

**Freedom and Unity in Diversity:
The role of Architecture in the creation of an
African Union centre**


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DECLARATION

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

Signed by me on the 20th July 2006



Miriam Oluwatoyin Adebayo

ABSTRACT

Throughout the African continent several significant historical events occurred that partly influenced current problems in African societies. The Problems are economic underdevelopment, social crises, racism and internal conflicts. It explains the great need for an institution like the African Union (AU), which is working towards a common goal including all African peoples of self-empowerment in social economic, cultural and political terms. The selected history of the African continent is mainly concerned with Colonial Africa leading to contemporary period. The colonial part has left a mark on Africa that several movements such as the Pan-African movement, the Organization of African Unity (OAU) and today's African union attempted to create a union of Africa as a greater gain of emancipation on the comments of nations.

Architecture is the main focus in this study, which through several precedents of traditional African settlements key principles are studied and highlighted. The colonial era in Africa has left a great mark in African societies in adapting their planning principles and architectural structures which are still visible today. During this time architecture identifying Africa has been neglected and in current year it has been reintegrated. Examples of current trends of architecture in Africa are examined, which are a fusion of traditional elements and ideologies and current technologies.

The aim is to find an architectural approach which synthesizes African elements and creates a new African identity in the common goal of the African Union. The intention of the study is to understand the principles of African elements and to give a holistic understanding of African architecture. The case study area is Durban, a place of multiplicity in cultures and architectural styles which can become the host for the AU center and its expression of unity and diversity.

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LIST OF ABBREVIATIONS

- ANC – African National Congress
- AU – African Union
- AEC – African Economic Community
- CSSDCC – Conference on Stability, Security, Development and Cultural Council
- CBD – Central Business District
- EU – European Union
- IAEA – International Atomic Energy Agency
- KZN – KwaZulu-Natal
- NEPAD – New Partnership for African Development
- OAU – Organization of African Unity
- PAP – Pan-African Parliament
- UN – United Nations
- UNESCO – United Nations Educational, Scientific and Cultural Organization
- UNIDO – United Nations Industrial Development Organization

Introduction

This study examines the historical events that have led to current political divisions and this social situation of Africa, as well as a movement towards a unified African continent. The concept of unity has been used throughout the history of Africa in regaining independence and after independence to boost the economy as in charters such as the Monrovia group (Ajala 1973). A unified Africa is the goal of the African Union (AU), just as it was for the former Organization of African Unity (OAU). The transformation from the OAU to AU took place in 2000 so that the new structure would address the current issues and needs of the continent. The OAU had been mainly concerned with the promotion of decolonisation and the establishment of new African states. Several important events have occurred in Africa since the invasion of European powers, generating a great need for an institution like the AU.

The AU aims to reconcile and redress past interventions of European colonial powers in Africa, while also healing many of the internal conflicts, shocking memories and deep wounds that have been created in many African societies. The colonial past has left a mark on Africa, informing many of its planning and architectural structures. Landscapes were shaped to suit European needs, often reflecting a separation of living functions, social classes, and perceived ethnic groups. In many ways the modernist movement assisted in the creation of the colonial city and of colonial architecture in Africa.

An ideology of “unity” is an old concept, based on the premise that people of similar aspirations can work together to form an agreement on self-empowerment in social economic, cultural and political terms. In Africa, this concept has been redefined often to suit various situations that have developed and for the purpose of solving issues and moving towards a more peaceful and prosperous future for all parties. Prominent figures in this movement in the past have been Kwame Nkrumah from Ghana, Sèkou Touré from Senegal, Julius Nyerere from Tanzania, to mention but a few.

The union of a continent through a process of free association has been achieved in Europe leading to the formation of the European Union (EU). This body is made up of a number of countries which have agreed on specific terms and policies that would improve their common rate of development. Other countries may be invited to join the EU only after they have met specific conditions. As with the European Union, each country in the African Union will continue to govern itself and preserve its national identity. The EU therefore presents an important example for Africa to follow, in that it illustrates how collective aspiration can be achieved and what needs to be done in order for these to succeed.

Some concepts that have shaped Africa, such as communal solidarity and *Ubuntu/Botho*, are significant for the vision of unity. These have influenced the Pan-African Movement in the spirit of fundamental cultural aspects of nation-building and the involvement of NEPAD is important for the vision and goals of the AU.

The tribal systems of pre-colonial Africa were not equipped to achieve goals of unity because they were fundamentally conservative. The idea of a new Africa introduced by Azikiwe argued that a vision of unity and prosperity should cover the entire of the African continent (Maloke 2000). The vision for a new Africa also implies a need for a place to discuss issues concerning current problems and future solutions. Therefore, the “forum” represents a place where these activities can be held. Architecture can assist this vision of unity through its symbolic manifestation and expression of the diversity and complexity of a unified African continent.

PROBLEM STATEMENT

The African continent has an indelible past of colonial rule. Most African countries gained independence only after the Second World War and the geographical fragmentation of Africa today is the result of colonial divisions. The ideas of the Berlin Conference held during 1884-1885, which created

most of Africa's existing boundaries, were perpetuated at a micro-scale by the fragmentation of its cities. The use of racial segregation at an urban scale conflicted with the ideology of a unified society. This problem needs to be addressed in order to achieve a stable society.

On a continental scale, the problems of regional conflicts in Africa have widened the social gap between people living in specific countries. These conflicts emanate from historical events that have occurred in the last 50 years, mainly after gaining independence, such as the Biafra War in Nigeria, the genocide of Tutsis in Rwanda, and the civil war in the Sudan. These events make the concept of unity even more difficult to achieve because there has been a need to first reconcile with the past in order to address the future of a unified African continent.

Africa's pattern of development is limited by trade among a few African countries and needs to be enhanced in order to boost its economy. One possible solution that has been put forward involves a return to the historical trade patterns of Africa before the intervention of colonial powers.

The former Organization of African Unity (OAU) was ultimately forced to transform into the AU, as its reforms would have been inadequate to deal with the challenges of today, focusing mainly on political issues. It is within this context that architecture has to find its own expression in the search for an African identity. In many ways, architecture is a manifestation of a people's beliefs, and colonial administrators imposed their theories and ideologies on Africa with hardly any consideration of existing architectural styles. The idea of creating a unique African identity has been a desire throughout the continent's nations in order to reconnect with their ancestors and to have a position in the world. Today, architects have been challenged by a need to find an appropriate architectural language for the continent that express the emerging vision of this identity.

RESEARCH QUESTION

Therefore, the main question is how architecture can be used to express the diversity of identities present on the African continent and still maintain the ideals of unity set out by the AU. Further questions, around the philosophies that influenced the path of political unity are important for an understanding of why it was a strong concept throughout Africa in the face of the oppressive colonial past. If unity in diversity already exists in Africa, it should impact directly on the architecture and therefore express ethnic variety. In relation to the AU building, it is important to grasp the process of the historic and contemporary exchange of ideas.

AIM AND OBJECTIVE

The objective of this study is to present an overview of historical events in Africa. The myriad problems that have taken place on the continent explain the need for an AU. The goal is to create architecture that is a synthesis of African design elements and captures a holistic understanding of Africa.

HYPOTHESIS

The rich diversity of the African continent contributes and gives rise to strong commonalities, which can be expressed and echoed in architecture. In order to empower the continent various levels of African experience will need to come together such as cultural, socio-economic, and political factors. African countries need to reconcile with their shared oppressive colonial past and internal conflicts, and analyse present conditions in order to make the necessary adaptations. The focus should be directed at the creation of a unified continent with a representative African forum, which will promote prosperity and gain greater emancipation in the community of nations.

DEFINITIONS OF CONCEPT

Several terms have been defined to support the context of this research project, as follows:

African Nationalism – a movement and a philosophy which promote the progress and welfare of Africans

African Renaissance – a transformation, in the African context, of socio-economic and political development, which should empower African people and strengthen the concept of African identity

Communal Solidarity - different communities supporting each other for the goal of common development

Colonialism – European powers controlling the economic, political, and social structures of sovereign territories in Africa

Decentralization – the process through which all forms of population and economic activities are dispersed from existing urban centres

Decolonization – to terminate political control of alien rule of colonial territories, replacing it with new political structures

Ethnocentrism - to be aligned with a particular ethnic group and ascribe undermining negative beliefs to other ethnic groups

Forum - in architecture, it is a place or space for exchanging ideas; in traditional Africa, it would take place in the men's meeting, an assembly of the Dogon or the market place in the Yoruba towns

Unity – to face common problems collectively with a view to develop and improve living standards and conditions in African countries, bringing peace and economic improvement to the continent

CHAPTER 1

METHODOLOGY

1.1 INTRODUCTION

Durban Central Business District has been selected as a case study, for the reason that is the heart of Durban. Furthermore its attraction and potential for redevelopment is the key conceptual parallel with the AU building.

1.2 METHODOLOGY OUTLINE

As the background of the case study, a conceptual and theoretical framework has been provided through a literature review of books and articles from academic journals and newspapers. These have been selected to provide information about the issues that revolve around the topic and provide a general background within which the concepts of regional, national and international identity have been expressed through the medium of architecture. A in-depth analysis of a small number of local case studies will follow, which, in the opinion of local architectural historians and commentators, best reflect the concept of African aesthetics.

The case studies have been chosen to derive certain at key elements that can be in cooperated in the AU building, where people of different regions, cultures and social backgrounds can identify with. Therefore the precedents where selected from each region of the African continent, which show the communalities and differences of the social- cultural elements embedded in the architecture and urban layouts.

A small number of informal interviews were held with experts in the field and the data derived is then examined and interpreted. Post-modernist concepts of artefacts, text, subtexts and silences will be subjected to contextual and

inter-contextual interpretations. Although the expectation is not to arrive at definite conclusions as to what constitutes an African aesthetic, broad principles will emerge. In this context also, a critical analysis of literature in the field was be able to support these findings.

The interviews with key informants provided useful knowledge about the current situation and future prospects in addressing the issues in the study area. These interviews were not formed as discussions about the issues concerning the case study. The following people were interviewed:

1. Mr. Derek White (ethekweni Municipality City Engineers, Urban Planner)
2. Mr. Jonathan Edkins (Architecture Department, City Architect)
3. Mr. Wic Usher (ZAE architects)
4. Mr. Hash Ramjee (Boogertman, Urban Edge and Partners Architects)
5. Mr. Shervin Kuppan (Ruban Reddy Architects)

The land survey was conducted in the manner of walking around the area and analyzing the current situation. The main objective was to find solution for the decentralization of the city Central Business District and finding possible locations for the African Union building, which would activate further development.

Several buildings have been identified as key buildings in this study, which represent interpretations of African architectural language; others are used as examples of design for headquarters in Durban. These buildings have been visited, studied and analyzed.

