, and can establish certain moods: A narrative picture will move the feelings of the beholders when the men painted therein manifest clearly their own emotions. It is a law of our nature...that we weep with the weeping, laugh with the laughing, and grieve with those who grieve" (Thiis-Evensen, 1987: 15).

Etienne-Louis Boullée writes of a similar notion within architecture stating that, "the most essential aspect of buildings is that the images they offer our senses should arouse sentiments analogous to the use which buildings are dedicated". An issue which has proven to be of hot debate with several others, namely Geoffrey Scott and Le Corbusier, writing on the subject. Where this notion is further concretised by the following statement:

"Architecture is a thing of art, a phenomenon of the emotions, lying outside questions of construction and beyond them. The purpose of construction is to make things hold together; of architecture to move us" (Thiis-Evensen, 1987: 15).

Thiis-Evensen (1987) ask a question of: "How can one plan specific architectural effects?" This is answered by an understanding of forms of which expressive characteristics are understood. This understanding of forms creates the very basis of 'architectural grammar'.

The forms are referred to as 'Archetypes in Architecture', "These archetypes may be understood as images which can be identified in relation to architectural form, function and technology"

Paul Zucker was the first to use the term archetypes within the field of architecture by introducing a description of 5 square archetypes and relating the notion to a history of architecture whereby each form has an appropriation from antiquity up to present day. Many others have experimented with the idea, namely Michael Graves, Rob and Leon Krier and Mario Botta (Thiis-Evensen, 1987).

Thiis-Evensen takes this thinking a step further by stating that, "As far as being acquainted with the expressive potential of form is concerned a theory of archetypes must have three goals: the first to classify the archetypes in a concentrated overview, the second is to attempt to describe them in order to point out the potential expression which exists within them. The third goal has to do with the following question: Will the expression be at all perceived by the user, and does not the experience of architecture vary from person to person? The aim of this goal must then be to show that there is a common language of form which we can immediately understand, regardless of individual or culture"

Thiis-Evensen approaches analysing archetypes by breaking the idea of form down further into three elements of which constitute the elements of "spatial delimitation". They are:

1. The Floor
2. The Walls
3. The Roof



Fig 18: Park Guell- Barcelona- elements of the floor, wall and roof

It is important to acknowledge that even though these elements are different in their own ways they all act under the same principle by setting boundaries in which building or architecture both begin and end. This thinking is not too dissimilar to the ideas put forward by Heidegger of separation between outside and inside.

Thiis-Evensen further breaks these elements down into what represents "four levels of scale within the construction of the delimiting elements":

1. The first deals with the how the 'major forms' are perceived
2. The second deals the 'construction systems' of the above mentioned elements, the floor, the walls and the roof. Are they skeletal or are they massive?
3. The third deals with the surface treatment of the major forms
4. The forth deals with openings in the major forms

Thiis-Evensen categorizes these levels of scale into what is described as "existential expressions" of architecture whereby the insideness or outsideness in regard to the floor, the walls and the roof can be understood through the ideas of *motion*, *weight* and *substance*.

A brief explanation of each 'existential expression' is provided below:

Motion- The architectural elements (either the floor, wall or roof) sense of "dynamism or inertia" (Seamon, 2000: 2).

Weight- "the sense of heaviness or lightness of the element and how it relates to gravity" (Seamon, 2000: 2).

Substance- "the material sense of the element- whether it is soft or hard, coarse or fine, warm or cold..." (Seamon, 2000: 2).

"What is it that the roof, the floor and the wall do? As a motion, the roof rises or falls. the walls stand up or sink, the floor spreads out, climbs or descends in this way, weight is also implied. That which rises is light and that which falls is heavy. And if the roof is bright and soft as a sail, it is open. If the roof is dark and of stone it is seen as being closed. If the openings in a wall are tall and narrow, they ascend, if they are short and wide, they sink. A soft and fine floor is warm and open, but if it is hard and coarse, it closes and is heavy" (Seamon, 2000: 4).

2.3.2 The 'breaking down' into Parts

2.3.2.1 The walls

The wall is of the most important parts, as it most strongly separates inside and outside. It is through the wall the one physically passes from outside to inside and from inside to outside. It thus represents a threshold between the two spatial paradigms (Seamon, 2000).

Thiis-Evensen explores this notion further through how the connections between outside and inside are dealt with those being through, as mentioned above by physically passing through the wall, and how openings within the wall such as windows etc. are treated (Seamon, 2000).

Openings in the wall serve as connections between these two paradigms and delimit their level of inside and outsideness. Thiis-Evensen explores the window as an element that brings life to architectural space through exploring parts of the window, namely: the *opening*, the *face*, and the *frame* (Seamon, 2000; Evensen, 1987).

Frame- the characteristics of the frame play an important role in establishing a point of focus, or a directional focus from the inside towards the outside. The focus is emphasized through which

parts of the frame are emphasized, the lintel, the sill and the jambs (Seamon, 2000; Evensen, 1987).

“If all its parts are emphasized, then the entire interior space seems to reach outward. On the other hand, if only the lintel is highlighted, then an upward movement and roofs take precedence. In addition, the sense of movement for a wall as a whole can be affected by the arrangement of window frames” (Seamon, 2000: 3). This is demonstrated by the following three figures respectively, (Fig.19 Fig.20 Fig.21)

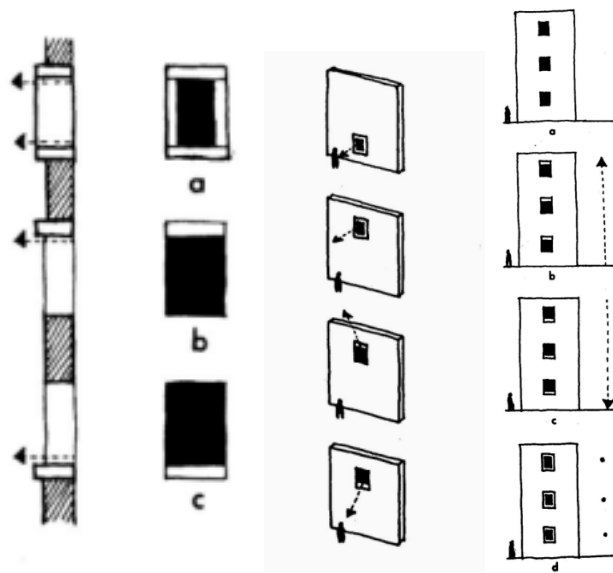


Fig 19: Motion Expression: 1 **Fig 20:** Motion Expression: 2 **Fig 21:** Motion Expression: 3

Thiis-Evensen (1987) makes note that another important aspect of the openings relationship between inside and outside is the shape of the opening. Three variations are identified: the vertical, the horizontal and the central. “Vertical and central windows suggest a movement coming from inside out, while a horizontal window suggests an inside lateral movement that is separate from the person outside” (Seamon, 2000: 4).

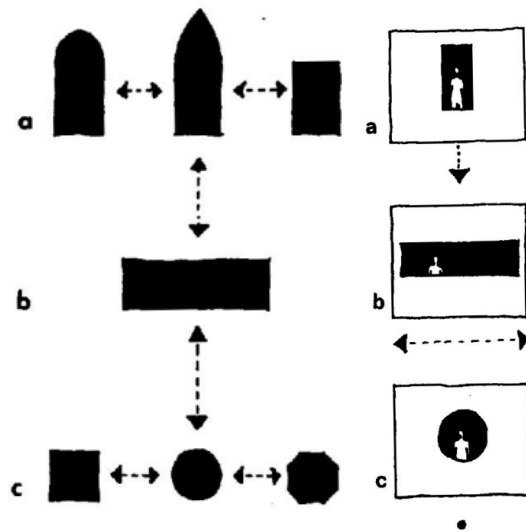


Fig 22: Window openings 1 Fig 23: Window openings 2

2.3.2.2 The Roof

Thiis-Evensen (1987: 301) explains that the main function of the roof is to protect the inside from the outside, "a space which is both over and around it". "In relation to the sky, a roof may accept the sky, which means that it guides a downward motion from above (A in figure 24). On the other hand if the roof resists the sky, the motion will be directed upwards from below (B in figure 24). A roof may also be balanced between downward and upward motion (C in figure 24)" (Thiis-Evensen, 1987: 301). "In relation to exterior space a roof may direct motion inwards toward a centre and thereby close the space outward along a line and thus open the space (D&E in figure 24)" (Thiis-Evensen, 1987: 301).

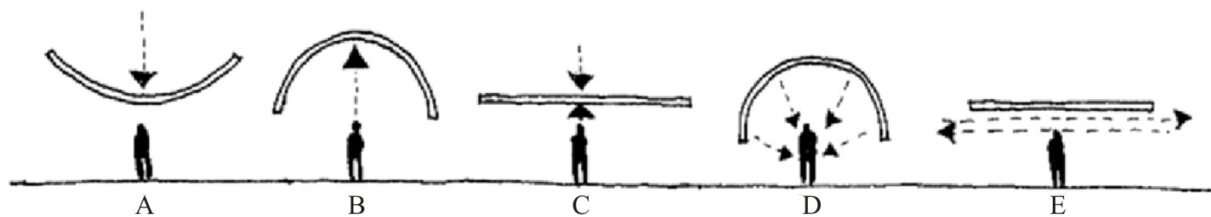


Fig 24: The roof and its relationship to the sky

Thiis-Evensen further applies the theme of motion in understanding how the roof impacts internal space: "The flat roof is neutral (A in figure 25), the dome centralizes (B in figure 25),

the barrel vault is directional (C in figure 25), the gable roof both directs and closes" (D in figure 25) (Thiis-Evensen, 1987: 3052).

