3. APPLICABLE THEORY

"We shape our buildings, thereafter they shape us." Winston Churchill, in Time magazine (1960).

Theory is an ambiguous word. It means different things to different people. To some people a theory is a system of ideas or statements, a mental schema that is believed to describe and explain a phenomenon or a group of phenomena. Some theory has been proved using scientific methods. Such theory is referred to as "positive theory" (Lang 1987:13). The term "positive theory" is used because it consists of positive statements, assertions about reality.

Theory can refer to a "model", a way of perceiving reality that imposes a strucrure on that reality. Theory can also refer to a prediction that a certain outcome will be achieved by a certain action; such predictions are referred to as "hypotheses" (*ibid*). According to Lang (*ibid*), the other way theory is used is as a prescription for action; this is "normative theory". In architecture, design priciples, standards, and manifestoes are examples of such theory. They are based on what the world, good architecture, landscapes, and urban designs should be. (*ibid*).

"Theory cannot be proved. It stands until it is disapproved" (Lang 1987:13). According to Vituvius, a building must fulfil three basic purposes: *utilitas, venustas,* and *firmistas*. Sir Henry Wotton (1624) paraphrased it as follows:

"In Architecture as in all other Operative Arts, the end must direct the Operation.

The end is to build well.

Well-building hath three Cnditions.

Commoditie, Firmenes, and Delight."

Commodity and firmness are certainly major contributions to delight. The mistake of too many modern architects was to believe that the two were sole contributors .Commodity, or what Norberg-Schulz calls "building task," was regarded as the functional goal "form" in Norberg-Schulz's terms, the aesthetic goal (Lang 1987:23).

Architecture also requires *firmness*. Buildings have to endure as long as they are needed. The history of architecture is partially the history of technology. Technology has been a predominant concern in explaining the evolution of architecture.

he major changes in architectural style have resulted, however, from the interrelationships of many factors: the emergence of new types of clients; changes in lifestyle, social stratification, values, and economic cultures; and developments in the technology available or inventable by designers and/or builders (*ibid*).

3.1 Good city form

Like a piece of architecture, the city is a construction in space, but one of vast scale, a thing perceived only in the course of long spans of time (Lynch 1960: 1). Moving elements in a city, and in particular the people and their activities, are as important as the stationery physical parts. We are not simply observers of this spectacle, but are ourselves a part of it, on the stage with the other participants (*ibid*).

People come to cities in order to experience the economic, social, cultural and recreational opportunities which can be generated through the physical agglomeration of large numbers of people (Dewar & Uytenbogaardt 1991:16). There is also a need for ease of access to the opportunities and facilities which exist. It is of little use generating opportunities if access to these is limited to a very limited number of people.

The marginal cost of overcoming access-restricting barriers, of which distance is one, for the more wealthy is low while the equivalent cost to the poor, who perpetually sit on a knife-edge of critical trade-offs, is very high (*ibid*). The concept of access has both spatial and a-spatial dimensions.

A central role of appropriate urban policy should be directed towards breaking down the economic, political, regulatory, attitudinal and other barriers which prevent people from fully entering, and participating within, the mainstream of urban life (*ibid*).

The primary physical barrier to ease of access is the cost of overcoming the 3.2 A place for identity friction of distance. The best situation obtains when people can gain access to most necessary daily activities on foot. Indeed, for many, it reflects the only feasible option. Movement on foot, therefore, should define the primary scale of urban life (ibid).

If the urban poor are to gain physical access to these, however, an efficient, viable and co-ordinated public transportation system is a prerequisite, it is not an option.

The concept of spatial separation of different race groups had been informally applied in South Africa, as in many other places, since colonial occupation. However, it was formalised with the advent to power of the National Party in 1948 and received it's clearest form of with the introduction of the Group Areas Act in 1966 (Act 66 of 1966). Different race groups (non-whites) were moved to the periphery of urban settlements.

The system of apartheid was dependent on long distant routes linking fragmented parts of the city together. These routes were seen as 'spacebridgers,' not space-intergrators. The emphasis was on mobility, as opposed to on increasing access and convenience. This system resulted in townships separated from the economic activities in towns and cities. Hence the townships remained stagnant and under-developed.

Here, at the southern tip of Africa, most people are dislocated from their immediate pasts, some joyfully, others reluctantly, yet others refusing the realities of their displacement. All are pre-occupied with matters of identity, with heritages, with histories- including architectural identities. Post-modern pastiche, the predominant design mode of the day, is viewed as a practice for, among other goals, "gratifying people's need for rootedness, for a sense of belonging" (Lipman).

As Alan Lipman (ibid) stated, "architecture - as a practice and as a product does not simply reflect the societies in which it is produced. Buildings are not merely images of what it is, of how people live presently. On the contrary, via it's material presence as embodied human action, architecture can and does speak of what might be, of how we humans live. Appropriate architecture must then help to shape, to educate people's desires." This is far from being solely a matter of outward form, of style.