CHAPTER 2

A SELECT HISTORY OF THE AFRICAN CONTINENT

2.1 INTRODUCTION

The partitioning of Africa by European colonial powers effected drastic changes that had a great impact on the social, economic, political and religious structures of Africa. The conflicts that occurred after individual African territories regained their sovereignty and independence was often deeply rooted in colonialism. The ideologies that arose in the independent Africa will also be highlighted so as to understand the complex and diverse dynamics within the continent.

2.2 PARTITIONING OF AFRICA

Throughout the centuries, Africa has played a vital role for several European empires. In the ancient world, North Africa was significant for the Roman Empire because of its proximity. Since the 15th century, Africa's resources were explored and exploited along the coastal edges. The continent played a pivotal role in gold trading with Asia which enriched and empowered their countries. (Mackenzie, 1983). (Illustration 1)

At the beginning of the modern era in Europe, Africa became more important for the supply of gold for trade and for the supply of slaves for plantations in America. Until the industrial revolution in Europe, Africa could only be explored along the coastal area, because of difficulties in terms of the geography, climate, and diseases. Another obstruction to inland access was unnavigable rivers. Only in a few places were Europeans successful in creating settlements, for example the Dutch in the Cape of Good Hope, and the Spaniards in Morocco (Illustration 2).

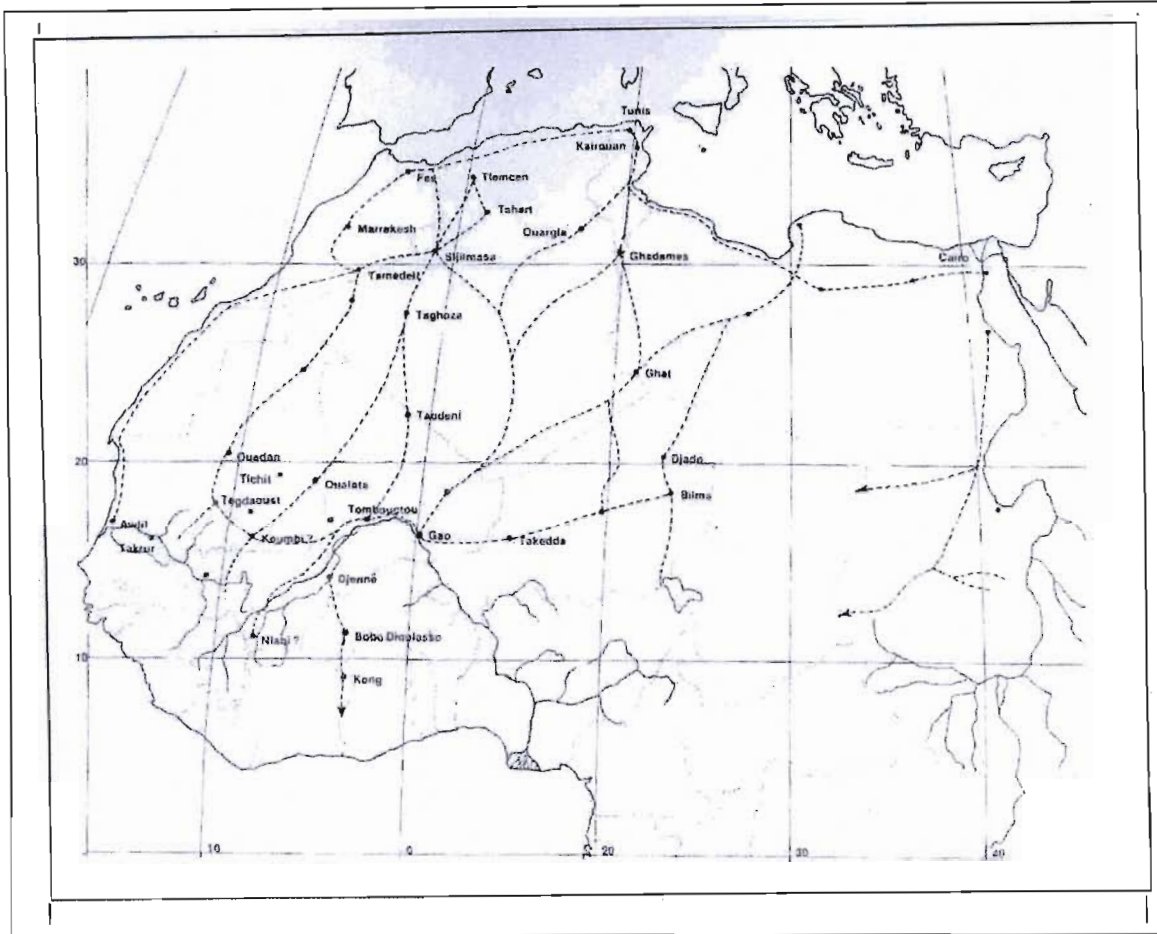
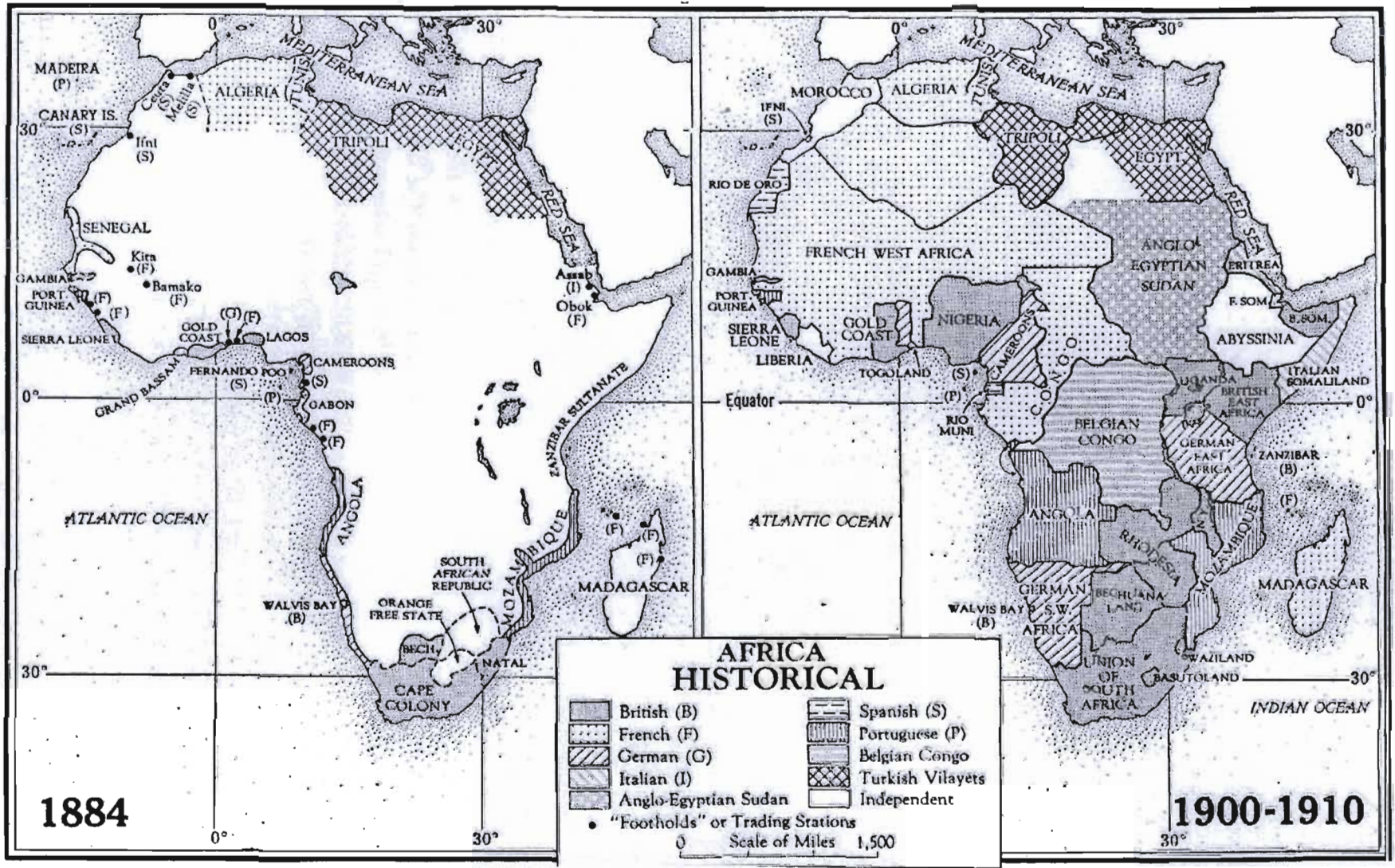


Illustration 1: Map of European trade pattern to Africa (Prussin, 1986:8)

Technological advancement assisted the Europeans in overcoming the obstacles that had limited exploration for centuries. This in turn made it possible to conquer a greater part of Africa. At the same time it was the era of European exploration, which created a greater spread of European power in Africa (MacKenzie, 1983).

Illustration 2: Map of 1884 showing the spread of colonialism and map of 1900 showing its expansion (Hodgson, 1963:50).