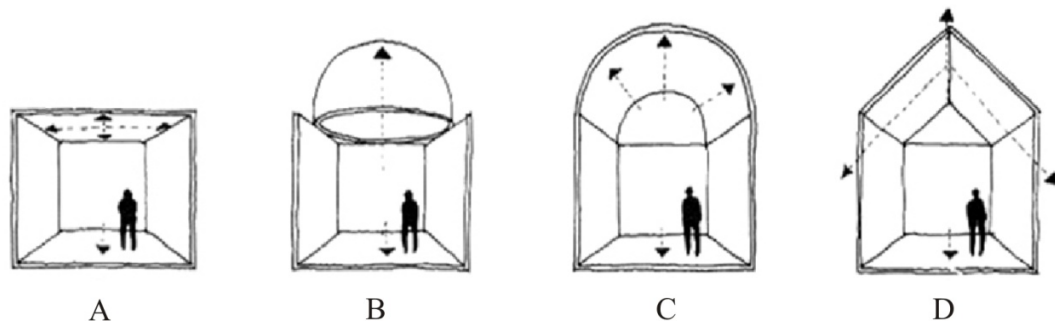


Fig 25: Themes of the roof and space below

2.3.2.3 The Floor

Thiis-Evensen (1987: 39) explains the floor's sense of motion through its mass: "Although the mass is permanent due to its firmness, it is not necessarily uniform. It affects our movements by being flat (B in figure 26) or by rising (C in figure 26) or sinking (A in figure 26). These three elements impact the motion of travel by the user, ie. A rising floor tends to bring a tendency of being difficult to negotiate, defining a structure of space further (Thiis-Evensen, 1987).

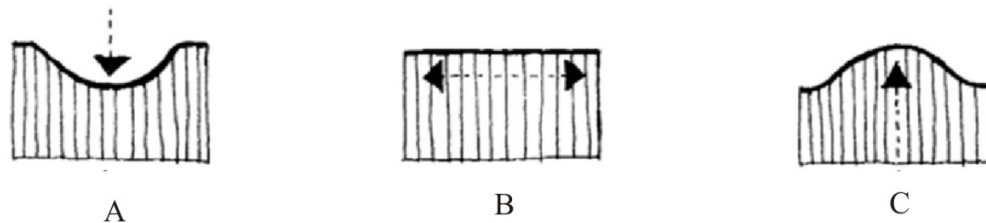


Fig 26: The three motions of mass

The directional theme deals with how the floor relates to the spaces around it, (the idea of an inside-outside relationship) furthermore it dictates how one moves between the two spaces are several spaces linked together. It can act as an element that separates inside from outside completely (A in figure 27), it can act as a path joining two spaces/places together (B in figure 27) or it can sit as a part of a bigger whole (C in figure 27) (Thiis-Evensen, 1987).

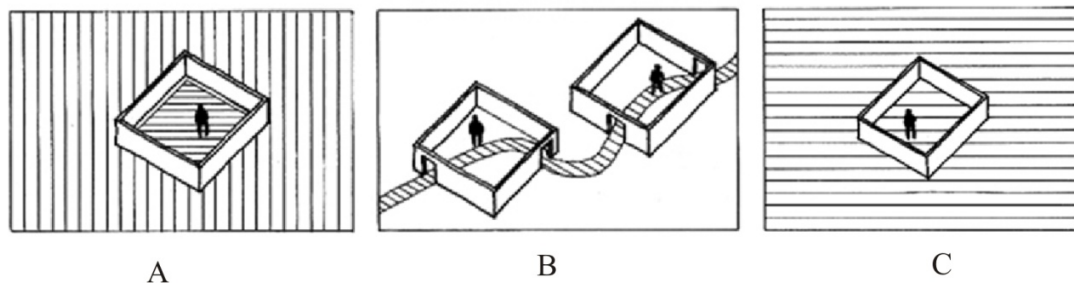


Fig 27: The directional floor theme

2.3.4 A Semiotic Approach

De Saussure (1959) believed that one not need use a hermeneutic method to analyse and understand language but rather the parts within the whole are read using a semiotic process between the signifier and the signified.

This may be true when applied to language as each word contains a specific meaning, however it may not be as simply applied to architecture as parts within the whole of a building tend to become a bit more obscure and harder to interpret. (Handa,1999)

Handa (1999) explains that architectural interpretation is different to that of linguistic interpretation whereby an architectural meaning will be different in that the intended meaning that the architect wishes to portray may not be as easy to interpret.

For the above reasons a hermeneutical approach when analysing architecture is favoured

2.3.5 CONCLUSION

In summary the concepts and theories discussed in this chapter from the basis of interpreting the built environment. The theory of hermeneutics has been used as a starting point whereby it breaks down methods of interpretation, unbiased of preconceived notions. The study of hermeneutics has not played a direct role in interpreting the built environment but has rather lead the researcher towards the various tools needed in order to do so.

Various key points have been raised through the study of hermeneutics, such as the importance of historical and cultural impacts. The importance of the physical and the ephemeral world as

well as the importance of the position of the self in the world all play a valuable role in understanding meaning in architecture. All of these notions have been explored through various concepts and theories outlined from 2.2 to 2.3.2.3. These concepts and theories have all had an influence or a direct relationship from the methods of interpretation dictated by the theory of Hermeneutics.

One may further understand the method of interpretation explored within this chapter as dealing with an idea of a macro context as well as a micro context and how the two relate to one another from a basis of perception.

The macro influences have been informed through a phenomenological background whereby both a structure of the urban environment as well as the character are analyzed in terms of Kevin Lynch's (1960) place theory, a place is made up of landmarks, paths, edges, districts and nodes. This provides for a platform for the urban environment to be viewed off of. Further an urban character can be explored through observation of the above mentioned aspects of culture and history which can be applied to the urban structure.

The micro deals with more of a person orientated method through the ideas of Martin Heidegger and Thies-Evensen, whereby the persons immediate surroundings are analyzed in terms of their impact on the person. A key issue addressed within the micro scale is of how the inside of the building relates to the outside (urban structure).

As this chapter deals with a universal application of interpreting the built environment the interpretation of the case studies within this dissertation have been structured in such a way whereby they reflect the methods expressed within this chapter to give an idea of how one might use a universal application within a developing third world setting.

The next chapter deals with more socially embedded issues involved with the developing third world and how they impact on urban place space in the creation of place.

CHAPTER 3

This Chapter aims to further outline the principles involved in understanding urban public space but with focus on the realm of the developing third world. It will provide the reader with several issues that have to be addressed and understood in order to create meaningful architecture within the developing third world.

First and foremost it must be acknowledged that all of the principles and findings from chapter two will form a basis for the development of an understanding of place. This chapter deals with much more social, economic embedded issues that have an influence on the end character of place.

3.1 Expressing an Identity within the developing third world

3.1.1 The informal Sector

The term 'Informal Sector' was first coined through the work of anthropologist Keith Hart while working in Ghana on a paper dealing with the informal income opportunities and urban unemployment in Ghana (Bhattacharya, 2008 ; Brown, 2006; Hart, 2010). Hart's findings were that workers that were described as 'marginal' were entrepreneurs in their own right (Brown, 2006).

Bhattacharya (2008) explains that the informal economy or sector is prevalent within Post war developing countries or more commonly termed 'third world developing countries' that experience rapid population growth along with migration towards urban areas. The problem arises whereby the general population count is much higher than the potential labour force, leading to an urban poverty. This 'knock-on' effect leaves people to create *livelihoods* from a "host of marginalized and vulnerable activities or are employed under fragile conditions" (Bhattacharya, 2008: 1). Therefore an informal sector arises outside of the traditional 'formal economy', otherwise known as economic dualism (Hart, 2010)

The informal sector is said to contribute as much as 40 percent of South Africa's gross domestic product, this being quite a considerable number. (Morris, 1996: 4)

The formal sector constitutes the largest portion of employment in the South African Economy. It is further broken down into four general categories: "trading and hawking (55 percent of total

businesses), production and construction (23 percent), services (16 percent), and illicitactivities (6 percent)" (Morris,1996: 4)

Empirical studies have failed at providing a true definition of what constitutes the make-up of an informal economy. Bhattacharya explains that the throughout developing countries a set of characteristics can be used to further explain the makeup of the informal sector, "ease of entry, low requirement of human and physical capital, small or tiny scale operation, prevalence of pre-modern and labour-intensive technology, skills acquired outside formal education system, family or household ownership operation" (Bhattacharya, 2008 :2).

Brown (2006) acknowledges that due to a growing informal economy within South Africa public space has taken on a different role in supporting the economy in comparison to that of the developed first world. It is further suggested that markets within the developing third world carry very different dynamics to that of the developed first world as it is found that street trade supports a different role to that of market trade.

Through empirical research of others, namely; Caroline Skinner, Saumyajit Bhattacharya, Richard Dobson. The following has been encountered and expresses a need to be acknowledged in the creation of urban place space suitable for the developing third world:

1. The informal sector primarily serves as a gateway into the city from a rural life to an urban identity. It potentially allows for easy access into the city as no formal education or qualifications are required (Bhattacharya, 2008).
2. With regards to Street trade and Market trade, women are the dominant workforce as it is found that men take on more physical roles involving physical trade based labour. ie construction (Skinner, 2007).
3. Due to the nature of not needing qualifications or formalized education, albeit most people within the informal sector have attended school but not to that of a matric level. A need for further skills development within the informal sector is of utmost importance(Skinner, 2007).
4. There are several 'barriers' that people face when trying to enter the informal economy, Problems of "skill formation, lack of credit , lack of access to infrastructure and services

and lack of an atmosphere to conduct safe business primarily in the context of the high crime situation in South Africa"(Bhattacharya, 2008: 18).

5. Historically workers rights have often been overlooked within the realm of the informal sector (Skinner, 2007).

The most important aspect of the informal sector is that it enables people to create livelihoods from small amounts of resources, Brown (2006) offers an explanation of what a livelihood is within the context of the informal sector:

"A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base" (Brown, 2006: 13).

Working within the context of this dissertation, the focus on livelihoods carries a focus on micro-enterprises (small ventures such as street trading and the like) which in turn create income for individuals who have been marginalized to an extent that there is no other option. It is therefore important to understand the dynamics involved in the creation or utilization of space to strengthen the opportunities for such livelihoods to take place.

3.2 The Social life of Urban Public Space

Various views have been shared as to what constitutes public space. Brown (2006) writes that Public space is made up from, primarily, cultural, economic and political dimensions whereby, "Public space is defined as the common ground where people carry out functional and ritual activities that bind a community, whether the normal routines of daily life or in periodic festivities" (Brown, 2006 :). It is further added that Urban public space portrays how society works celebrating many aspects of society from Investments, affluence, organization, dereliction, poverty and rebellion. "Its image is defined by the architecture of the street and by activities it accommodates, reflecting many aspects of the urbanizing world" (Brown, 2006: 17). Many others such as Jane Jacobs (1961), William Whyte et al share a similar stance on what constitutes public space/place. Gehl (1996) offers an opinion that takes a more structured look at how society functions within the urban fabric.