To be at peace with the universe, with society and with themselves people need to be able to situate themselves by affirming their identity:

- -Identity as a human being, *Homo sapiens*, who is distinct from the physical, mineral, vegetable and animal world;
- -Identity as a member of a group with which one shares a nd discusses values: the family, polical party, club, etc.
- -Identity as an individual who maintains a margin of liberty and personal responsibility, distinct from the group and from all others, each person is unique (Von Meiss 1990:161)

"The built environment is far from being the only one to influence our sense of identity" (ibid). Gestures and ritual, clothes and objects, language and many more factors are just as important. Architecture is nevertheless playing an important role in reducing or strengthening our sense of identity.

Cities do not reflect a cohesive social identity. They represent an amalgam of complex forms of social organizations and institutions operating over many scales. Physically, this richness is expressed in two ways. First is through the celebration of valued societal institutions in the organization of urban space. In this sense, social order directs spatial order (Dewar & Uytenbogaardt 1991: 22).

The second is through the reflection of cultural expression in the making of environments. Appropriately, therefore, the complex social and cultural fabric of cities should find expression in the built environment. Cities should not reflect the imposition of uniform values: they are many placed places. In the management of urban growth, there must be sufficient freedom for the expression of social and cultural value to occur (ibid).

A workable image requires first the identification of an object, which implies it's distinction as a separate entity. This is called identity, not in the sense of equality with something else, but with the meaning of individuality or oneness. Second, the image must include the spatial or pattern relation of the object to the observer and to other objects. Finally, this object must have some meaning for the observer, whether practical or emotional (Lynch 1960:8).

Architecture is playing an important role in reducing or strengthening our sense og identity. We must distinguish two types of manifestations of identity:

(a). Private identity

The affirmation of identity to oneself and to one's intimate group. The signs can be relatively 'private' or subtle. They only need to be rocognizable by the initiated. Thus the position objects and icons in an orthodox church guide the behaviour only of those who know it's ritual, and that is sufficient (Von Meiss 1990:162).

(b). Public identity

The affirmation of identity to others by establishing a distinction between 'them' and 'us.' The indications must be clear, redundant and popularized. The architecture of colonial towns imposing itself on a foreign country is a striking example on a large scale (*ibid*).

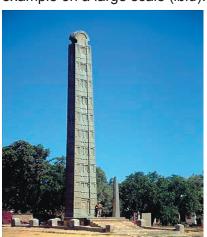




Figure 3.2: Sphinx, Egypt

Fig 3.1: Obelisk Axum, Ethiopia

In both cases the aid to identity is only effective provided it is known and recognised by others. It implies a tacit or explicit agreement, a convention, a tradition. The terms of this agreement, the distinctive signs of identity, become clearer as we accumulate experience of social life in a given culture. "The architect must discover the principal means which ensure this communication of identity" (*ibid*).

In order to produce a building reflecting the identity of a group of initiates (e.g. a family home or a church interior), the architect has a choice between three strategies.

1. Interpretative

It pre-supposes attentive observation and deep understanding of the values and behaviour of the people and groups concerned, as well as the places and the architectural elements crucial to their identity. For example, Le Corbusier was not a practicing Catholic, but he clearly understood the essential characteristics of the sacred Catholic space in order to build Ronchamp and La Tourette (Von Meiss 1990:162).



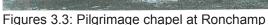




Figure 3.4: Interior of chapel

2. Making future users participate in the design of places

This process presents interesting possibilities in the residential field for allowing those involved to confirm their identity. Architects who engages himself merely as a technician at the service of the user produces buuildings which are characterized by a non-critical summation of personal tastes at the expense of the collective interest, thus detracting from the lasting quality of the work (*ibid*).

3. 'Architecture of hospitality'

The third strategy proposes the search for an architecture which suitably lends itself to the places and symbols of identity which will be created by the occupants themselves after completion of a strong ordering structure. 'Architecture of hospitality' is a new strategy which seeks to reconcile mass production and our need for individual identity (*ibid*).

To resolve a building project which involves, to a greater extent, the creation of a place displaying an identity to the public (for example a church exterior or the gateway to a private garden), we must resort to symbols that are comprehensible by everyone.



Figure 3.5: Kaedi Hospital, Kaedi, Mauritania



Figure 3.6: MATEP Art Therapy, Soweto



Figure 3.7: KwaMai-Mai, Johannesburg

These signs of a place and it's underlying identity are effective because they are unique and widely known (e.g. Eiffel Tower); or because they belong to a typology rather than to a conventional code, deep rooted in the collective memory of which we are part, such as doorways, fountains or staircases (*ibid*). The architect must respect certain conventional layouts in order that the building can effectively play it's role as an aid to public identity.