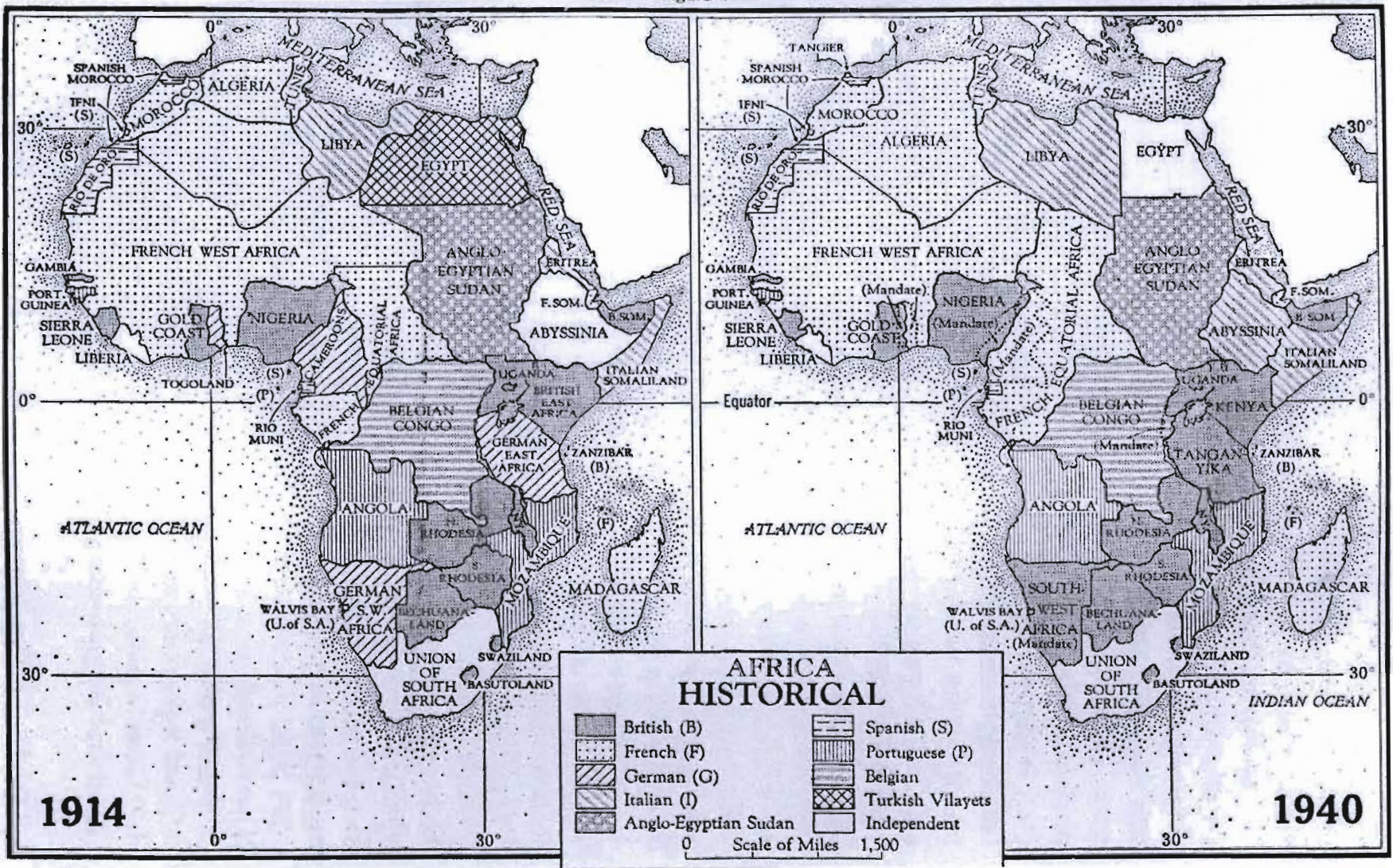


Technical advancement in steamship design enabled the Europeans to navigate most of Africa's rivers. Medical breakthroughs such as preventing malaria also contributed to the spread of European settlements and the construction of railway lines enhanced economic returns for the colonialist occupiers, so sustaining colonialism (MacKenzie, 1983).

The partition of Africa into its current geo-political map was discussed during the Berliner Conference of 1884-1885. This gathering of colonial powers, which was first proposed by Portugal and convened by Chancellor Otto von Bismark of Germany, led to an agreement in principle of a General Act to "the partition of Africa". Representatives of 14 European states and of the United States attended the conference. At that time, some of the countries, like France, Germany, Great Britain and Portugal, were already in control of some areas of Africa. The conference was held to prevent conflicts amongst the Europeans themselves (www.homestead.com). The resulting period of European expansion brought their architecture and ideologies of space into Africa.

The partitioning of Africa had a major impact on the lives and identities of native African people. The boundaries imposed on the African continent had never existed before (Plate 3). The African people had lived in a tribal system, where each ethnic group had its own territory, without any existing visibly drawn boundaries, such as those found on the European continent. These new boundaries disregarded any ethnic and linguistic divisions perceived to exist by African residents. Many tribal lands were divided and their traditional area or territory was split along lines of military, commercial or political expediency of the different colonial states (Hodgson, 1963).

Illustration 3: Maps of Africa 1914 and 1940 showing the territories of the different colonial powers (Hodgson, 1963:51).



The colonial powers profited from the ethnic groups being split up and reformed. Hodgson argues that in many cases, Europeans were a helpful, unifying force among the tribes and often brought peace to warring elements (Hodgson, 1963:24). Mulemfo 2000, on the other hand, argues that the colonialists believed in forming unitary states in Africa and that they forced African people to unite under European administration. Furthermore, he argues that uniting them according to a European agenda cut them off from their ethnic structure which was a means of controlling them (Mulemfo, 2000:54).

The argument is that unification of regions into colonies introduced a *Pax Europea* that created peace and prosperity under efficient administration. Therefore the colonizers could control millions of native Africans more easily once tribal systems had been weakened. The result of interfering by splitting some ethnic groups and uniting them with others, they sowed the seeds of future ethnic crises and conflicts, culminating in the fragmentation of traditional homogenous societies.

2.3 COLONIALISM AND ITS IMPACT IN AFRICA

Colonialism dominated Africa for just under a hundred years, from the 1880's to the 1960's. The colonial powers shared one common objective: the exploitation of African resources. Each colonial power ruled their newly formed colonies differently, according to their particular policy and traditions. Great Britain was a democratic country at that time and established in the newly formed colonies a system of indirect rule over much of their domain. They left the tribal system in place and allowed local rulers to be representatives of the British Crown (www.homestead.com). Such indirect rule diminished the authority of the traditional leaders, who were used by the colonial officers to implement policies such as forced labour, taxes, and recruiting men for the colonial army (UNECOSO, 1985).

The French chose to create a culturally assimilated, privileged class that would represent French interest in the colonies. Brooks 2003, argues that this tactic of introducing a selected class of “ native elites” to French culture relegated them to a buffer class stuck between their people and the colonizers. These selected elites were ‘Europeanized’ and they become poor representatives of their own people (www. geocities. com).

The Portuguese also had a policy of assimilation with local society, which however recognized social status as the means of segregation. The Italians, on the other hand, were latecomers to colonisation in Africa and perceived that their colonies would ultimately become integrated into Italian indigenous state, having sister states within a greater Italian family.

...nevertheless the difference between the condition of African society at the end of the nineteenth century and at the end of the Second World War is staggering. The colonial powers provide the infrastructure on which progress in the ‘independence’ period has depended; a fairly efficient administrative machine, reaching down in villages in the most remote areas; a network of roads and railways and the basic services in health and education. (UNESCO, 1985:783).

Under colonialism, two new institutions in Africa were introduced: a codified judicial system, and a bureaucracy or civil service, which have been maintained in Africa ever since. UNESCO argues that colonization completely isolated and insulated Africa from the major developments of the nuclear age and the age of motorized mass transport, keeping Africa in a position of dependency (UNESCO, 1985:789).

Under colonialism the provision of a travel infrastructure including roads, railway lines, and even some airports, was implemented, although this was only provided in order to support the exploitation of natural resources. Economic growth usually only occurred in areas rich in natural resources. Areas which had little value to the colonial powers were neglected. This resulted in great variances in economic development within one colony, later

creating problems associated with the colonial rulers' inadequate and unbalanced development.

Some apologists for colonialism argue that this reduced the gap between Africa and the Western world and laid foundation for intellectual and material development in Africa. This argument submits that colonialism brought enlightenment where there was ignorance, claiming that Africa received a new and more efficient form of political and economical organization and a greater opportunity for survival in a competitive world ([www. afbis. com](http://www.afbis.com)).

The African Nationalists and anti-colonists would argue that the only thing that colonialism achieved in Africa was to "develop dependency and underdevelopment". Moreover, some believe that Africa would have been able to develop without colonialism, because pre-colonial Africa had existing social and economic structures ([www. geocities. com](http://www.geocities.com)). Moreover, some anti colonialists argue that some colonial powers robbed Africa of the fundamental right of liberty of people, through loss of sovereignty and independence. Within that loss they were deprived the right to shape their own destiny (UNESCO, 1985). In some areas it was different; the English at the Cape started by recognizing the sovereignty of blackness beyond their boundaries and continued to do so.

The positive outcome of colonialism would be African Nationalism, which created a sense of identity and consciousness for Africans and the African Diaspora. It played a vital role in later movements and in the preparation for independence on the African continent and post- independence.

2.4 DECOLONIALIZATION AND INDEPENDENCE IN AFRICA

The move towards decolonization and independence occurred after the World War II and is connected to the beginning of African Nationalism. After the interwar period, other movements like “back to Africa” arose, creating awareness for the African people about their identity and the history of pre-colonial Africa. Decolonization meant to regaining their lost sovereignty and independence in Africa, and being able to control their own destiny (Hodgson, 1963).

Major events occurred outside Africa which influenced the move towards decolonization, either through direct involvement or indirect connection in Africa. The indirect influence was World War II, which had a great impact on the political, economical, social and racial transformation of the African continent. At the same time, African peoples’ consciousness about their identity grew and their aspiration for sovereignty and recognition increased. Another factor was the role of the United Nations, which endorsed Africa’s quest for independence. As early as 1947, the United Nations took the position of supporting the self-government of African territories. Its aim was to provide international oversight of decolonization (Carter, 1985):

The declaration of granting of independence also known as the Colonialism Declaration declared by the United Nations that the subjection of peoples to alien domination and exploitation constituted a denial of fundamental human rights.(Carter 1985:36).

This Declaration called for immediate steps to transfer all powers of the colonial rulers to the colonized people of Africa. The first newly formed African states became members of the United Nations which advanced the goal of independence for all African states, still oppressed by colonial powers (Carter, 1985).

The move toward independence began in the Arab Muslim states in the northern part of Africa. Hodgson argues that these northern states were

considered best prepared for self-rule because they had a longer tradition of independence or at least local autonomy, before European occupation.

(Hodgson, 1963:85)

The internal factor for the move of decolonialization in Africa was the defeat of Italy in North Africa by Libya, the fall of French Equatorial Africa and the economic difficulties of Great Britain after World War 2.

These events caused a growth in nationalism in Africa and after the Independence of Ghana, African Nationalism's aim of independence for Africa was mobilised (Hodgson, 1963). Independence was hardly an easy goal to achieve because the colonial powers did not want to give up their political and economic power. Therefore, it was through violence and revolts that many countries achieved their independence. Most of the African states today won their independence during the first few years after World War II. The southern part of the continent held out much longer, beginning with Angola in 1975 and Zimbabwe in 1980, Namibia in 1990 and South Africa in 1994. (Illustration 4).

1847 Liberia	1964 Malawi, Zambia
1951 Egypt	1965 Gambia
1956 Sudan, Tunisia, Morocco	1966 Botswana, Lesotho
1957 Ghana	1968 Equatorial Guinea, Mauritius, Swaziland
1958 Guinea	1969 Guinea-Bissau, Libya
1960 Chad, Benin, Nigeria, Ivory Coast, Madagascar, Central African Republic, Mali, Niger, Senegal, Burkina Faso, Mauritania, Togo, Zaire, Somalia, Congo, Gabon, Cameroon	1975 Angola, Cape Verde, Comoros, Mozambique, Sao Tome
1961 Sierra Leone	1976 Seychelles
1962 Burundi, Rwanda, Uganda	1977 Djibouti
1963 Kenya, Tanzania	1980 Zimbabwe
1990 Namibia	1990 Namibia
	1994 South Africa

Illustration 4: Table showing independence dates of all African states

Leopold Senghor expressed the term “decolonialization” as the abolition of all prejudice and superiority complex in the mind of the colonizers, and also all inferiority complex in the mind of the colonized (Hargreaves, 1988).