Gehl (1996) considers social activities in public space, distinguishing between three types of activities: necessary activities, optional activities and social activities. A brief explanation of each is provided as follows:

1. Necessary activities

The things that have to be done: Going to school, waiting for the bus, shopping and going to work. These activities occur regardless of the quality of the physical environment because people are compelled to carry them out. A good city provides good conditions for many necessary activities and will retain and strengthen these activities over time (Gehl, 1996).

2. Optional activities

Activities people are tempted to do when climatic conditions, surroundings and the place are generally inviting and attractive. These activities are especially sensitive to quality. They only occur when quality is high. A good city is characterized by a multitude of optional activities. People come to town, find places attractive and stay for a longer time. A great, attractive city can always be recognized by the fact that many people choose to spend time in its public spaces (Gehl, 1996).

3. Social Activities

These activities occur whenever people move about in the same spaces. Watching, listening, and interacting with other people, passive and active participation. A good city offers a wide range of necessary as well as attractive optional activities, and because many people use the city, there are many people to meet, watch and speak to. The city becomes a lively and wonderful city (Gehl, 1996).

A sense of place is achieved when Urban Quality is high. "Urban Quality is the overall key term for the understanding of how the relationship between cities and people works". They go on to describe a number of issues which bear an impact on the Urban Quality of the area. Those being as follows:

- **Traffic.**

A very dominant factor. If there is too much traffic, the environment deteriorates due to noise and fumes, the space for pedestrians is limited, more accidents happen and there is increased fear for pedestrians (Gehl, 1996).

- **Security.**

Lack of city centre residents and 24 hour activities create a deserted city at night, where people avoid coming. This creates a downward spiral(Gehl, 1996).

- **Walking.**

Poor walking conditions prevent pleasure walks and make the city difficult to get around, especially for pedestrians with special needs (e.g. children, the elderly). A lack of visibility, signage, many under- and overpasses and inconsistent street layout adds to discomfort, disorientation and general confusion(Gehl, 1996).

- **Staying**

City life is more than walking. When possibilities for resting at conveniently-located and inviting sitting areas are not present, the public realm turns into a transit zone where only walking takes place. The city environment is poorer, people with special needs stay away and possibilities for enjoying the city are greatly reduced. It is important for the ambience that people are invited to spend time in the city (Gehl, 1996).

- **Seeing, talking, hearing**

Seeing, hearing and talking are part of social interaction. When talking and hearing is made impossible by a noisy environment, people will give up even trying to communicate, thus eliminating another aspect of the joy of life. Enjoying nice views and vistas when staying and walking in the city is part of the city experience and reduces the perception of time used for the journey(Gehl, 1996).

- **Activities & Interaction**

Other city activities ought to be considered, such as skating and jogging, activities for special age groups as well as day and night, summer and winter activities(Gehl, 1996).

- **Climate**

Being able to enjoy the sun in all parts of the year is a most important part of the northern European living. Shaded, windy places are deserted places (Gehl, 1996).

- **Aesthetic quality**

The aesthetic qualities are part of our perception of city quality. What we touch and what we look at close by and in the distance from the urban experience. Garbage, bad maintenance, poor quality street furniture and poor lighting tell a story about a city not being carefully looked after(Gehl, 1996).

As addressed in the previous section through the understanding of the informal sector it is evident that urban public space within the developing third world carries a multitude of different needs and qualities. Brown (2006) argues that urban public space, more specifically within developing countries, carries importance and is the 'key element' in the livelihoods of the urban poor. A part of the research examines physical and social space whereby social space is defined as "the spatial implications of social institutions, where space is determined by its function and the social institutions that create it" (Brown, 2006: 20).

"Some space forms part of the civic domain-streets, plazas and piazzas that define the city image. Other space is edge space, undefined in city planning-the street corner, the bus station, vacant land, space under a flyover, the veranda of a house, rough land by the roadside, or even the beach" (Brown,2006:3).

"Although urban public space is a common property resource, it is not static, but a shifting resource whose boundaries may change quickly over time as a result of social negotiation, and which may be experienced very differently by different social, ethnic or gender groups" (Brown, 2006: 22).

Brown (2006) writes of the social boundaries that define public space that affect the socially marginalized (being grouped into similar categories) as the following: Culture, politics and economics; Control, contest and exclusion; Rights and ownership.

1. Culture, Politics and Economics

Brown writes of how Public urban space has an impact on the culture of a place, drawing on the issue of exclusion through the catering for one social class or demographic within one space. It is further argued that culture of a place is reflective of the people using the space and further stated that by responding to the following guidelines an architecture that is inclusive of culture can be created. These guidelines are that architecture must be responsive, democratic and meaningful in order to foster a culture within a space (Brown, 2006: 22-23).

- Responsive- be designed and managed to serve the needs of users
- Democratic- protect the rights of all user groups
- Meaningful- making connections between the place and public life

It is concluded that there is a vital link between urban design and culture, as both have to deal with constant societal changes (Brown, 2006).

When dealing with a politically correct urban public space it is emphasized that there is the inclusion of civic space. "Civic spaces are essentially free spaces , where people can rally for unorganized political exchange" (Brown, 2006: 24). The importance of such space bears relevance when understanding the struggles of the marginalized poor.

"Urban public space has an indirect role in supporting the economic and social aspirations of dominant business elites" (Brown, 2006: 24). Economically big corporate money has always had preference to the use of urban public space, as cities and government often get more return out of the land through formal economies. Little regard is given to existing users of the space. The economic properties of space deal primarily with livelihoods of the urban poor within the city(Brown, 2006).

It has been discovered through empirical research undertaken by Dewar& Watson (1990) that markets operate best around concentrations of pedestrian activity. Other opinions state that commercial centres, public transport nodes and areas which experience high flows of pedestrian

traffic serve the function of a market very well (Brown, 2006: 24). Alexander shares a very similar idea whereby he believes that transport nodes should form the centre of public life creating gateways from place to place (Alexander, 1977: 451-453).

Through the above findings it is clear that Urban Public Space is of high value to the urban poor. Several issues arise as a result. Trading spaces carry value that represents the opportunities and livelihoods of

2. Control, Contest and Exclusion

Design of public space can be used for both inclusion and exclusion of different social groups. Brown (2006) explains through the findings of Cho (2002) that the lack of Civic Space within public urban space can lead to exclusion and conflict, of which an example of South Korea is used whereby the lack of civic space resulted in conflict between state and society resulting in the 1986 June uprising.

Factors of importance when dealing with the aspect of exclusion are, Ethnicity, Gender (important within the realm of street trade in South Africa), Age, Religion, Citizenship (how one creates a sense of permanence for its users) and income (Brown, 2006 : 26-46).

3. Rights and Ownership

When dealing with the issue of rights and ownership it can be broken down further into the following categories; access and use rights, property rights and human rights (Brown, 2006: 31-35).

Primarily all of the above deal with the issue of citizenship and being able to give a person the right to ownership of a life within the city.

Access rights deal with how people are able to access space. Space is either public or private by nature and a middle ground is not common. Street trading sits within this middle ground as a private function sitting within the public realm (Brown, 2006: 31). Property rights deal with an existential need whereby it caters for the most basic of needs in order to trade, "land is a commodity that no-one can do without" (Brown, 2006: 32). The idea of human rights is best described by the definition provided by the UN habitat, " Everyone has the right to work, to free

choice of employment, to just and favorable conditions of work and to protection against unemployment" (Article 23, UN, 1948).

- rights to work- if a right to work is established traders cannot be moved unless another appropriate trading location is found.
- rights to decent work- rights to infrastructure providing for basic needs
- usufruct rights- rights to use a specific location for trading; these may be occasional, daily, for longer periods, or permanent, and may apply to a particular site or to a trading locality
- transfer rights- rights to lend, transfer or bequeath a site to another user
- sub-letting - rights to sub-let a site for profit while retaining overall use rights
- management rights- rights to be involved in decisions over areas to which a trader has

CONCLUSION

The aim of this chapter was to gain a better understanding of the social implications involved with the design of urban public space. An approach of understanding the social implications from a general perspective has been taken to start with, as those social dimensions exist everywhere within the world. Further as the scope of the intended building exists within the developing third world, more specifically within the informal sector a brief background of the informal sector has been outlined. Several important issues with regards to social implications within the informal sector have also been outlined.

The importance of this chapter will bear significance within the case studies as these social implications are generally good at testing the effectiveness of the structure of the built environment (outlined in chapter 2) in supporting the needs of its users and establishing an idea of a meaning of architecture.

Therefore a method of interpretation of the case studies will involve an application of key points from both chapter 2 and chapter 3

CHAPTER 4: CASE STUDIES

The aim of this chapter is to test the relevance of the concepts and theories explored within chapters 2 and 3 within the dissertation through a means of critical analysis and observation ultimately testing the hypothesis laid out in chapter 1 stating that, *through understanding the parameters involved in urban public space within a context of a developing country, meaningful architecture which bears a positive impact not only on its direct users but also on its surrounding urban context can be created.*

INTRODUCTION

4.1 BRIEF HISTORY OF STREET TRADE IN DURBAN, SOUTH AFRICA

Trading within Durban was originally centered around the Indian community, 300 migrant arrived in South Africa in 1860 as indentured labourers in what was then the Natal Colony (Dobson, 2009 : 43).

The Grey street area saw the Indian business flourish through an immigrant, Aboobaker Jhaveri, he that established business in the area and later opened up a bazaar. He then carried on to set up a mosque in the Warwick Junction Area, it was through the creation of an Indian community that encouraged Indian people to take up residence in the area and to set up small formal trading and service businesses (Dobson, 2009: 43).

Street trading within Durban has always for the most part been seen under a negative light. Post 1930 saw street traders being harassed by government. The driving force behind the difficulties street traders were facing was that of the Apartheid legislation, most significant was the introduction of the Group Areas Act of 1950 and the Blacks Consolidation Act of 1945 of which restricted blacks access to viable trading spaces and opportunities . This was soon followed up by the Durban City Street trading by-laws of 1962 which prohibited street trading within the city. In 1973 the Natal Ordinance was introduced which implemented 'move on' laws to trading which allowed trading to occur but traders were only allowed to occupy one spot for a 15 minute period and then had to move on to another spot at least 25 metres away and were not allowed to trade within the same space they had already traded that day. All of this however only worsened over the next decade and it was said by Rogerson and Hart (1989:32) that South African urban

authorities had developed the most "sophisticated sets of anti street trader measures anywhere in the developing world" (Skinner, 2007: 1-8).