3.3 God is an African: Sacred Sites

"Take off your sandals, for the place where you are standing is holy ground." (Exodus 3:5)

In every region and town and neighbourhood, there are special places which have come to symbilse the area, and the people's roots there. These places may be natural beauties or historic landmarks left by ages past. But in some form they are essential (Alexander et al 1977:132).

People cannot maintain their spiritual roots and their connections to the past if the physical world they live in does not also sustain these roots (*ibid*). Usually, sacred sites are well known by everyone in the community. For example, Moria in Limpopo Province is well known by everyone that it is a sacred site for the ZCC. Likewise, people in KwaZulu-Natal know places of pilgrimage of the *AmaNazareth*.

People agree about the sites which which do embody people's realtion to the land and to the past. It seems, in other words, as though the sacred sites for an area exist as objective communinal realities. As Christopher Alexander (*ibid*), these sites must be preserved and made important. Destruction of these sites, which have become part of the communal consciousness, can create gaping wounds in the communal body.

Figure 3.8: Moria, Limpopo Province

Traditional societies have always recognised the importance of these sites. Some mountains are marked as places of special pilgrimage. Rivers, bridges, buildings, rocks, and trees are also be sacred and have the power through which people can connect themselves with their own past (*ibid*).

Modern society often ignores the psychological importance of these sites. They are bulldozed, developed, changed, for political and economic reasons, without regard for these simple but fundamental emotional matters; or they are simply ignored (*ibid*).

We must therefore build around a sacred site a series of spaces which gradually intensify and converge on the site. The site itself becomes a kind of inner sanctum, at the core. And if the site is very large, for example a mountain, the same approach can be taken with special places from which it can be seen, an inner sanctum, reached past many levels, which is not the mountain but the garden, from which the mountain can be seen in special beauty (*ibid*).

Whether the sacred sites are large or small, whether they are at the centre of the towns, in neighbourhoods, or in the deepest countryside we must establish ordinances which will protect them absolutely, so that our roots in the visible surroundings cannot be violated (Alexander *et al* 1977:133).



Figure 3.9: AmaNazareth during pilgrimage in KwaZulu-Natal

What is a church or temple? It is a place of worship, spirit, contemplation, of Even in an ordinary Christian church, you pass first through the churchyard, course. But above all, from a human point of view, it is a gateway. A person comes into the world through the church. He leaves it through the church. And, at each of the important thresholds of his life, he comes again steps through the church (Alexander et al 1977:332).

The rites that that accompany birth, puberty, marriage, and death are fundamental to human growth. In all traditional societies, where these rites are treated with enormous power and respect, the rites, in one form or another, are supported by parts of the physical environment which have the character of gates (ibid).

In all cultures it seems that whatever it is that is holy will only be felt as holy, "if it is hard to reach, if it requires layers of access, waiting, levels of approach, a gradual unpeeling, gradual revelation, passage through a series of gates". For example, anyone who has audience with the Pope must wait in each of the seven rooms; the Aztec sacrifices took place on stepped pyramids, each step closer to the sacrifice; the Ise shrine, the most famous shrine in Japan, is a nest of precincts, each one inside the other (ibid).

then through the nave; then on special occassions, beyond the altar rail into the chancel and only the priest himself is able to go into the taberbacle. The holy bread is sheltered by five layers of ever more difficult approach.

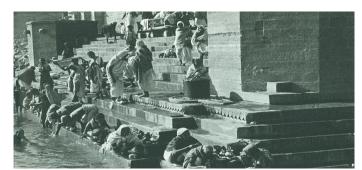


Fig 3.10: The Ganges (Mother Ganga). The most sacred of all the rivers in India.

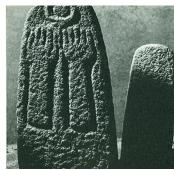


Fig 3.11: Canaanite Stone, Hazor



Fig 3.12: Obelisk Temple, **Byblos**

Layers of access of Temple of Solomon

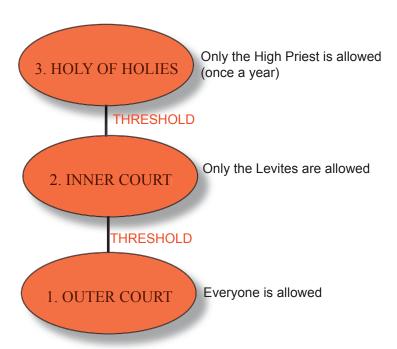


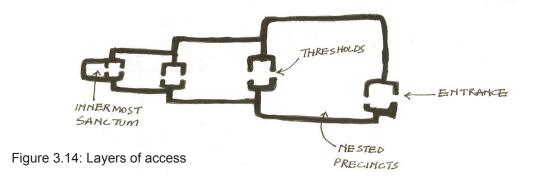
Fig 3:13 (Source: Holy Bible)

In the temple of Solomon everyone was allowed to congregate in the Outer Court. Only the Levites were allowed in the Inner Court or Holy Place. In the Holy of Holies, where the Ark of the Covenant dwells, only the High Priest was allowed inside once a year. A similar structure was also in the tabernacle of Moses (Holy Bible).