Independence signifies the right of indigenous people to govern their territorial jurisdiction formed under colonial rule. The universal extension of this human right of self-determination was the moral and political achievement of the anti-colonial revolution. (Carter, 1985).

Independence signified for most Africans the right to control their own destiny. The problem was that through colonialism, the African people were badly equipped to govern their own countries and as a result they struggled with political, social, economic and ethnic problems (Hargreaves, 1988).

After gaining independence, the stability and political control needed to be created in the newly formed African states. Carter argues that independence opened a gap between the international legacy and internal marginality of many emerging African countries (Carter, 1985:46). This gap presented a political dilemma and risked undermining the newly formed governments in Africa. As a result, some African leaders retained their European officials, who requested assistance for the newly independent states in return for some kind of economic power in the way of land possessions (Carter 1985).

The African Nationalists described this form of negotiation of assistance for creating a prosperous society as a false independence. They believed that real freedom could only be achieved through full political and economic independence ([www. afbis. com](http://www.afbis.com)). Nkrumah argues that there was no real independence in the new states, only an immersion in a new form of domination, neo-colonialism ([www. marxist. org](http://www.marxist.org)).

The period of decolonialization witnessed the emergence of new breed of African leaders, Kwame Nkrumah from Ghana, Julius Nyerere, Sekou toure form Guinea, Leopold Sedar Senghor from Senegal. (Maloka, 2000)

2.5 CONFLICTS IN AFRICA

Early expectations of a relatively smooth transition from colonialism to meaningful independence have been dashed in an African ravaged by natural disasters, international conflicts, civil wars and military coups. (Decalo, 1989:9)

After independence, the problems created through decisions taken by the colonialist powers generated different conflicts all over Africa. The boundaries formed by the Europeans and kept by the newly independent states created ethnic problems throughout the continent. As a result, most African states were made up of a medley of different people with different cultures, traditions of origin and language.

Through African Nationalism, African people found an identity which was linked to a negative self-image formed by the oppression, humiliation and frustration experience during the colonial era. Therefore, the new leaders of the independent states were faced with the problem of changing this low self-esteem to a positive self-image in order to strengthen the new states (UNESCO, 1985). The advantage of this ethnocentrism is that it creates a constructive self-image, but the disadvantage is that it undermines social realities and creates conflict between different ethnic groups.

This problem of ethnicity is visible in the many crises and civil wars that have occurred in Africa. At the root of these ethnic rivalries is the economic growth in former African colonies that was based on the unequal access to natural resources in the region, resulting in highly developed *versus* undeveloped areas. This created great difficulty between the different ethnic groups in the African states (UNESCO, 1985).

UNESCO argues that the tribal differences might disappear easily in the modern world if all tribes were equally economically empowered (UNESCO, 1985:792). Some African leaders for their own political sake have manipulated these conflicts through ethnicity.

Social crises were created through the break-up of social patterns and the loss of community imposed by European concepts of industrialization and urbanization. These Western concepts, according to Mulemfo, cherish the individual instead of communalism, which was inherent in pre-colonial African society (Mulemfo, 2000:54).

Basically the concept of neo-colonialism applies the same structures of colonialism and political preference in the newly formed African states. Therefore, some African states were controlled by the military, and were abused by leaders for personal enrichment, creating a dictatorial system, as in Uganda (Decalo, 1989). These civil wars, military coups, and dictatorships hindered the vision of a unified Africa, which was promoted by several prominent African leaders like Nkrumah, Senghor and Haile Selassie.

CHAPTER 3

ATTEMPTS AT UNITY

3.1 INTRODUCTION

The importance of the vision of unity for Africans throughout their history of occupation and colonialism is highlighted. The Pan-African movement of the 20th Century marks the creation of the OAU and its successor, the AU, forgoing the vision, aim and objectives of the OAU and AU.

3.2 PAN - AFRICANISM

The origin of Pan-Africanism lies in the United States and the West Indies and it was the first endeavor for Africans in emulating some form of unity. The important figures propping this concept were Marcus Garvey and William Dubois who expressed their concern for Africa and the African Diaspora. Their idea was to manifest fraternal solidarity among Africans and peoples of African descent in the early 20th Century. The various ideas mainly existed outside of Africa and were later incorporated into the African continent's vision. This signified the emerging awareness of the identity of African people (Woronoff, 1970).

Pan-African ideologies and visions were later assimilated in the OAU and AU. Several important people shaped the course of Pan-Africanism throughout its history of existence, from Marcus Garvey, William Dubois and Haile Selassie, to Kwame Nkrumah, who later was actively involved in the formation of the OAU (Ajala, 1973).

3.3 ORGANIZATION FOR AFRICAN UNITY (OAU)

Only with unity can we ensure that Africa really governs Africa. Only with unity can we be sure that African resources will be used for the benefit of Africa- Julius Nyerere. (Ajala, 1973:47)

Emperor Haile Selassie of Ethiopia held a conference attended by African statesmen to discuss issues of common interest. The OAU was established in 25 May 1963 and 32 heads of state signed the OAU Charter. The 25th of May is celebrated as African Day. The charter of the Monrovia and Casablanca group, which still separated the continent, was abolished to achieve the OAU goals. For the first time in the history of Africa many leaders met to discuss their issues and a vision of unity concerning the continent.

The conclusion reached at the conference held in Addis Abba agreed on several points for achieving unity. The basic principles included non-interference in the internal affairs of other states, the recognized equality of all states, condemnation of subversive activities organized against one member state by another, and abhorrence of political assassination.

The primary aim of the OAU was to help the continent become independent and to abolish systems of colonialism (Turnbill, 2004:5). The aim was to promote unity and solidarity among African states and to co-ordinate and intensify co-operation and efforts to achieve a better life for the people. In addition, it was to ensure sovereignty, territorial integrity and independence and to promote international co-operation.

The OAU achievement succeeded in overturning colonial regimes and establishing independent states in Africa. It was involved in decolonization and independence movements, and in peacekeeping operations in Africa. Furthermore, it played an important role in conflict resolution and economic development, especially in servicing issues of the African continent. In terms of its main objective to abolish colonialism, it was successful. One critique of the OAU is that it did not intervene in many internal conflicts in various

countries. In addition, it did not condemn the actions of many African dictators (Turnbill, 2004).

The OAU established specialized structures to achieve its goals and four Principle Organs: the assembly of Heads of States and Government, the Council of Ministers, the General Secretariat, and the Commission of Mediation, Conciliation and Arbitration (Thompson, 1969).

3.4 THE AFRICAN UNION (AU)

The AU was established in 2001 and was inspired by various conceptual and development sources, the main source being the historical link with the OAU. Other important sources are the Abuja Treaty, the Arusha Declaration, the CSSDCC, and the close partnership with NEPAD (AU, 2004).

The transformation from the OAU to AU was necessary to address the problems and issues facing the continent. Turnbull argues that the AU is leading the second liberation in Africa, while the OAU led the first. Fifty-three existing OAU members have joined the AU (Turnbill, 2004:5). The AU is based on similar ideas to the EU in that its concern is focused on the economic, political and health issues of their continent and the aim of creating continental unity.

The AU is based on a common vision of a united and strong Africa and on the need to build a partnership between all segments of civil society. It is important to strengthen solidarity and cohesion amongst African people. The AU's concern lies also in the promotion of peace, security and stability on the continent, in order to implement an agenda of development. As a premier institution and principal organization, the AU promotes the acceleration of socio-economic integration on the African continent. It is believed that this will result in greater unity and solidarity between African countries and the African people (www.dfa.gov.za).

In the Constitutive Act of the AU, there are 14 main objectives listed as key considerations. The primary intention of the AU is to enable Africa to tackle the challenges of the 21st century and strengthen the position of Africa in the global economy and international community. The others include:

- *To achieve greater unity and solidarity between African countries.*
- *To defend the sovereignty, territorial integrity and independence of its member states.*
- *To accelerate the political and socio-economic integration of the continent.*
- *To promote and defend a common African position on issues of interest to the continent and its peoples.*
- *To encourage international co-operation, taking due account of the Charter of the UN and Universal Declaration of Human Rights.*
- *To promote peace, security and stability on the continent.*
- *To promote democratic principles and institutions, popular participation and good governance.*
- *To promote and protect human and people's rights in accordance with the African Charter on Human and People's Rights and other relevant human rights instruments.*
- *To establish the necessary conditions which enable the continent to play its rightful role in the global economy and in international negotiations.*
- *To promote sustainable development at economic, social and cultural levels as well as the integration of African economics.*
- *To promote co-operation in all fields of human activity to raise the living standards of the African people.*
- *To co-ordinate and harmonize policies between existing and future regional economic communities for the gradual attainment of the objectives of the Union.*
- *To advance the development of the continent by promoting research in all fields, particularly in science and technology.*
- *To work with relevant international partners in the eradication of preventable diseases and the promotion of good health on the continent.*

(www.dfa.gov.za)

The AU faces different problems to those faced by the OAU. Some argue that through globalization, problems on the African continent have worsened economic conditions for most African states (Turnbill, 2004).

These problems are social, economic, and political, factors which are taken in consideration by the AU (Illustration 5). These problems are:

- Globalization, which creates a bigger gap between Africa and the more industrialized countries and puts Africa in a disadvantaged position.
- Secessionist movement.
- Lack of domestic order and stability.
- The clash between tradition and modernization.
- HIV/AIDS.
- Gender inequality, especially as women need to be more integrated into the economic development.
- World ecological problems.(Kotze, 2003)

(Comparison of means on a 7-point scale, where 7=most problematic)

	South Africa	Nigeria	Senegal	Algeria	Kenya	Uganda	Zimbabwe
1	HIV/AIDS (6.55)	Income disparities (6.04)	HIV/AIDS (6.28)	HIV/AIDS	HIV/AIDS (6.63)	HIV/AIDS (6.32)	HIV/AIDS (6.74)
2	Income disparities (6.02)	HIV/AIDS (5.95)	Secessionist movements (6.07)	Income disparities (5.83)	Income disparities (6.34)	Income disparities (5.84)	Income disparities (6.38)
3	Gender Equality (5.00)	Ecological problems (5.11)	Income disparities (6.00)	Ecological problems (5.52)	Stable and accountable democratic govts (5.70)	Ecological problems (5.11)	Domestic order and stability (5.42)
4	Globalisation (4.98)	Secessionist movements (5.04)	Domestic order and stability (5.54)	Secessionist movements (5.34)	Ecological problems (5.22)	Secessionist movements (4.93)	Secessionist movements (5.39)
5	Ecological Problems (4.70)	Stable and accountable democratic govts (4.88)	Stable and accountable democratic govts (5.53)	Domestic order and stability (5.26)	Globalisation (4.98)	Domestic order and stability (4.88)	Stable and accountable democratic govts (5.22)
6	Secessionist movements (4.68)	Domestic order and stability (4.66)	Ecological problems (5.51)	Stable and accountable democratic govts (5.25)	Gender equality (4.94)	Globalisation (4.85)	Globalisation (4.85)
7	Stable and accountable democratic govts (4.51)	Globalisation (4.14)	Globalisation (5.17)	Globalisation (4.78)	Secessionist movements (4.71)	Stable and accountable democratic govts (4.75)	Ecological problems (4.71)
8	Clash between traditional & modern (4.06)	Clash between traditional & modern (3.93)	Gender Equality (4.86)	Gender Equality (4.74)	Clash between traditional & modern (4.55)	Clash between traditional & modern (4.67)	Gender equality (4.43)
9	Domestic order and stability (3.64)	Gender equality (3.85)	Clash between traditional & modern (4.01)	Clash between traditional & modern (4.05)	Domestic order and stability (4.53)	Gender equality (4.45)	Clash between traditional & modern (3.80)

Illustration 5: Problems facing the African continent (Kotze, 2003:75).