Only once there was change in the local government in the early 1980's with the election of the Progressive Federal Party did the brutality on traders/ hawkers ease up. In 1985 saw the introduction of a hawkers license which legally allowed informal trading to take place. Influx control laws were the next to fall to the whey side in 1986. The early 1990's saw a complete change in mindset towards trading/ hawking as even the 'move-on' laws were abolished and it was considered an offense to enforce them. This saw an influx of informal activity right throughout South Africa and as a result local authorities struggled to control the activities. This saw regulation come back into place with the Amended business Act (1993). Restricted zones were outlined within the city and trading spaces were allocated to traders. All of the restrictions implemented dealt primarily with the general safety of the users and general public with emphasis on passing vehicular traffic(Skinner, 2007: 9-10).

The next hurdle was that of health. Health and sanitation had up until the mid 1990's spiraled out of control. In 1994 Durban's City Health Department started a health training programme for food traders. These were the signs of a more co-operative government and by this time it became evident that the city was very much on-board with the traders, whereby a sense of permanence started to sink in(Skinner, 2007: 9-10).

The next big step forward came with the introduction of the Warwick Junction Project, of which will be discussed in further detail taking shape as the first Case Study. It is widely known as a good example of incorporating street traders into an existing urban fabric(Skinner, 2007: 9-10).



Fig 28: Durban Indian squatters market, 1935

Fig 29:Awaiting the opening of the market, 1935

4.2 LOCATION OF STUDY

The area of Study is located within the confines of the eThekweni (Durban), highlighted in Fig.30 , district of Kwa-Zulu Natal, South Africa. The two areas of study are the Warwick Junction Precinct and the Verulam traders market.



Fig 30: MacroLocation of Study



Fig 31: MacroLocation of Case Studies

THE TWO CASE STUDIES

The two case studies have been chosen for similar but differing reasons, first and foremost they both deal with a specific portion of the demographic within South Africa, whereby the day to day users are street traders within the Durban region. However each have taken a different approach in accommodating the traders. The Warwick Junction precinct has over time adapted and grown into a somewhat complex network accommodating various types of trade in various ways. The architect has taken on the role of the facilitator rather than the implementor. There has been a very sensitive approach in the accommodation of the traders and of which one may assume at this point bears a true representation of Street Trade within the developing third world. The second case study is that of the Verulam Market located in Verulam, Kwa-Zulu Natal. The reason for choosing this is as previously stated, is that it caters for a similar demographic to that of the Warwick junction precinct. The difference is that the market design has been a direct implementation by the city having used formalised planning principles. There is also a lot to be learnt in respect to the concept of dwelling as the building has been in use for the past 24 years and the test will be whether the building has had a lasting effect on its users or not. One should also bear in mind that during the time of the design of the Verulam market most of the theories discussed in chapter two were well known and more than likely highly influential in the design of most public buildings of the time. Bearing in mind that the concepts and theories in chapter two are said to be of a first world standpoint viewing the Verulam in such a light should give one a fair representation of what outcomes to expect when designing from a first world perspective.

In order to understand the true meaning through interpretation of the selected case studies one must, as hermeneutics dictates, obtain an understanding of the context of where the buildings sit. The concepts and theories within chapter 2 and chapter 3 have all branched off of a hermeneutical influence and will therefore provide for a means to analyse the selected case studies.

The way in which the selected case studies will be analysed is through categorising various elements involved in the bigger picture, namely the physical structure of the environment, the relationship the interior of the building has with the physical structure of the environment, and the character of the environment.

Since it has already been established that to understand an architectural character a general social understanding must be obtained. Therefore an understanding of the various cultures within the city are imperative in determining whether or not the two case studies respond to the various social issues that have arisen over time.

CULTURAL BACKGROUND

The city of Durban is of the second largest city within South Africa having according to Lund (2000: 4) a population of 2 360 000.

Historically in the twentieth century Durban has been immersed with the toils of segregation resulting in a history about the contesting of space. The city had always been primarily reserved for the use of white people with black people being pushed out towards the peripheries, this allowed for better opportunities for the white people as prime work and education opportunities lay closer to the city (there was more resources available). It was only until the 1980's where a desegregating of the city began allowing migrants to enter certain parts of the city. The 1990's saw the deracialising of the city of which presents to us the Durban of today (Maharaj, 2002 :171-189).

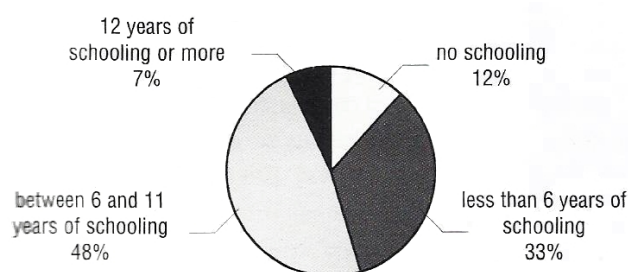
Lund (2000: 5) further outlines some figures and issues which help one to understand the background of the demographics of South Africa and how they may be applicable to street trade in South Africa:

- Black people are poorest: 77% of the population are black and 60% of black people are classified as poor. Whites make up 11% of the population, with only 1% classified poor.
- Women are poorer than men. They are concentrated in rural areas where there is more poverty, and unemployment rates are much higher for women than for men.
- There are more women than men in rural agricultural work, in casual employment, in informal activities and in low wage work for government.
- Millions of poor people also live in informal settlements near or in cities where life is hazardous, services are poor, and environment controls are few.

- Women do most of the unpaid labour. This especially rural and peri-urban women who do not have access to services and who have to spend a great deal of time collecting water and fuel.
- Three children in every five live in poor households and are vulnerable to violence of many kinds.
- there are clear regional differences in inequality, with the areas of the country which were earmarked for black separate development having very high rates of poverty
- Typical street traders are poor and black and women, so have been disadvantaged on all three counts throughout points in their lives.

"Surveys show that most street traders are between the ages of 25 and 49. There are more younger men and more older women. So men seem to start trading younger and leave, while women seem to start later, possibly because of child bearing and rearing" (Lund, 2000: 12).

Education of street traders in South Africa is a major problem, as most of the street traders are older they in most cases suffer the fate of the apartheid education systems and as a consequence received very poor educations (Lund, 2000: 12).



(Source: Sandhya James, 1998. The Self Employed Women's Union: 1997 membership survey. Durban. SEWU.)

Fig 32: Education levels of women traders

ENVIRONMENTAL FACTORS

In order to assess both the case studies in terms of their relationships between inside and outside, as stipulated by Heidegger (1977), Norberg-Schulz (1971) and Thiis-Evensen (1987). A good understanding of the overall climatic conditions are needed. This will determine if either case has acknowledged the outside or 'heavens' as a means of grounding a sense of dwelling with their physical environments. It will also provide an understanding of how the environment has affected the design of the buildings.

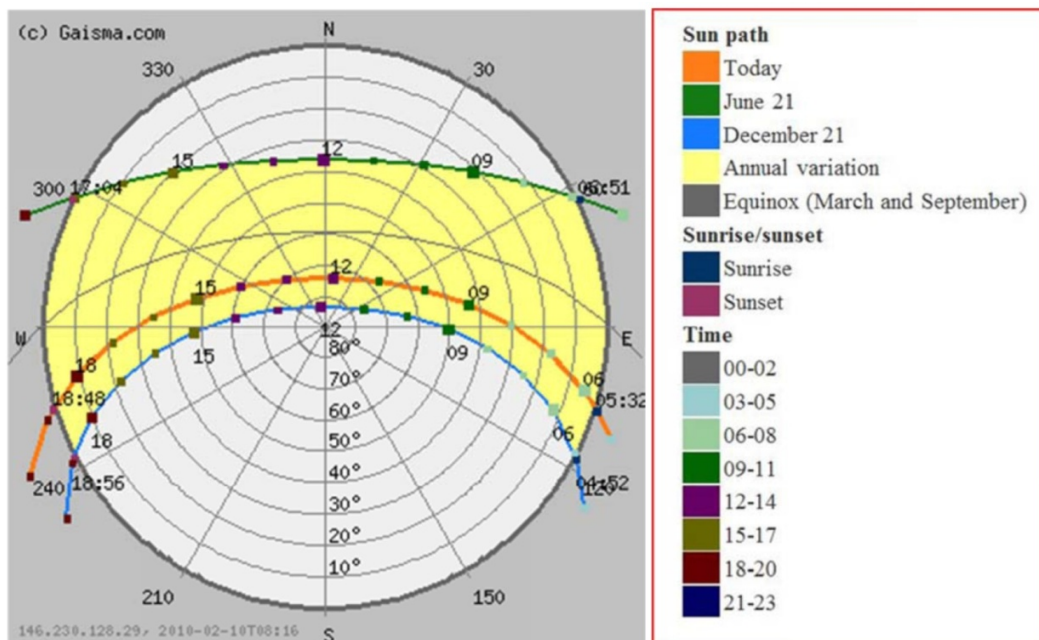


Fig 33: Solar chart for Durban

Durban, South Africa's latitude & longitude are respectively; 29°58'S 30°57'E. It has an average Altitude of 8 m within the CBD. The average temperature in Durban, South Africa is 20.5 °C. The warmest average max/ high temperature is 28 °C in February. The coolest average min/ low temperature is 11 °C in June, July. Durban receives on average 1003 mm of precipitation annually or 84 mm each month. On balance there are 89 days annually on which greater than 0.1 mm of precipitation (rain, sleet, snow or hail) occurs or 7 days on an average month. The month with the driest weather is July when on balance 26 mm of rain, sleet, hail or snow falls across 3

days. The month with the wettest weather is February when on balance 128 mm of rain, sleet, hail or snow falls across 9 days. Mean relative humidity for an average year is recorded as 79.1% and on a monthly basis it ranges from 73% in June, July to 83% in March. There is an average range of hours of sunshine in Durban of between 5.2 hours per day in October and 7.4 hours per day in May. On balance there are 2343 sunshine hours annually and approximately 6.4 sunlight hours for each day. On balance there are 0 days annually registering frost in Durban and in July there are on average 0 days with frost. In general Durban has a very forgiving climate and is warm throughout the year, which is conducive to outdoor living and a relationship with the outdoors. (<http://www.climatetemp.info/south-africa/durban.html>)