This layering, or nesting of precincts, seems to respond to a fundamental aspect human psychology. Every community, regardless of it's particular faith, regardless of whetherit even has a faith in any organised sense, needs some place where this feeling of slow, progressive access through gatest o a holy centre may be experienced.

When a sacred site exist in a community, even if it is associated with any particular religion, the feeling of holiness, in some form or the other, will gradually come to life there among the people who share in the experience (Alexander *et al* 1977:334).

In each community and neighbourhood, sacred sites must be identified as consecrated ground. A series of nested precincts, each marked by a gateway, each one more progressively more private, and more sacred than the last, the innermost a final sanctum that can only be reached by passing through all of the outer ones (*ibid*).



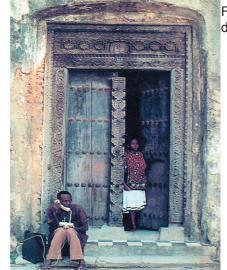


Fig 3.15 : Intricately carved door surround, Zanzibar.

3.4 Houses of God

Houses of God are "artifices of eternity." Everywhere we find arresting evidence, from all times, of man's acknowledgement of a power greater than human. And wether the god or goddess is found in a mountain, a stone, a bog, a tree, the inmost recess of a cave, or lodged in a temple or church, the deity's presence sanctifies the place. Such sacred sites are a visible expression of man's intense wonder and faith as well as his everlasting cry for help and hope (Mirsty 1965: 1).

From the very earliest times, the houses of the gods are proof of man's abiding effort to explain the mysteries of birth and life and death, increase and regeneration; to define behaviour as good or evil. Each place worship can be seen as an attempt to translate myth and symbol, dogma and ritual, into earth and stone and wood (*ibid*).

Gods are not approached in an offhand manner, and their dwelling paces are characterised by th serious, vital, sometimes lofty, sometimes dangerous purpose to which they are concencrated. Many such places are stupenous, overwhelming the eye and informing the imagination (*ibid*).

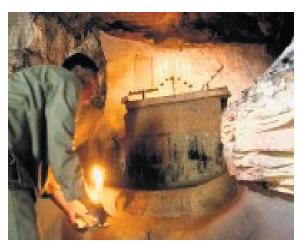


Fig 3.16: Cave Church, Eastern Free State.



Figure 3.17: Sacred entrance of *Ga-Modjadji*, near Tzaneen.



Figure 3.18: Obelisk Axum, Ethiopia.

3.5 The Beginning . . .

"In the beginning God created the heavens and the earth...
Then God said, 'Let us make man in our image, in our likeness...'"
Genesis 1:1, 26 (Holy Bible)

Man's awareness of superhuman forces began in the dim period of the last interglacial age when a new human type, the beetle-browed Neanerthal Man, emerged. His skeletal remains show that he buried his dead according to ritual. In every civilization death is related to religion; the funeral observances imply a relationship among the dead, the quick, and the supernatural (Mirsty 1965: 1).

Long before colonialists and missionaries brought the concept of the Christian God to south-east Africa, *Umvelinqangi* or *Unkulunkulu* was the all-powerful Zulu creator. Humans could not approach *Umvelinqangi* directly, but had to approach him through the ancestors. Hence, indigenous churches today combine elements of traditional belief with Christianity (Derwent 1998: 140).

Therefore, form time immemorial man has always acknowledged the Creator or God in almost every culture. This creator is called by different names in different religions. The Muslems call Him Allah, Christians call Him God, and the Jews call Him Jehovah.

"Religion consists of explanations of existence based on supernatural assumptions & including statements about the nature of the supernatural and about ultimate meaning" (Stack 2003: 4).



Figure 3.19: Dome of the Rock. Jerusalem



Figure 3.20: Stonehenge. England

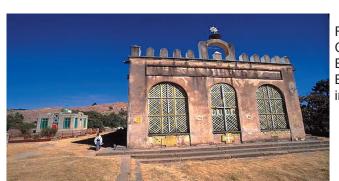


Figure 3.21: Church of St Mary of Zion, Ethiopia. Ethiopians believe Biblical Ark of Covenant is inside. Entrance is prohibited.

Saint Mantsopa Makhetha (1795-1906)



Figure 3.22: Mantsopa Makhetha, activist, diviner, and seer. She was also a spiritual advisor to King Moshoeshoe of Lesotho

"The way to heaven is not a narrow road. The missionaries are ridiculously mistaken in saying so." Mantsopa Makhetha