The table highlights statistically the major issues that different countries face. Furthermore, it is clear that the HIV/AIDS pandemic is visible throughout Africa, as is the problem of income disparities (Table 2). AU politicians believe that in order to achieve the goal of a more stable and unified continent, these issues have to be addressed. Other problems need to be attended such as the growth of xenophobia in Africa and biased thinking against developing countries. Furthermore, the inherent problems caused by border issues remain. One solution would be to redraw the map of Africa (Turnbill, 2004).

The AU's aim and mission is to lead a well co-ordinated struggle against the mechanism of neo-colonialism that is present in Africa. Moreover, it aims to achieve the total unification, democratization and development of Africa (Turnbill, 2004).

The mission of the African Union Commission consists essentially in doing all that is necessary to establish the conditions which facilitate the attainment, in the shortest possible time, of all the objectives enshrined in the Constitutive Act of the African Union, by initiating discussion and policies, by educating and rallying the people of Africa and the rest of the world, by carrying out advocacy missions, by stimulating reflection, by seeking overall coherence of the organs of the African Union, by building its own capacities and by establishing follow-up /evaluation mechanisms. (AU, 2004:28)

Specific obstacles could strain the mission of the AU for development and improvement on various levels stated as the Objectives of the Constitutive Act of the AU. Some of these would be:

- *Corruption*
- *HIV/AIDS*
- *Lack of accountable African leaders*
- *Poverty, gender inequality*
- *Unfair international trade regimes*

- *Income inequality between the very rich and the very poor African states* (Kotze, 2003:78)

The establishment of the organs of the African Union represents a break from the OAU and this is considered necessary to achieve the AU's vision. The difference is that the AU is based on multiple sources of authority, assembly of Heads of State and government with democratic institutions of the Parliament. Furthermore, the AU incorporated the AEC and its regional program, whereas, under the OAU the AEC was a separate organization (AU, 2004). The AU is assisted by NEPAD in achieving socio-economic development in Africa; it is an essential part of the AU strategy. NEPAD's aim is to integrate the African continent into the global economy. To be able to achieve this, several situations needs to be addressed by the AU, as mentioned in the objectives of the Constitutive Act, for NEPAD to be successful (Kotze, 2003).

The organs of the African Union, according to the Constitutive Act, are the Assembly of the Union, The Commission, The Executive Council, the Permanent Representatives Committee, the Peace and Security Council composed of 15 Member states and the Pan African Parliament (PAP). The PAP is the embodiment of African sovereignty and the highest representative government of the African Union (AU, 2004).

The PAP was proposed to be hosted and constructed in South Africa. The ANC proposed that the Parliament to be seated in the Bluff area in Durban, KwaZulu-Natal (KZN). The reasoning for this was that it could be a good way of promoting KZN. Furthermore, it was argued that there are already enormous demands on the province because of the high HIV/AIDS rate and poverty (Daily News, 2004).

The African Renaissance, first mentioned by Thabo Mbeki, is aligned with the vision of AU, seeking a revival of Africa and close co-operation of all African states to create a unity in Africa (Mulemfo, 2000).

CHAPTER 4

ARCHITECTURE AND URBAN FORM IN AFRICA

4.1 INTRODUCTION

The influences of the built environment in pre-industrial Africa will be highlighted through various examples across the continent to show their traces of original settlement patterns and architecture, and also the similarities and differences of ethnic groups. The colonial era imposed its culture, ideologies and theories of organizing space, identity and power on the African landscape. This will be explained through examination of key buildings and urban layout principles. In contemporary Africa, new ideologies and theories have emerged as a response to the past and to the growing global culture, which finds its expression in the medium of architecture.

4.2 CULTURAL FORM AND CITY PATTERN OF PRE-COLONIAL AFRICA

In the pre-industrial era of Africa, the architectural and settlement patterns can be seen as the organization of human activities and as the embodiment of all social, political and religious structures. Some of the determinants are climatic, the available material of the region and cultural interpretations of beliefs through architectonic forms. Similar characteristics in most settlements across Africa can be found in terms of spatial organization, climate, nature of work and living patterns, even though they developed at different times and places. As an example, most traditional villages throughout the east, west, and south of Africa have a central open space as a social place with houses surrounding it. Even the use of basic geometric forms of rectangular and round shapes and their moderations are visible throughout Africa. Most settlements developed around economic activities such as agriculture, farming and trading nodes.

Traditional architecture is strongly linked with the religious beliefs of the specific ethnic group. The architecture becomes a symbolic representation of the beliefs, where almost all things are depicted in the structure, the layout of the house, and the layout of the settlement. Also, the use of pattern as an aesthetic and symbolic element is important for the creation of the identity of an ethnic group. Guidoni argues that primitive architecture is subject to symbolic and cosmic interpretation (Guidoni, 1975:28).

Other settlements are clearly different because of particular religion, culture and social aspects. The northern part of Africa is predominantly influenced by Islamic culture and this influence is also found along the east African coast because of historic Arab trading routes.

The following examples of concepts for the architecture and the settlement pattern of specific ethnic groups will highlight differences and similarities in responses to the natural environment and interpretation of their cultural beliefs.

YORUBA

The origin of the Yoruba is found in the south-western part of Nigeria along the border of the Republic of Benin. Yoruba land can geographically be divided into three zones, which determine the architectural form and the settlement form. Another influential factor is the Yoruba belief known as Ifa theology which is embedded in the architecture and the settlement layout. This belief is also called cosmology mythology, which sets out the hierarchy and rules of the Yoruba society, its economic structure and the socio-political framework. The cosmology is the basic principle for the layout of the typical settlement and also the Yoruba worldview (Illustration 6). In it are embedded the concept of the centre being the sacred and most protected place, the concept of the round or circle as the structure of organization for the settlement layout and the different components being strongly linked to the cardinal representation of the compass.

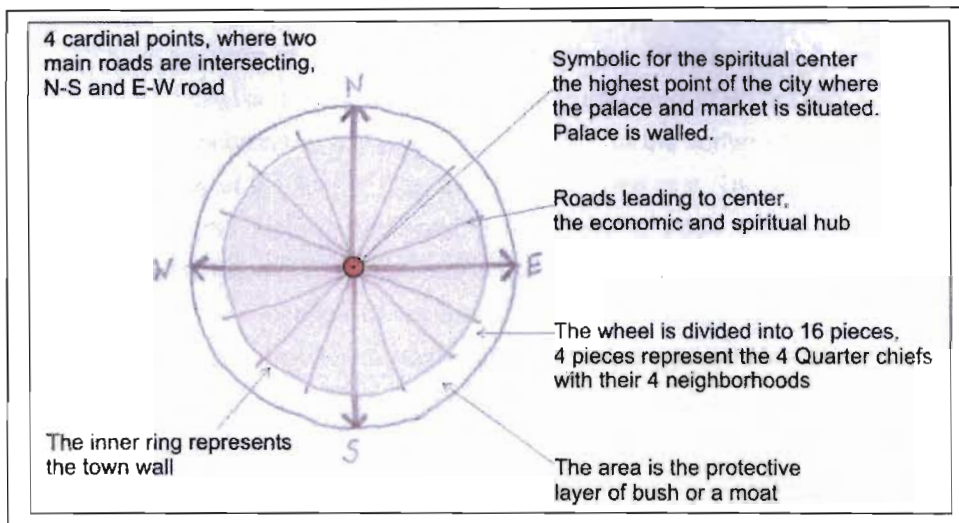


Illustration 6: Sketch showing the geometric representation of a typical Yoruba settlement based on cosmology mythology.

The Yoruba dwelled predominantly in towns with extended farmlands. The layout of a typical Yoruba town resides in a wheel. Ile-Ife is the first Yoruba city, which is the dispenser of basic religious thought. It is the spiritual capital of the Yoruba people (Illustration 7).

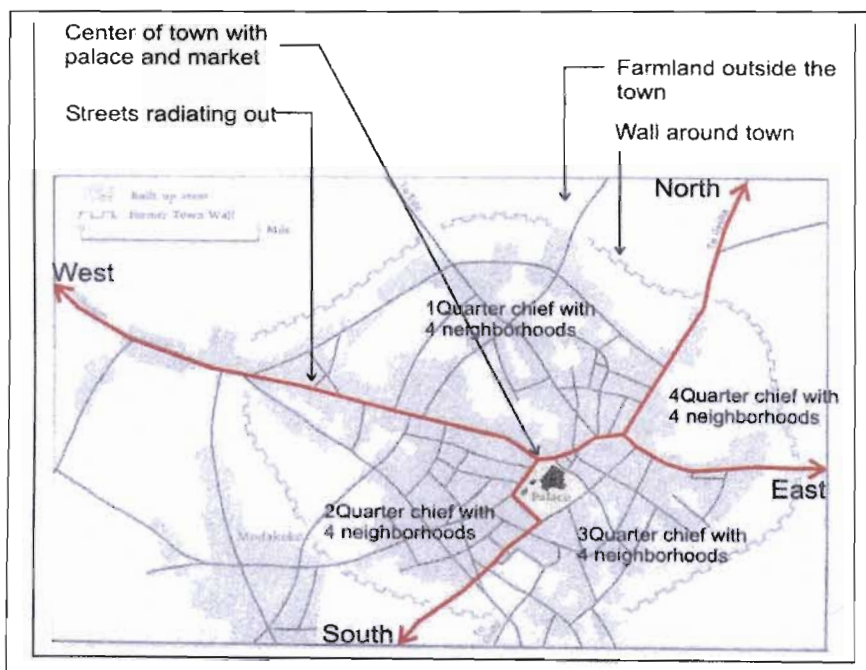


Illustration 7: Town plan of Ile-Ife showing the concept of cosmology mythology (Krapf-Askari, 1969:180).