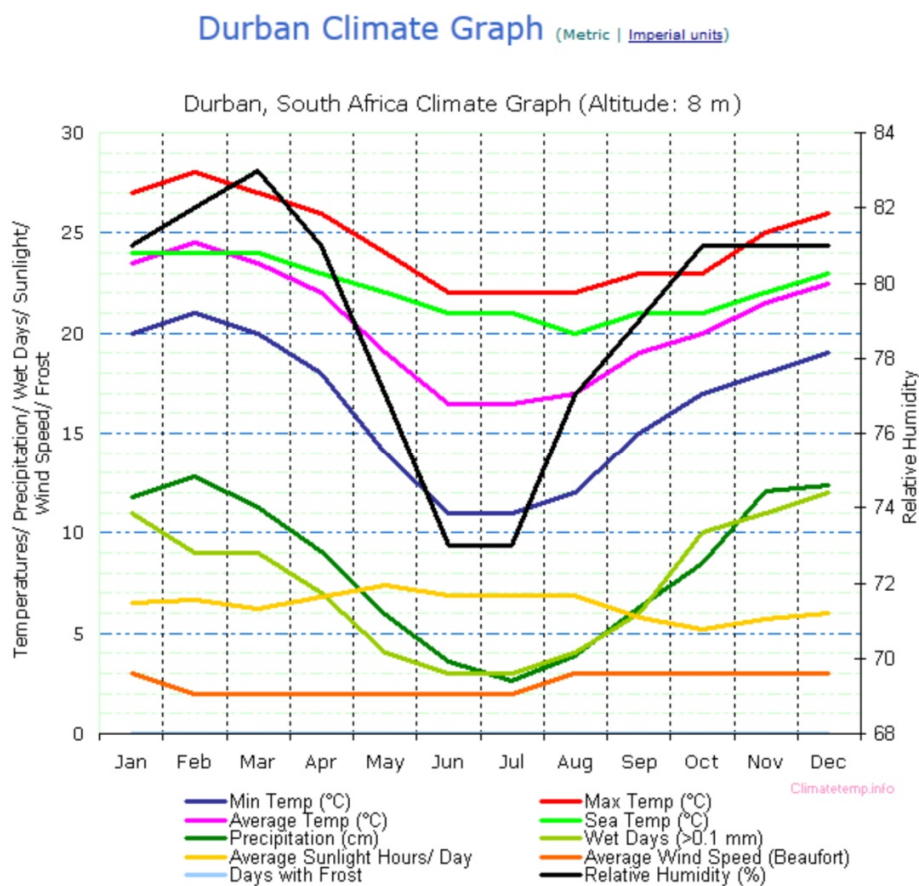


Fig 34: Climate graph for the city of Durban

4.1 WARWICK JUNCTION MARKETS- DURBAN, KWA-ZULU NATAL

4.1.1 INTRODUCTION

Warwick Junction is located within Durban, Kwa-Zulu Natal, South Africa and has come to be primarily a transport hub serving as a connection point from many rural places within the greater Kwa-Zulu Natal region to the City of Durban (Seymour, 2012).

"The Warwick Junction precinct is located on the edge of the inner city and contains a mixture of residential, transport and trading land use. It is one of the oldest racially mixed residential areas in Durban and was the site of important contestation against the Group Areas Act....The Area contains a confluence of rail, taxi and bus transport and is the primary transport node feeding the inner city" (Skinner, 2007: 11).

Some figures provided by Dobson (2009: 5) give one an idea of how Warwick Junction has firmly rooted itself within the city of Durban:

- 460 000 people walk through Warwick Junction every day.
- 300 buses and 1550 mini bus taxis depart from Warwick Junction every day.
- 166 000 public transport passengers use Warwick Junction.
- 38 000 vehicles drive through Warwick Junction each day.
- Between 5000 and 8000 people trade informally here, earning between R1000 and R8000 a month.

Historically the precinct has had to deal with struggles relating to racial discrimination, exclusion and infrastructural neglect (Dobson, 2009: 43).

Due to the vast nature of the precinct a two phased approach shall be taken in analyzing the selected case study. First an understanding of the urban scale and parameters shall be obtained. A brief description of the urban structure of the precinct will bring to light that there are various components within the precinct that exist. It is important to acknowledge that each component cannot exist without the support of the others, this is known through the writings of Kevin Lynch (1960). Therefore a detailed study has been done on the Early Morning Market and how it relates back to its urban network, i.e. a relationship between inside and outside (the notion of Dwelling proposed by Heidegger).

4.1.2 URBAN STRUCTURE



--- edges
--- paths

nodes

A- Berea Train Station B- Early Morning Market C- Taxi Rank
D- Taxi Rank E- Bovine Head Cookers F- English Market
G- Victoria Street Market

Fig 35: Urban Structure of Warwick Junction

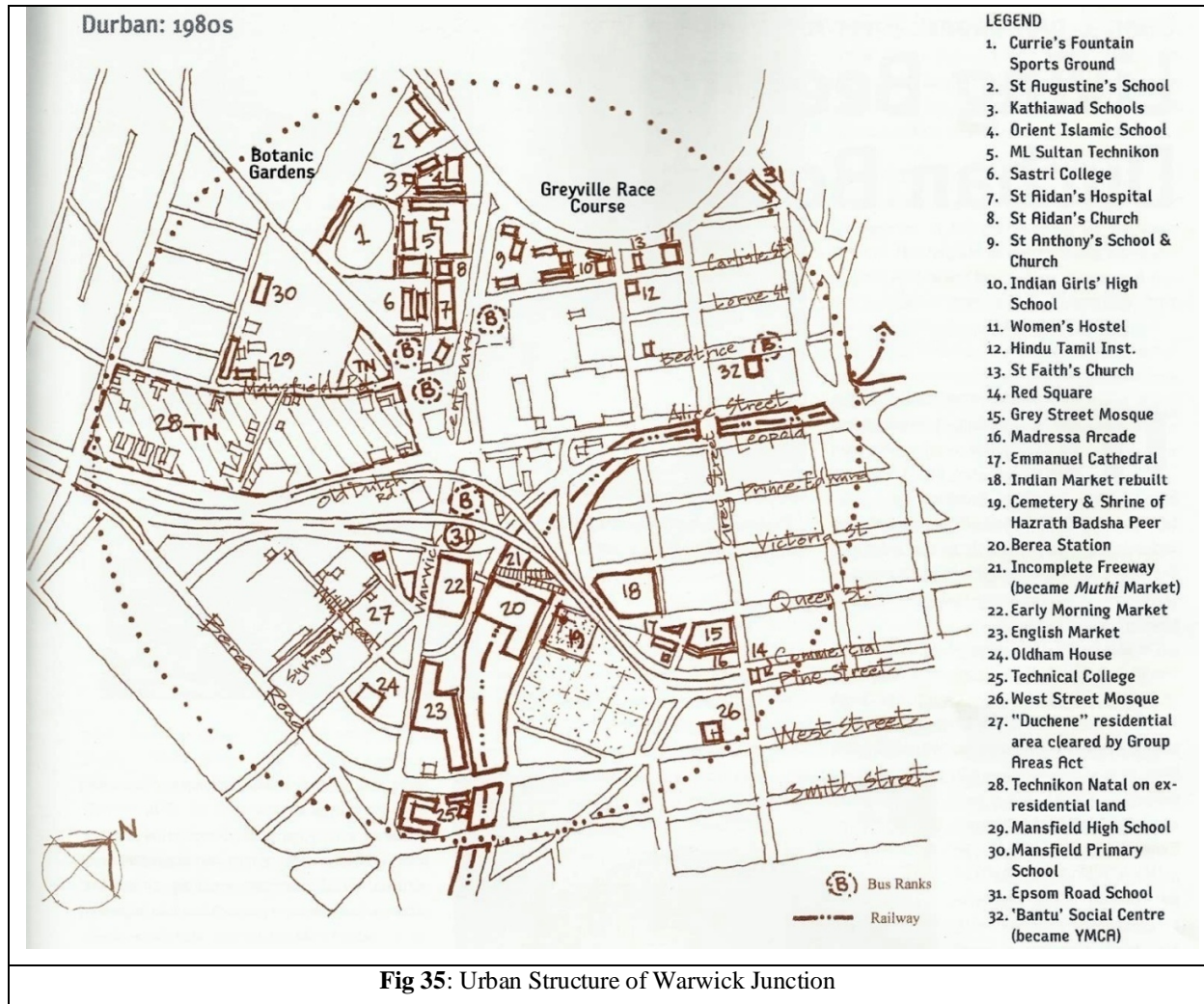
The method of analyzing the 'urban structure' of Warwick undertaken is similar to that of Kevin Lynch (1960), whereby the main elements in which are looked at are the *Edges*, the *Paths*, the *Nodes*, the *Districts* and the *Landmarks*. The three most important ones at this stage in analyzing the creation of urban public space are that of the edges, paths and nodes as they deal primarily with the movement of people. The nodes are what bring activity to the place, hold that activity and finally disperse of it again. The paths assist in moving the people along a set direction and edges further re-enforce the boundaries of where buildings, places, spaces begin and end.

The Structure of Warwick is different to that of a more conventional building typology as it adopts a much more of an widespread urban response whereby it sits within Durban as a set of buildings that respond to one another, tying and weaving itself quite strongly into the urban fabric. There is an almost flawless integration of transport, trade and pedestrian movement as each function (transport, trade, circulation) is either doubled up or exists just off the other.

By taking an approach such as Warwick Junction has it allows for many more connections within the urban fabric to be made. By increasing the number of buildings or nodes within a site it allows for a greater number of connections to be made through its edges, paths and districts.

Further it can be said that the paths, nodes, and edges aid in the creation of districts within the precinct, the different types of markets within the precinct are representative of these said districts.

THE PERCEPTION OF THE SELF WITHIN THE BUILT ENVIRONMENT AND ITS IMPACT ON URBAN
REGENERATION: Towards the design of a food market for the city of Durban



4.1.3 URBAN CHARACTER

Warwick Junction provides for an interesting case of study as within this seemingly unorganized space a large number of activities occur bringing about a rich, diverse and vibrant atmosphere. To the westerner a multitude of social senses are awakened upon arrival to this gateway to the city. Within this space we find the following activities occurring simultaneously: selling of fresh produce through informal street trade on pavements as well as the more 'formalized' early morning market and the bovine head cookers market. We also find the sale of traditional African medicines in the Traditional medicine market. Second hand music cassettes and cd's are found for sale on the music bridge, pinafores and other clothing items can be found in the brook street market, porters run around the vicinity from trader to trader delivering various goods and foreign barbers occupy the pavement offering different styles of haircuts (Dobson, 2009 : 5- 39).



From left to right; Fig 36: Porter in Warwick, Fig 37: Meilie cooker, Fig 38: Herb Seller



From left to right; Fig 39: Pinafores, Fig 40: Traditional medicines , Fig 41: Fresh Produce

4.1.4 EXAMINING THE OUTSIDE ORIENTATION & LEGIBILITY

Landmarks:

Lynch (1960) argues that one requires landmarks within an urban setting to be able to orientate themselves effectively. Several Key buildings surrounding the Warwick precinct have been highlighted as being notable in such regard. It is important to note that a landmark may also be something that is not architectural but may be an object within the world that aids in the orientation for the user. The following have been considered to be some of the main elements within the precinct. A brief description of each is provided in order to give a better understanding on their relationship to the precinct as a whole:

1. The "street queen" mural serves as a key reference point within the Warwick Junction precinct providing passing motorists and pedestrians a point to orientate themselves. The artist Terryanne Stevenson describes the meaning behind the mural, "We chose the image of Nomkhubulwane back in 1994 because we were looking for a unifying subject...we chose this cultural and spiritual symbol...representative of the festival of the rain and an Earth Mother figure..." (Admin, 2011). Fig 42: Street Queen



2. The Muthi-market bridge situated above as a link between the Victoria market and the Early morning market. It is representative to the people of Warwick as a symbol of permanence as it was one of the first initiatives in cleaning up Warwick during the 1990's (Dobson, 2009).



Fig 43: Muthi-market bridge

3. The Victoria street market is the oldest market situated within Durban and serves as the only portion of Warwick to be situated on the CBD side of the train tracks. (F in Fig 35). Visually it is prominent in having an architectural style very different to its surrounding counterparts.

Fig 44: Victoria Street Market



4. The early morning market serves as a key Landmark within the Warwick Junction precinct. Its green colored roof dominates the landscape (B in Fig 35). It sits prominently on a corner site serving to several links throughout the precinct.



Fig 45: Early Morning Market

5. The Berea train Station serves as a very functional landmark within the Warwick precinct. The Berea station at first glance is very heavy and monolithic but does very well in setting a backdrop for activity to happen as it does read very simply. It can be considered as one of the elements of permanence within the Warwick precinct.



Fig 46: Berea Station

6. The taxi ranks within the Warwick precinct also serve as dominant landmarks as they are in most cases the first and last things people see when entering or exiting the precinct.



Fig 47: Taxi Ranks

Paths and Nodes:

The paths within Warwick have become quite an interesting study in their own light as they are in fact the main structuring elements of the life of the precinct. Paths have the ability to take on several different forms, functions and characters. First and foremost if one looks back at FIG 35, there have been several nodes highlighted with regards to this study. The nodes act as beginning and ending points for the paths. It must be acknowledged that neither one can exist without the other and that is the reason for which they will be looked at together. Several of the nodes being the Landmarks previously discussed. The difference between a node and landmark in this regard is that a landmark is used for visual reference and a node is something that draws people to a certain point.

If one considers the node of Berea Station (A in fig 35), it sits on a path (the railway line) that acts as a connecting element to the greater Durban area (mostly rural). It also acts as a common ground between either side of the train tracks. In this respect it serves as an element that connects several districts and as a result a large influx of people are brought into this precinct daily. One may also make reference to the station as acting as playing an important role as a portal from rural to urban.

The next major path is the path (road) that connects the CBD to the Berea (Fig 48+ Fig 49). This path consists of both Bertha Mkhize street, on the CBD side and Cannongate Road on the side of the Berea. A pedestrian path has arisen out of the need for this connection in the form of an unused flyover. As a result the Traditional medicine market has come to life. The traders have taken advantage of the high volume of pedestrian traffic and trading occurs everywhere, from the floor to on staircases.

The next major path is that of Julius Nyerere Street as it links several nodes along it, namely if referring to Fig 35. nodes, C, B, E and D. This is arguably the main road through Warwick Junction as most of the taxi's and busses pass along this road, dropping off and picking up passengers. As a result this path sees a lot of informal trade activity, (Fig 51), as well as small business ventures in the surrounding buildings opening up onto the street frontage. Advantages of this is that there are always eyes on the street which helps with general safety.

The paths are important from a developing third world perspective whereby they are the most valuable and sought after of the trading spaces. They also serve as the spaces in which people such as porters (Fig 36) make their money.



From left to right; Fig 48: Path through muthi market into the CBD, Fig 49: Path through Muthi market into the berea, Fig 50 Path through Berea Station

Edges:

Edges according to Lynch (1960) are elements which define the boundaries of places. Both Norberg-Schulz (1976) and Heidegger (1971) examine the boundaries as being areas of transition between the inside and outside worlds. The edges are important as they are in most cases what the user first encounters upon arrival to a place. Within Warwick Junction the edges (along with all of the other spatial elements) are not as defined as easily as opposed to a more conventional development, building. This is due to how the Warwick Junction precinct has been divided up into several nodes of buildings. Each building or node has its own set of edges which respond to entirely different contexts. The edges are in most parts related to the relationship of the nodes to the paths and vice-versa. As a result the edges are often found along paths of predominant pedestrian movement and have developed as viable economic opportunities.

As seen in Fig 50, Fig 51, Fig 52 and Fig 53 each edge has developed a different character in its own right, this is due to different influences such as types of movement along the edges, pedestrian movement where pavements are wide enough to cater for higher volumes of pedestrian flow (Fig 51) seem to generate more stall based trade. Edges which are dominated by a flow of vehicular traffic tend to become pick-up and drop-off points to the precinct. One must also acknowledge that there are internalized edges along paths, such as the paths through the

traditional medicine market (Fig 48+ Fig 49) or through the Berea Station (Fig 50). All of these factors determine whether or not the edge is an active edge.



From left to right; Fig 51: Edge of Early morning market onto Julius Nyerere Street. Fig 52: taxi rank edge on market street.



From left to right; Fig 53: Foreign barbers, Fig 54: Berea road edge

4.1.5 EXAMINING THE INTERIOR

For the purpose of examining the inside, focus has been given on that of the early morning market and of how it relates to the rest of the framework of Warwick Junction, of which has already been outlined.

The Early Morning Market currently located at 100 Warwick Avenue was established in 1933, its trading hours are 6am-3pm, Monday to Thursday and from 6am-6pm on Fridays as well as 6am-2pm on Saturdays (durban.gov.za, 2012: Retail Markets).

There are currently 676 tables to trade off of for fruits and vegetable, 14 kiosks and, 54 pans inside and outside of the building. The demographic of traders is made up of a total of 300 permanent traders with 90% being Indian and 10% being African. Items Sold are fruits and vegetables supplied from the Durban Market (durban.gov.za, 2012: Retail Markets).

4.1.4.2 The walls

Essentially the Early Morning Market functions as a big shed. If one examines the walls in the way of which Heidegger (1977), Norberg-Schulz (1971) or Thiis-Evensen (1987) suggest one interpret the interior, the first step is to examine the wall in terms of openings. Openings in the walls are very limited as there are no windows and openings are limited to that of the doors. This treatment has resulted in a rather dark interior not conducive to dwelling. As a response traders prefer to trade on the outside edge of the Early morning market as "living conditions" are better and there are more people passing by and they are less isolated on the outside. The entrance into the early morning market is limited to two entrance points, as a consequence it is found that an internal path has developed between the two whereby trade inside of the market predominantly takes place along that path. The result of this is that there are pockets of used space within the early morning market building. The exterior walls are almost somewhat meaningless as the interior is disguised and hidden from the exterior world limiting the amount of trade happening inside the market building, all to the traders detriment.

4.1.4.3 The Floor

There is no change in level of the floor from inside to outside as the intention is for the outside to flow into the inside, and vice-versa, with relative ease. Floor texture remains the same as well giving the impression that the market is part of the bigger whole. This is however let down by the other two elements (the walls and the roof) failure to connect with the outside in an appropriate way.

Internally the floor has been further divided whereby the trading stalls are all raised on plinths distinguishing circulation space from trading space. Floor texture and finish are once again kept the same so as to unite each other to a bigger whole.



From left to right; Fig 55: Relationship of trading stall to floor, Fig 56: Floor finish including drainage

4.1.4.1 The Roof

The roof of the Early Morning Market could at first be described as shed like, it provides a scale and proportion of the height that is relative to the overall dimensions of the Market. Something that does seem to be a problem with the roof is its limited ability to let natural light inside. This is not to say that the connection with the exterior is poor, as the roof is of the only element to make an attempt to connect to the exterior. The gables have been punctured, as seen in Fig 57, and the roof is not one fixed plate but instead arranged as a set of overlapping plates, as seen in Fig 58, which allow for ventilation to take place through the roof. Even with these attempts to connect to the exterior it must be noted that the roof is the most dominant elements of the building and ends up making the user experience very internalised.



From left to right; Fig 57: Holes in gable, Fig 58: Interior of roof Fig 59: Verandah Roofing above

4.1.5 CONCLUSIONS

In the authors opinion the Warwick Junction precinct serves as a good model to learn from when viewing a notion of how the urban structure can be supportive in the existence of a market and vice versa. First and foremost the market sits within a highly responsive network that does not impose itself on its surrounding urban fabric but rather sensitively integrates itself.

Therefore the market has developed as a node as well as a landmark because of the support that the surrounding structuring elements give it. ie. the path, the node, the landmark, the edge and the district.

The location of the market plays a big role in ensuring the success of it as a economic generator for its users. It sits on a corner site where the two edges are paths to and from large transport nodes ,as well as districts intersect and it can therefore be said that without the presence of these several nodes, activity in the area would not be of the same magnitude and the relevance of the market could be argued as wasted space.

When viewing the Warwick junction precinct from the viewpoint of how transport has an impact on it one must bear in mind that Warwick Junction receives and distributes people from all areas of the Kwa-Zulu Natal area, predominantly from the areas being rural in nature and can be considered as Jahangeer (2008,2012) aptly puts it as a portal to the city. A notion substantiated by the likes of Christopher Alexander (1977) who believes that transport nodes are the centre of public life.

This then dictates that Warwick Junction by nature is a transitional space for most of its users, however as previously discussed there is a level of permanence for those that are trading within the markets inside Warwick. It can therefore be said that the elements discussed in chapter two must be supportive of both the transitional and the permanent for an effective working relationship to take place, of which is evident within Warwick.