Ile-Ife is an example of a typical Yoruba city with the difference that it never attained political or military importance as did Yoruba cities of Oyo or Owo. It is based on the principle of the wheel (Illustration 8,9). In the centre of the town was the palace of the king or Oba, with a market next to it. The palace was positioned at the highest point and most protected place of the city to enhance the function of the king. The market was important as the hub for the economy, for the exchange of ideas and for political discussions. All roads led to the central point of the market and palace, as seen in the city of Ile-Ife (Illustration 8,9). At the centre of the town, two main roads are intersecting, which represents the central point of the world in the Yoruba belief system. This crossing divides the town into four quarters for four-quarter chiefs. Oliver highlights that the number four is an important number in the cosmology mythology of the Yoruba, as well as its multiple 16 (Oliver, 1978:212).

Hence, it corresponds to the four cardinal points of the compass, the four principal gods and also the 16 regions of the world, which are represented in the Yoruba city through the 16 neighbourhoods with the 17th in the centre, the palace (Oliver, 1978).

Each town is walled as a defence mechanism and surrounded by the thick protective zone of the rain forest. Some settlements create a moat along the outside of the town wall if the town is not situated next to a forest (Illustration 8).

The social and political structure of the Yoruba is also visible in the layout of the towns. The Yoruba considered themselves as a collective entity with a king (Oba) leading them. The position of the Oba's offices and the king was sacred to the Yoruba people. The palace was walled with a thick wall, traditionally with only one gate leading to the market space and a secret exit for the king to leave if in danger or for urgent matters. The palace consists of numerous courtyards as seen in the palace of Akure (Illustration 8).



Illustration 8: Plan of palace of Akure (Krapf-Askari, 1969:89).

The rooms in the palace such as those seen in the palace of Akure are located around courtyards with open verandas. The response to the climate is visible through the creation of open courtyards, which allows people to continue with their daily routine (Illustration 8).

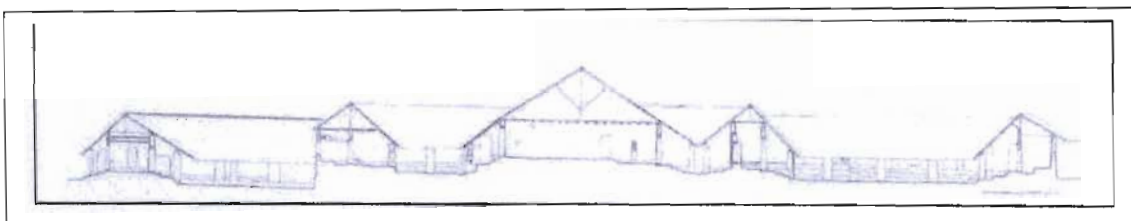


Illustration 9: Section through the palace of Akure showing the several courtyards (Dmochowski, 1990:2.21).

Different sizes of courtyards are placed within the palace, each is symbolic of the Yoruba culture. The functions of each section are depicted in the carving of the structural support of the roof. These columns are iconographic of human figures, which for example is visible in the King's courtyard (Illustration 10).

Only the king and the priest are allowed to enter the king's courtyard. The first king of the town is buried underneath a tree and a stone is placed in the center of this courtyard. Daily life is strongly linked to the architecture and art placed in these courtyards. For example, a statue representing fertility is placed in the woman's courtyard, where women would pray to this statue to fall pregnant. The art and architecture was an extension of the belief of the Yoruba, which was made up of cult figures, in wood, bronze, terra-cotta and iron. The sculptures were used for cultural and religious ceremonies. Symbolism was a constant concept for the Yoruba culture, which is also evident in many other cultures in the pre-industrial era in Africa.

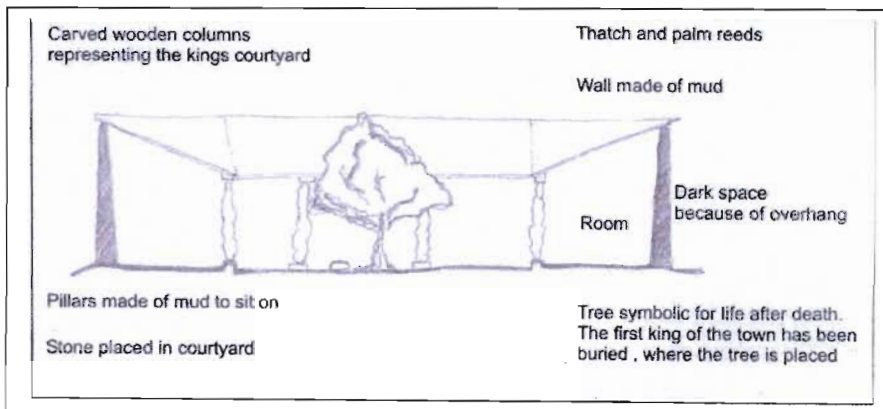


Illustration 10: Section of the King's courtyard showing the columns, symbolic stone and tree.



Illustration 11: Picture of Yoruba shrine showing the iconography and symbolism (Oliver, 1975:212).

The palace was made of mud walls that were thicker and higher than that of a residential house. The mud was mixed with palm oil instead of water for the palace walls. The posts were of carved wood to support the roof structure, which were bigger in the palace than in a residential house to emphasize the status of the king. The roof is constructed of wooden trusses and rafters covered with palm leaf or thatch, mainly a lean-to roof with an extension of a saddle roof to keep the interior cool and dark (Dmochowski, 1990) (Illustration 11).

The main courtyard in the forest areas of Yoruba land featured impluviums to collect water off the roof in tanks or pots. This system is used in the palace as well as in domestic houses in the towns counter the shortage of drinking water. The impluvial style is also found in the ancient Egyptian and Roman houses (Denyer, 1978) (Illustration 12).

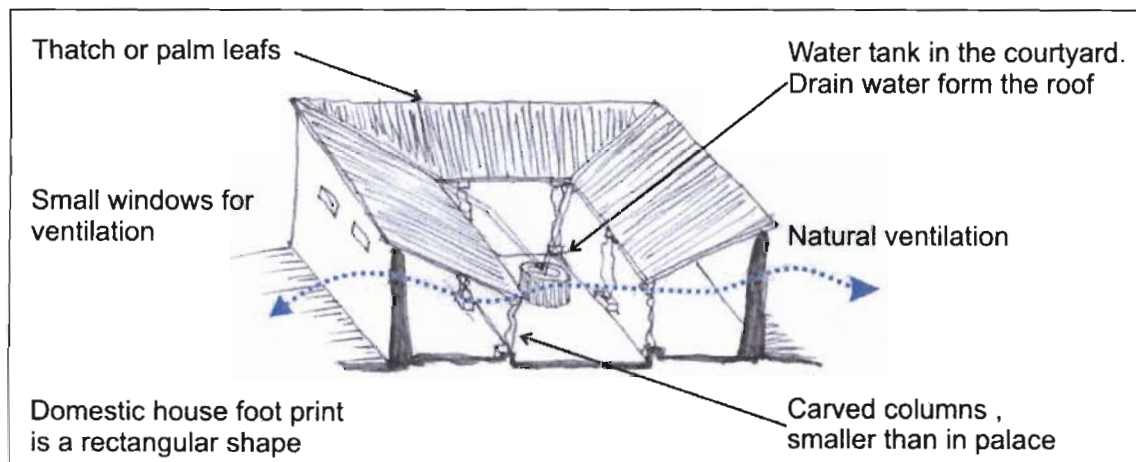


Illustration 12: The principle of the construction shown of Yoruba residential house.

DOGON

The Dogon live in the republic of Mali in the mountainous region of the upper Niger basin. The area is divided into three distinct zones :the highland, the rocky belt and the plain. The majority of the villages are located on the rocky belt where the village shape is determined by the frequency of the flat terraced areas (Illustration 13). Most Dogon villages are based on the principle of a man lying down, where the man is orientated in a north-south direction. The village and also the Dogon house functions reside in specific connection to the human body (Guidoni 1975).

Dogon belief informs their architecture, art and social structures. It describes the myth of their existence that the universe consists of 14 levels of terraces, one of which is the earth. Their god, Amma, is the creator of all things. The earth is seen as circular and surrounded by the waters of the ocean and a gigantic serpent biting its own tail. According to Guidoni, the Dogon myth describes the reason why they are situated in the mountainous regions, and that their migration is connected to the death of an ancestor. (Guidoni 1975:290)



Illustration 13: Picture showing a Dogon village on the rocky belt (Denyer, 1978:25).

The Dogon house functions represent the human body in an abstract manner, where various rooms are linked in a harmonious manner. For example the kitchen represents the head of the house and is therefore inspired by the circular shape of a human head (Illustration 14). The house is constructed of wood and clay wall and is bound to the philosophy of the Dogon myth, also known as cosmogonic myth.

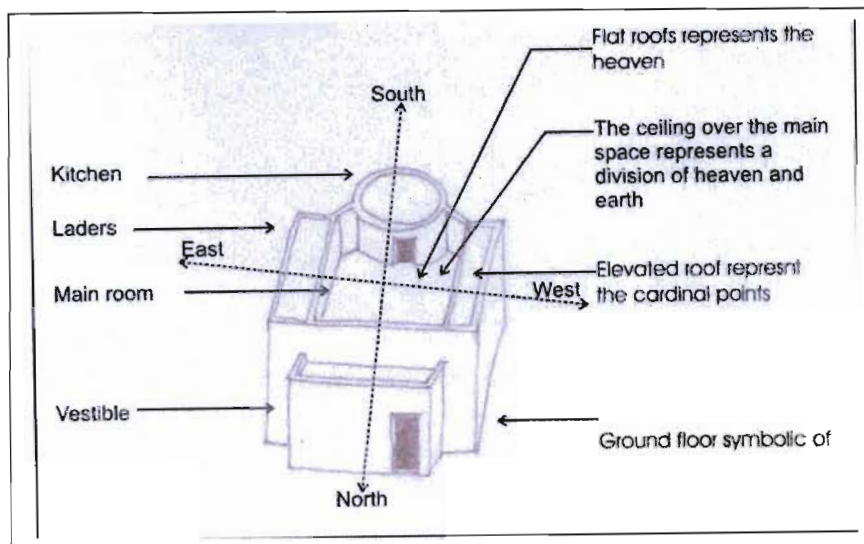


Illustration 14: Dogon house showing the connection with the human body (Guidoni, 1975: 284).

The Toguna is the most important building in every Dogon village. It is the first building to be constructed on the main plaza or an elevated terrace. It is built in the most dominant position in the village and in relation to its most sacred place. The Toguna functions as the men's assembly and council meeting house and therefore plays an important role in the economic and political stability of the community. It is a semi-enclosed rectangular building that is situated on the main axis of north-south. The structure is made of carved wooden columns depicting the human form which represents the eight primordial ancestors of the Dogon. The Toguna is a low structure forcing men to crouch inside, creating a shelter from the sun without hindering cross-ventilation. The roof structure is constructed of wooden poles with heaped vegetable matter, either in a rectangular or round shape (Guidoni, 1975) (Illustration 15).