Through analysis, the Early Morning market sits within a prime location and is very well supported by the various urban structuring elements, however when examining the connection between inside and outside a link is somewhat lost as there is now a preference towards trading on the outside of the market rather than that of the inside. This is due to limited connections with

the outside once inside of which could be improve with more entrances and structuring trade along movement paths. This would in turn ensure that traders would receive more trade and a possible positive impact on livelihood generation.

The fact that Warwick Junction is so well connected to an abundance of outlying areas around the city as well as to several districts within the city ensures that it is a common place for many and a place that many can identify with . It also provides a platform for the many marginalised within the city to develop from and be proud of, being truly representative of the democratic age South Africa now lives in. For these reasons in the authors opinion Warwick Junction has a positive meaning not only to its direct users but to the city on a whole.

4.2 VERULAM TRADERS MARKET

4.2.1 INTRODUCTION

The town of Verulam is situated about 25 kilometers north of Durban. It was founded in 1850 by English settlers and over the years developed as a settlement for Indians. In 1964 Verulam was declared an Indian Town under the Group areas act and in 1967 full control of the town was given to the Indian town board (Unknown, 1989).

The Verulam Market is very different to that of the Warwick Junction counterpart as it is a formalized market. The current market is situated at 151 Wick Street, Verulam, Kwa-Zulu Natal, South Africa. The original market was established in 1884 in Market Square, a permanent structure was built on that same location in 1912 and then the market was relocated to its current location in 1988 (durban.gov.za, 2012: Retail Markets).

When selecting the site for the current market the council listed the following as criteria that had to be fulfilled: The site had to have good road access, there had to be space for off-street parking for a large number of vehicles, There had to be space for good loading and off loading facilities, A good relationship with the central business area so as to reinforce its public drawing power and, it had to be close to a transport terminal for ease of access for commuters (Unknown, 1989).

The accommodation of the market was divided into two parts- The day market, for permanent stall holders comprising of 14 stalls consisting of butchers, fishmongers, grocers, condiment

stalls, tea rooms and 21 stands catering for the sale of fresh produce. However today this is not the case. Only a handful of stalls remain with the tea-rooms remaining open on a daily basis. The second part of the market is that of the Morning market (originally referred to as the farmers market). This portion caters for 498 stalls/ tables, 6 flower stalls and 16 poultry stands. The demographic of traders/stall owners within the day market is 100% Indian and the morning market consists of 90% Indian and 10% African. There is a variety of goods sold from both markets at any given time (durban.gov.za, 2012: Retail Markets).

The function of the day market over time has been cut down in size as only one half of a floor is dedicated to that of trade, the rest of the building has been taken up by the use of the local municipal council. This has further strengthened a sense of community within the development.

4.2.2 URBANSTRUCTURE



Fig 60: Urban Structure of Verulam Town Centre

The Verulam Market takes on a very different role within its urban setting when compared to its Warwick counterpart. There are several factors which dictate this. First and foremost there is no transport node attached directly to it. The main transport node is found moments down the road, this consequently does not ensure a steady flow through the market. The market therefore mainly relies on people going into the area to specifically visit it. The results of this are evident in that the market is only open during selected days per each week.



Fig 61: Verulam Transport Terminal

One can argue that the location of the market plays a big role in determining how much this building is likely to get used. First and foremost one can analyze the urban setting in terms of densities that surround it. Where the Warwick Junction precinct has a large density of the CBD as well as the surrounding suburbs to draw most of its activity from, the market in Verulam is limited as it is somewhat enclosed by its primary paths with only a few secondary paths reaching out into the surrounding suburban areas. The arrangement of such structured paths also break, of what can be described as a cul-de-sac type of setting, down the urban setting further into smaller districts within the Verulam centre. If one refers back to Fig 60, one can see that the market then sits within a district that carries a significantly lower density to the surrounding districts. The most important elements within this setting are therefore the paths, as they are the elements solely responsible for facilitating the movement of the masses to the site. The details of the paths will be discussed further on in this chapter.

4.2.2 URBAN CHARACTER

Due to the nature of the market being quite internalized and formalized it makes for an interesting study in determining whether or not such an implementation either adds or subtracts to the greater urban character. For the most part the character of the precinct is made up of the surrounding smaller enterprises relating directly to the street. Wicks street has over time developed as the commercial centre of Verulam, with the prominence of banks, hardware shops and many other small cafe/ tea-room type shops being present as one can see in Fig 62 and Fig 63. As previously mentioned the density of development surrounding the Market ranges from a low to medium density and not many buildings exceed a height of one to two storeys.



Fig 62: Shop frontage onto Wicks street 1



Fig 63: Shop frontage onto Wicks street 2

4.2.3 EXAMINING THE OUTSIDE

The approach taken in understanding the physical boundaries of the Verulam Market is different to that of Warwick Junction because the Verulam Market sits within its context as a building housing the market as opposed to several buildings being linked by the trade and retail. For that reason an approach has been taken to rather determine if the building uses certain elements to tie itself into the urban structure effectively.

ORIENTATION AND LEGIBILITY

The building even though it is somewhat plain looking and quite brutalist with its finishes does carry a few qualities that are worth noting that set it apart from the rest of its urban environment. Primarily the building sits within its context as a landmark, it achieves this in several ways. If one starts off at Wicks Street the building has been set back from the roadside in order to create a visual difference where if one looks at Fig 62 and Fig 63 one will see that the rest of the surrounding buildings communicate directly onto the street. The Market presents itself as much more insular. The clock tower gives the building a sense of prominence creating a path towards the entrance of the day market.



Fig 64: View of market from Wicks Street

The back of the market along Ireland street takes much the same approach, however it is set back to provide for parking. A smaller imitation of the clock tower is found in an attempt for a consistent language through the building to exist.



Fig 65: View of market from Ireland Street



Fig 66: View of market down Ireland Street

On the whole, the way in which the exterior of the building is presented would suggest that it is not a public building but rather something of a more industrial function. There are limited openings within the walls to give the passer by an indication of the on goings within the walls.

4.2.4 EXAMINING THE INSIDE

The inside of the market will be discussed in two parts. Zone 1 for the day market and Zone 2 for the morning market. The reason for this is essentially they are two separate buildings and operate at different times.

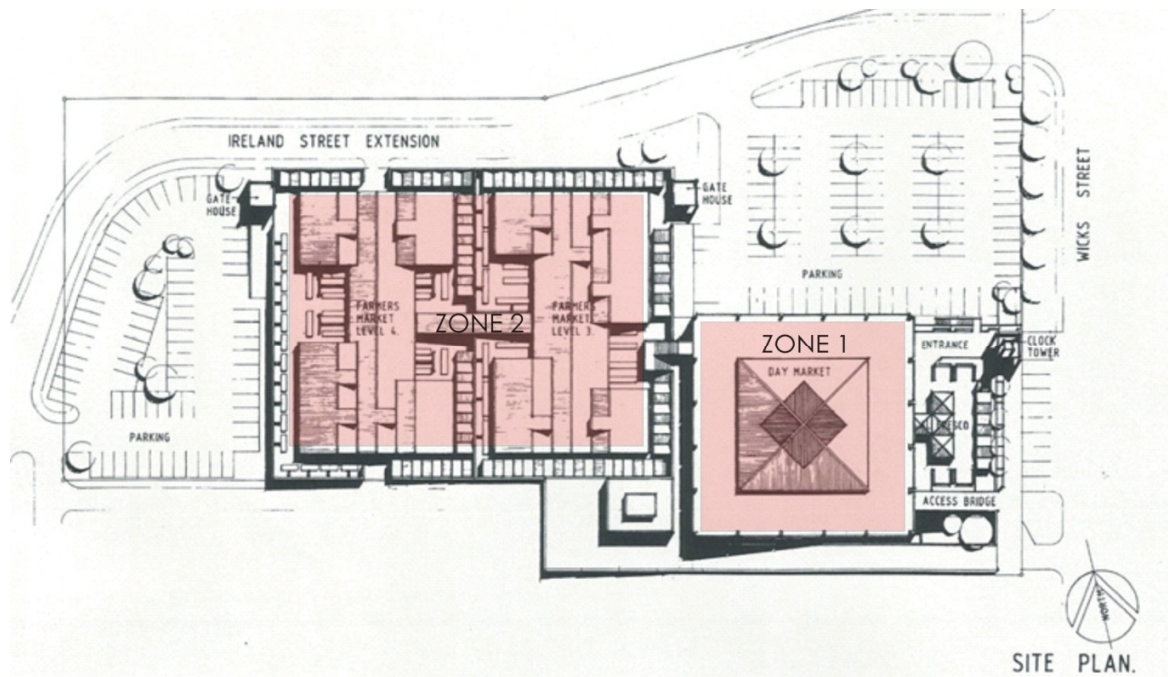
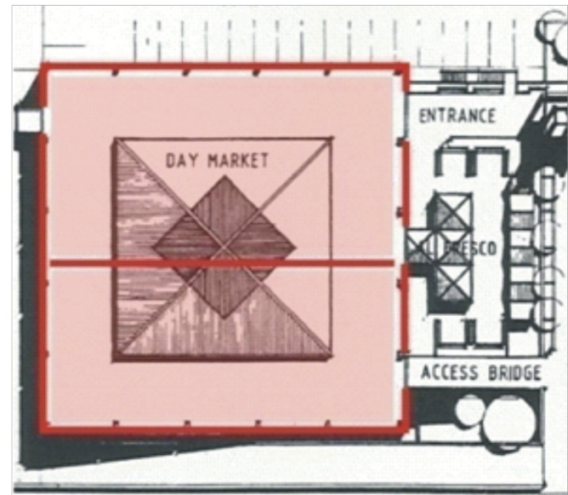
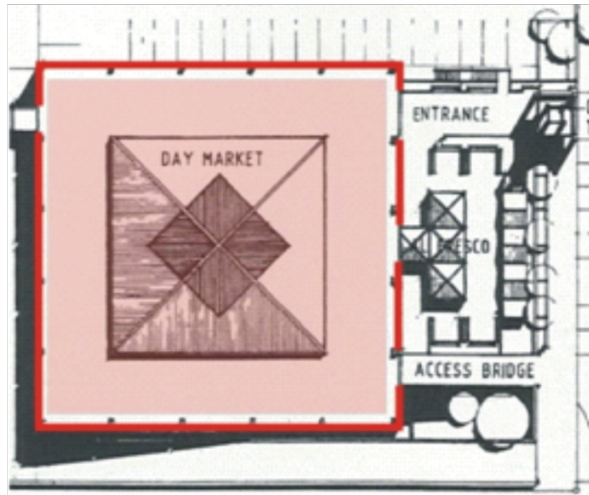