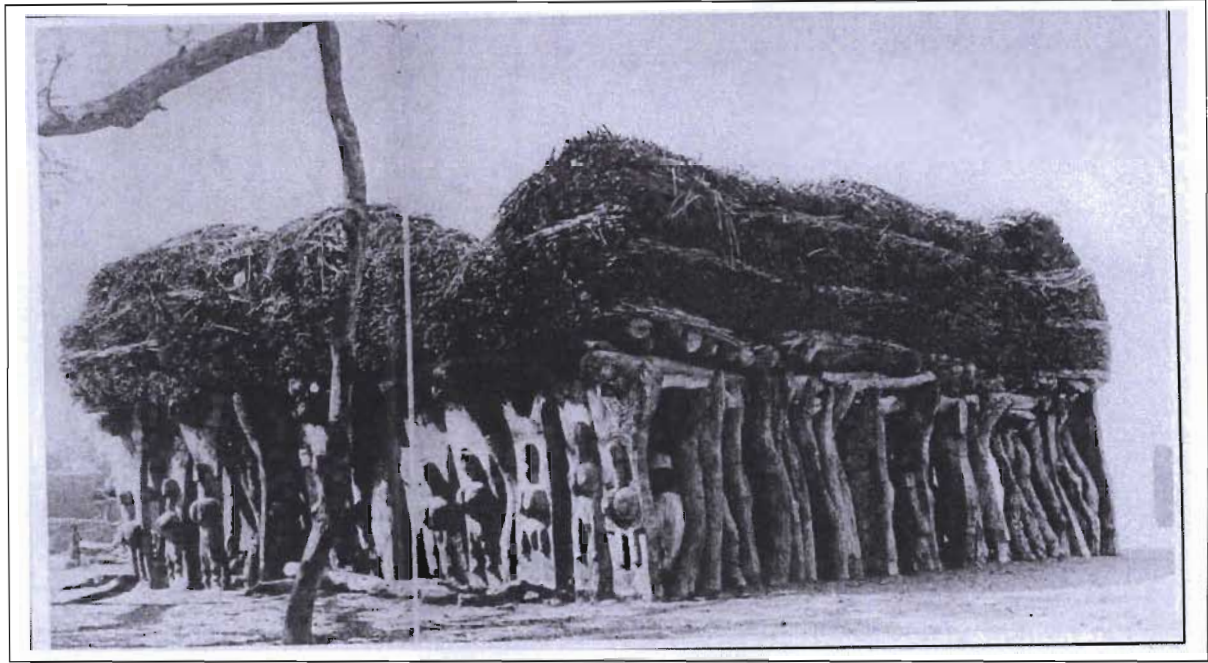


Illustration 15: Picture showing Toguna with carved columns (Guidoni, 1975:292).

The synthesis between their belief and the built environment is embedded in the architecture and the art such as iconography; wall paintings and wall decorations consist of patterns, a symbolic sign of the Dogon. This can be seen in the granary, a rectangular building with thatch roof (Illustration 16,17).



Illustration 16: Granary showing the pattern on the walls (Guidoni, 1975:281).

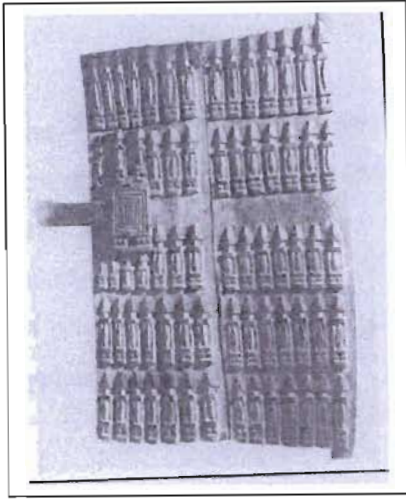


Illustration 17: Showing the granary door and its decoration representing human figures (Guidoni, 1975:281).

ISLAMIC INFLUENCE IN AFRICA

Islamic influence in traditional African architecture is evident in dry areas, North Africa and along important trading routes such as the East African coast. Along the east coast, coastal towns were developed and depended heavily on trade. The architecture and urban form was influenced by the different cultures that traded in the area, therefore it became a hybrid culture (Garlake, 1966).

Elleh states that the architecture on the east coast is homogenous in four basic elements: the construction technique, the ornamental and decorative details, the composition and planning of the mosque and the planning of the domestic buildings (Elleh, 1997). The architecture is a synthesis of African and Arabian culture. As a result the structures are mainly built of cord lime stone and include flat roofs, gables and vaults. The walls are usually plastered. The same principle is evident in other parts of Africa where the Islamic culture had a great influence.

The mosque is an important element of Islamic culture, not just as a religious building but also as focal point for the whole community. Its function is also diverse and it is used as refuge, a court, school or treasury building. It is also a monumental structure and symbolic of the culture (Garlake, 1966).

The Mosque Husuni Kubwa, in Kilwa Tanzania is an example of mosque construction along the coastal area (Illustration 18). It is located on the edge of a cliff and is completely walled, as a defence mechanism. It consists of several courtyards, each functioning differently. In the Mosque the concept of transition of private from public movement consists, which is also visible in the layout of a typical Muslim town.

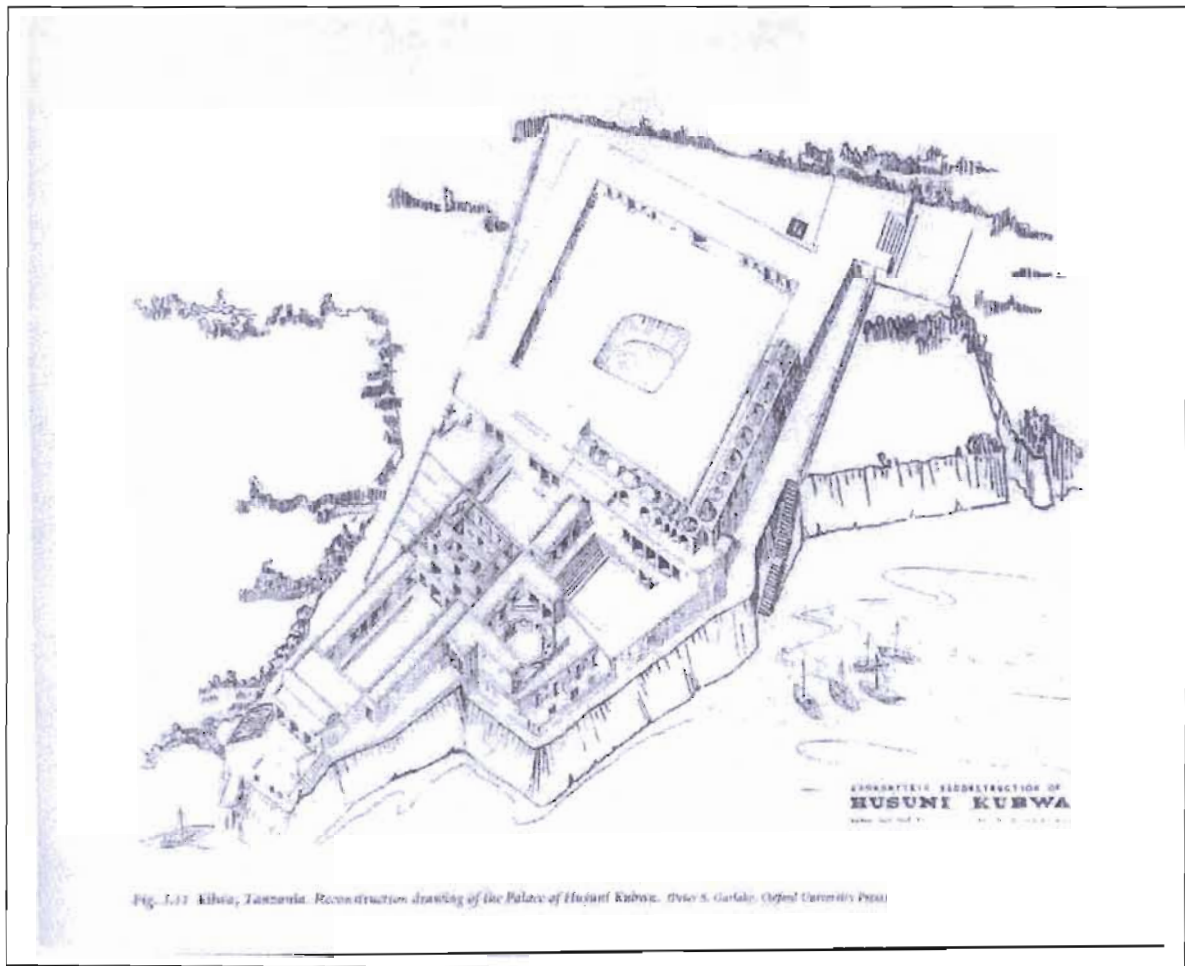


Illustration 18: Husuni Kubwa, Kilwa showing the layout and the several courtyards (Elleh, 1997:75).

In the northern part of Africa the mosques are built in a different style with the available material of the area. The mosque form is different in each town but the construction used is basically the same. The djenne Mosque in Mali is built in a specific style called the djenne style which in principle uses vertical buttresses

crowned with pinnacles (Illustration 19). The elaborate decoration would be at the entrance door of the mosque. The walls were made of mud, bricks and plaster with mud, which sometimes has vegetable butter mixed into the mud. The minaret is basically a tower which is either in the form of a rectangular base or a round basic form. It is constructed of mud with wooden poles sticking out of the structure as a support for the spiral staircase that becomes an aesthetic element. The minaret shape and height becomes a focal point in the city and is the highest element (Denyer, 1978) (Illustration 20).

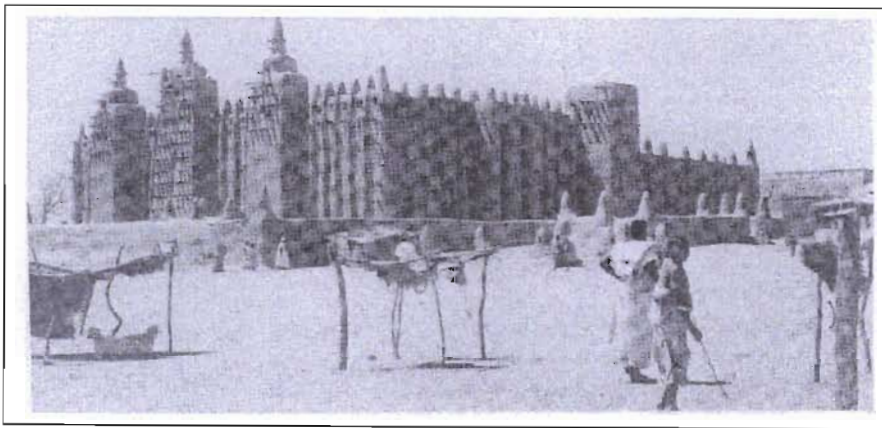


Illustration 19: Djenne Mosque, Mali, as an example of the Northern African construction (Denyer, 1978:170).