Fig 67: Two Zones of development

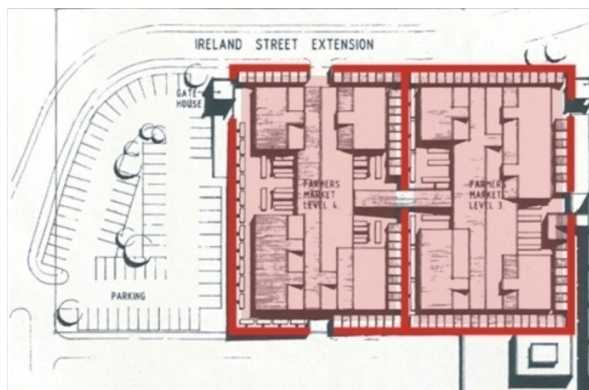
4.2.4.2 The walls

Essentially the Day Market functions as a big room. If one examines the walls in the way of which Heidegger (1977), Norberg-Schulz (1971) or Thiis-Evensen (1987) suggest one interpret the interior, the first step is examine the wall in terms of openings. Openings in the walls are very limited as the windows have been in the most part blocked by hanging goods and as a result the circulation paths do not receive a great deal of natural light. Openings become limited to that of the doors. This treatment has resulted in a rather dark interior not conducive to dwelling. The interior thus requires a great deal of artificial light. A combination of the traders inside of the day market having little connection to the outside and being set back so results in an underutilized

interior. As a result there has been a dramatic downsize in the size of the day market, as Fig 68 and Fig 69 demonstrate. Much like the Early morning market within Warwick Junction entrance is limited to two entrance points and as a result an internal path has developed between the two and trade inside of the market predominantly takes place along that path. The exterior walls are almost somewhat meaningless as the interior is disguised and hidden from the exterior world.



From left to right: Fig 68: Intended use of Day Market **Fig 69:** Day market today



From left to right: Fig 70: Morning Market Walls **Fig 71:** Inside the Day Market

Essentially the Morning Market functions as a big shed. Openings in the walls are very limited as there are no windows and openings are limited to that of vertical slits within the brickwork (Fig 72). This treatment has made an attempt to create a relationship with the outside from the inside. The morning market is divided into two levels, the upper and the lower portions of the Morning

market. The upper section is almost fully enclosed excepting for the junctions between the wall and the roof, the lower market is almost fully open with the walls only serving as spatial dividers between inside and outside. Entrance is limited to two entrances per each part of the market with one entrance being common between the two taking the form of a wide ramp, on which people are not permitted to trade. The placement of the entrances forces the user to meander around the market within set boundaries.



Fig 72: Wall Openings

4.2.4.3 The Floor

There are three changes in level of the floor from first entering the day market to proceeding down towards the lower Morning market. The change in level creates a distinct separation in activity between each area. Floor texture remains the same throughout each section, unifying each section within the greater whole

Internally the floor has been further divided whereby the trading stalls are all raised on plinths distinguishing circulation space from trading space. Floor texture and finish are once again kept the same as to unite each other to the bigger whole (Fig 73). Internal paths are wide enough to accommodate up to 3 people walking side by side.



Fig 73: Lower Farmers market floor

4.2.4.1 The Roof

The roofs of the two zones are entirely different as the initial intention was to cater for different types of trade to occur within each zone. The day market was intended to be more permanent and if one refers to Fig 71, one sees elements such as concrete waffle slabs being utilised as the ceiling. The Morning Market could at first be described as shed like, it provides a scale and proportion of the height that is relative to the overall dimensions of the Market. The roof of the Morning market has been sensitive in allowing connections between inside and outside. The roof has been very skillfully lifted and dropped in different places to create gaps for light and ventilation to enter the internal space.



Fig 74: Upper Farmers market roof

4.2.5 CONCLUSIONS

In the authors opinion the Verulam Market serves as a good model to learn from when analyzing an implementation of a market within a third world developing country. The aims and objectives through studying the Verulam Market were to learn and understand what impacts arose through the architect implementing a building to house traders within a selected space.

Through the analysis of the linkages to and from the market it has been deduced that the market is somewhat poorly connected to a bigger framework and has ended up being limited to a few small districts within the town centre. The consequences of this are seen with the market only operating selectively.

The location of the market plays a big role in ensuring the success of it as an economic generator for its users. It sits on a site set back from a main road that is far busier towards the town entrance. As a passing customer it is somewhat of a hassle to enter the building to quickly buy goods when they are on offer for similar prices a stone's throw off the street in the form of several tea-room cafe like shops.

The market has been designed around several "first world principles" whereby there has been a lack of sensitivity towards the design of a market. It has failed to truly cater for the needs of the traders and one could even go as far to say that the idea of it truly being a public building falls short as it ultimately sits as an island disconnected amongst a hive of activity.

As a result the market is primarily used on Saturday mornings for a family outing kind of experience. The interior of the Morning Market is somewhat conducive to this kind of activity.

CHAPTER 5.0 CONCLUSIONS AND RECOMMENDATIONS

To conclude this study one must revisit the definition of the problem which asks, how architecture can be perceived in a common light whereby it acts as a tool to bring people together, enhancing a common meaning or identity, creating a stable working environment for many people within the informal sector and ultimately better lives for generations to come. The authors expected outcomes were that, through understanding the parameters involved in urban public space within a context of a developing country, meaningful architecture which bears a positive impact not only on its direct users but also on its surrounding urban context can be created. This was outlined as the hypothesis for the dissertation and through the exploration of the Primary and secondary questions can be confirmed as correct in the authors opinion.

The main question of the dissertation aimed to respond primarily to the research topic, questioning the ability perception has on architecture. The theory of Hermeneutics provided a platform and a methodology off, which to explore an answer to this question. It must be noted that the process of understanding through hermeneutics was used in order to explore an idea of an overall or universal meaning with the aid of several other connecting theories.

Several of the key questions that aided in the process of testing the hypothesis were involved around issues of interpretation, space and place. These carried significant weighting of importance as they provided for a general or global understanding of the idea of place

One can argue that a sense of place within South Africa and more specifically Durban, because of a past of political struggle, is not present as a whole. It has come to be very fragmented. Due to the state of place that Durban has found itself in it is almost impossible to gain a true reflection through the a sense of place through the methods of interpretation that Norberg-Schulz, Alexander, Lynch, Thiis-Evensen discuss. It was acknowledged that one would have to have a further understanding of various social issues attached to urban public space to gain a true representation. The work of Alison Brown proved to be seminal in the understanding of the social implications of third world public space

The secondary questions dealt with exploring that gap further by dealing with an understanding of meaning, meaning of space and how that meaning could be translated into an architectural meaning.

The case studies set out to provide examples of both aspects of place and space as well as the relationships between the two. The two different case studies served as a comparison to determine the best approach in providing for a relevant meaningful architecture adding to the urban fabric.

It was found that in the case of Warwick Junction there was much to be learnt from an urban perspective as sensitively sits within the urban fabric enriching it and adding to the economic viability of its surroundings. However both buildings examined poor relationships with the outside environments.

Design guidelines and Recommendations:

- The research within the dissertation is relevant towards the design of a public building dealing with urban space as a commodity towards creating better livelihoods. Specifically within the street trading sector.
- Paths need to be considered and are of utmost importance when design for street traders.
- There is a need for a presence of natural light within market venues as goods need to be displayed clearly as well as adding to the buildings relationship with the external world.
- Construction methods must create connections between inside and outside through lightweight structures and openings.
- The market should accommodate for the various social activities to take place, whether they be permanent or transitional. This could be achieved through a mixed use strategy.

Site Selection Criteria:

- The site should have the presence of a transport terminal on or next to it.
- It must be within an urban setting
- It must deal with a demographic that would benefit from the introduction into the informal sector.

Suggested further aspects to be studied:

- There is a need for further understanding of what a correct ratio between urban density/ amount of people passing through a site and the size of the market. This would provide valuable information as to what would be the optimal size.

- One can further explore Thiss-Evensen's three elements, the floor, the walls and the roof not from a perceptual point of view but from a functional point of view to further develop an architectural language involved with the tectonics of the building

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7.0 APPENDICIES

UNUSED QUESTIONNAIRES

Questionnaire 1

Location: Warwick Junction Precinct

Interviewer: Mark Leith

Interviewee:

Age:

Gender:

Race:

1. How many years have you been trading within Warwick Junction and have you traded elsewhere other than Warwick Junction?
2. Do you live full time in Durban? If not where do you live and how long do you spend in Durban at a time?
3. Where in Durban do you stay? Hostel, Flat, etc.
4. How important is Warwick Junction to you? What does it mean to you?
5. Do you have a place inside the market that you always use or do you move to different parts of the market and why?
6. Is safety an issue inside of the markets?
7. Where do you get the goods that you sell, do you grow/produce them yourself or do you get them from a supplier?
8. Where do you store your goods if you do not sell all of the goods?
9. On average how much money do you make per week and how much does it cost you to live in the city per week?
10. What would make it easier for you to trade and do better with business?
11. What are your short term goals?
12. What are your mid-term goals?

13. What are your long term goals?
14. What level of education do you have? Would you take the opportunity of skills development to broaden your business?
15. Out of the three markets stalls, which do you think would suit your needs best? A, B or C? and why?

Questionnaire 2

Location: Verulam Traders Market

Interviewer: Mark Leith

Interviewee:

Age:

Gender:

Race:

1. How many years have you been trading within Verulam and have you traded elsewhere other than Verulam?
2. Do you live full time in Verulam? If not where do you live and how long do you spend in Verulam at a time?
3. Where in Verulam do you stay? Hostel, Flat, etc.
4. How important is The Market to you? What does it mean to you?
5. Do you have a place inside the market that you always use or do you move to different parts of the market and why?
6. Is safety an issue inside of the markets?
7. Where do you get the goods that you sell, do you grow/produce them yourself or do you get them from a supplier?
8. Where do you store your goods if you do not sell all of the goods?
9. On average how much money do you make per week and how much does it cost you to live in the city per week?

10. What would make it easier for you to trade and do better with business?
11. What are your short term goals?
12. What are your mid-term goals?
13. What are your long term goals?
14. What level of education do you have? Would you take the opportunity of skills development to broaden your business?
15. Out of the three markets stalls, which do you think would suit your needs best? A, B or C? and why?