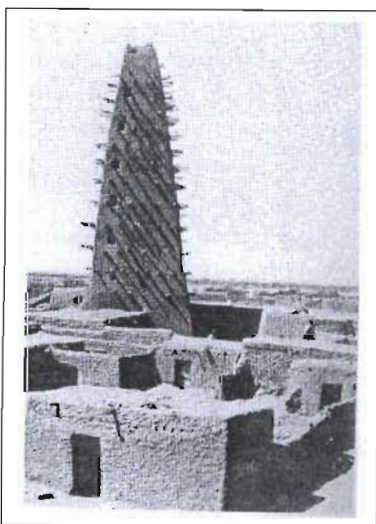


Illustration 20: Songai Minaret, Agadez Niger in its surrounding (Denyer, 1978:170).

The street layouts in towns along the east coast of Africa are based on the principle settlements of Muslim towns. The streets become winding paths in the city to connect several important buildings and at the same time create a bazaar, or market (Illustration 21). The houses are simple box-like structures with flat roofs and courtyards in the centre. The concept of public-private space is part of the design of these houses, where the courtyard is an open private space, because the surrounding walls are windowless. This concept is constant throughout the design of the town. Therefore, the houses are grouped with a common courtyard which reflects the communal aspect of the extended family (Rapaport, 1969).

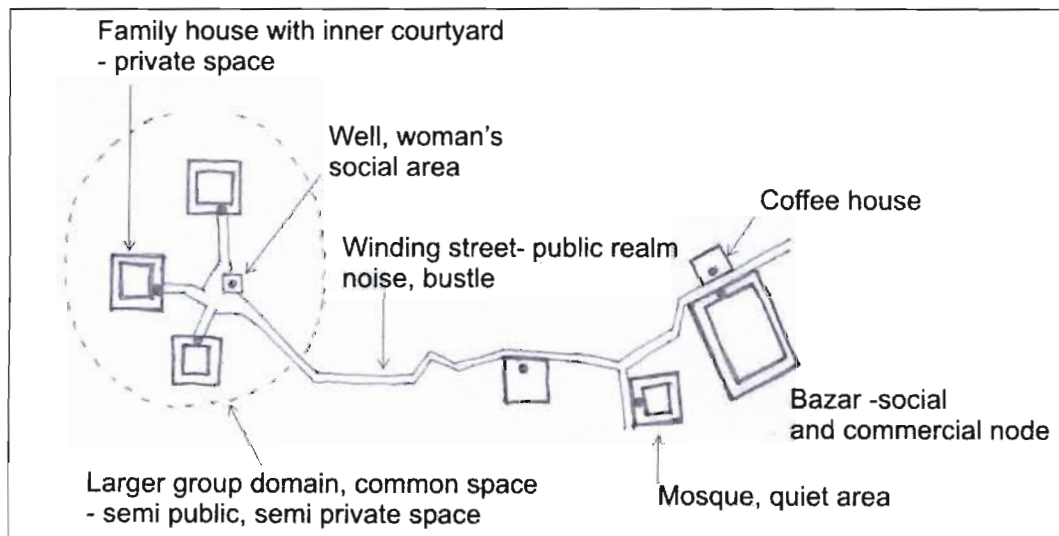


Illustration 21: Diagram of a typical Muslim town showing the concept of private-public space (Rapaport, 1969:73).

ARCHITECTURE IN SOUTHERN AFRICA

Traditional villages found in the southern part of Africa were often designed as self-contained fortresses in a concentric order. The example of the enclosure is Great Zimbabwe, which also had a great influence on the Bantu and Zulu settlements. The origin of Zimbabwe culture is found at Mapungubwe from different ethnic groups such Toutswea. The architecture of Mapungubwe, which is located in the Limpopo area, shows the earliest evidence for class distinction

and sacred leadership in the pre-industrial era in Africa. This ideology of class distinction characterizes the Zimbabwe culture that is visible in the two spatial patterns the Zimbabwe pattern and the central Cattle pattern (Illustration 22,23). The concepts of life forces, status and security is embedded in the two-settlement pattern but differently arranged. The arrangement is based on five essential components: the palace that represents the private or sacred area, the court as the male area, the royal wives, the place for the followers and the place for the guards. As protection for the town and the palace the guards are situated in concentric rings. (Huffman 2000)

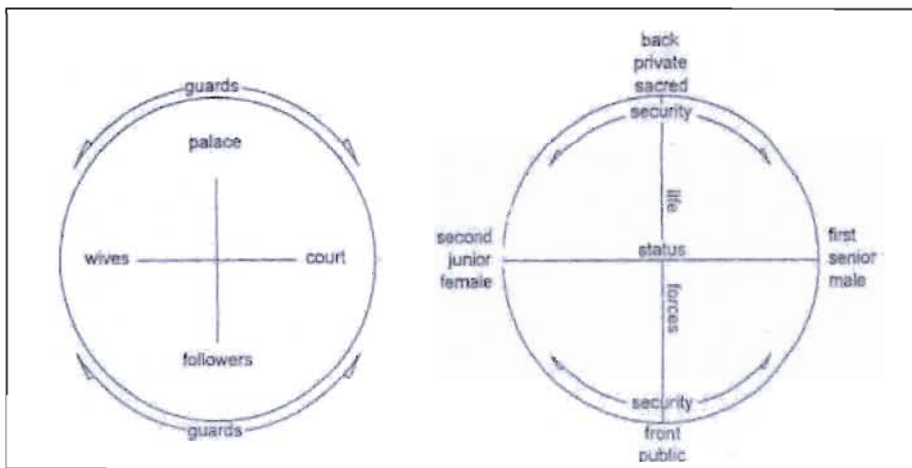


Illustration 22: The Structural Arrangement of the elite Zimbabwe pattern (Huffmann,2000:15).

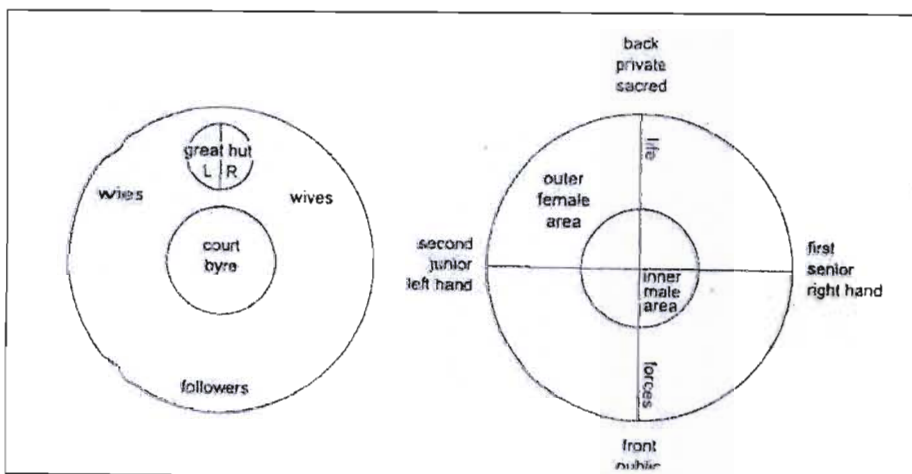


Illustration 23: The Structural Arrangement of the central cattle pattern (Huffmann,2000:15).

The central cattle pattern used by the commoners in Zimbabwe culture arranges the five components differently. The centre of the settlement is the domain of the man and is used for the men's assembly and for the cattle. It is also the place of burial for important people of the Zimbabwe culture. Moreover the sunken grain pits and the raised grain bins belong to the male vicinity. The domain of the married women is situated on the other residential zone. The eastern Bantu speakers use this settlement pattern. The Bantu belief in procreation, bride wealth in cattle, leadership and ancestors, all of which is interconnected.

This dual organization of settlement layouts in one society is connected to Mapungubwe. The Zimbabwe pattern is originated at K2 and Mapungubwe. As a result the similarities between Great Zimbabwe and Mapungubwe are that the stone walled palace is situated on the hilltop, where the leader is separated from the followers. (Illustration 24)

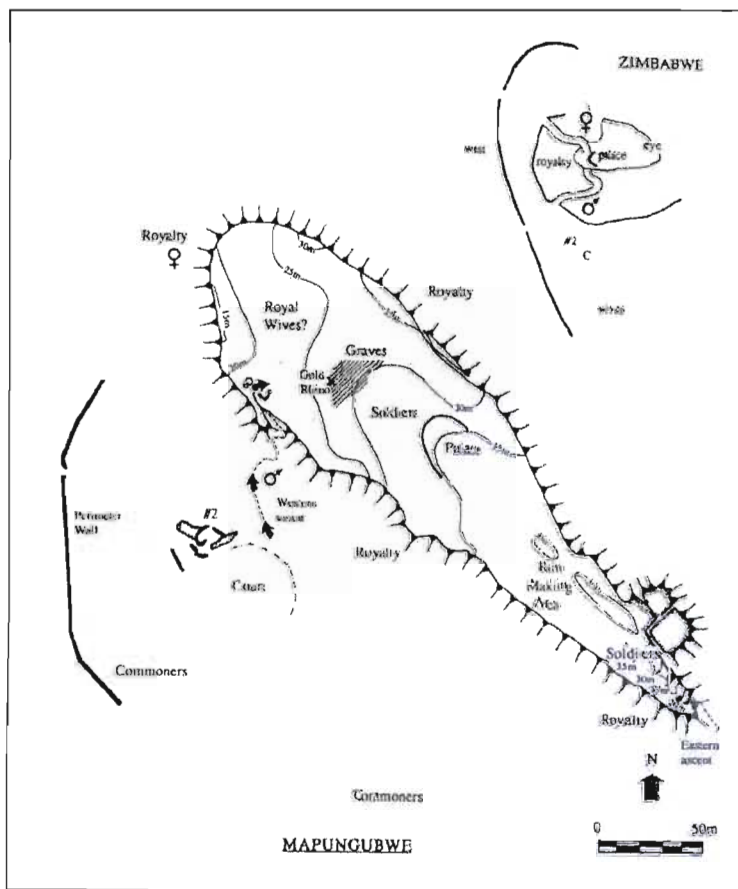


Illustration 24: Schematic comparison and Great Zimbabwe (Huffmann, 2000:21).

At Great Zimbabwe there are two ruins found which indicate class distinction. The two groups of fortress complexes are located on a hill and at the foot of the hill. Elleh states that the site was possible chosen because of the gold reserve in the region and the good agricultural land (Elleh, 1997:209).

The ruins on the hill appear to have been the temple or a priest house and the other a chief house (Illustration 25). The structures were built form the local available material granite stone which was laid without mortar.

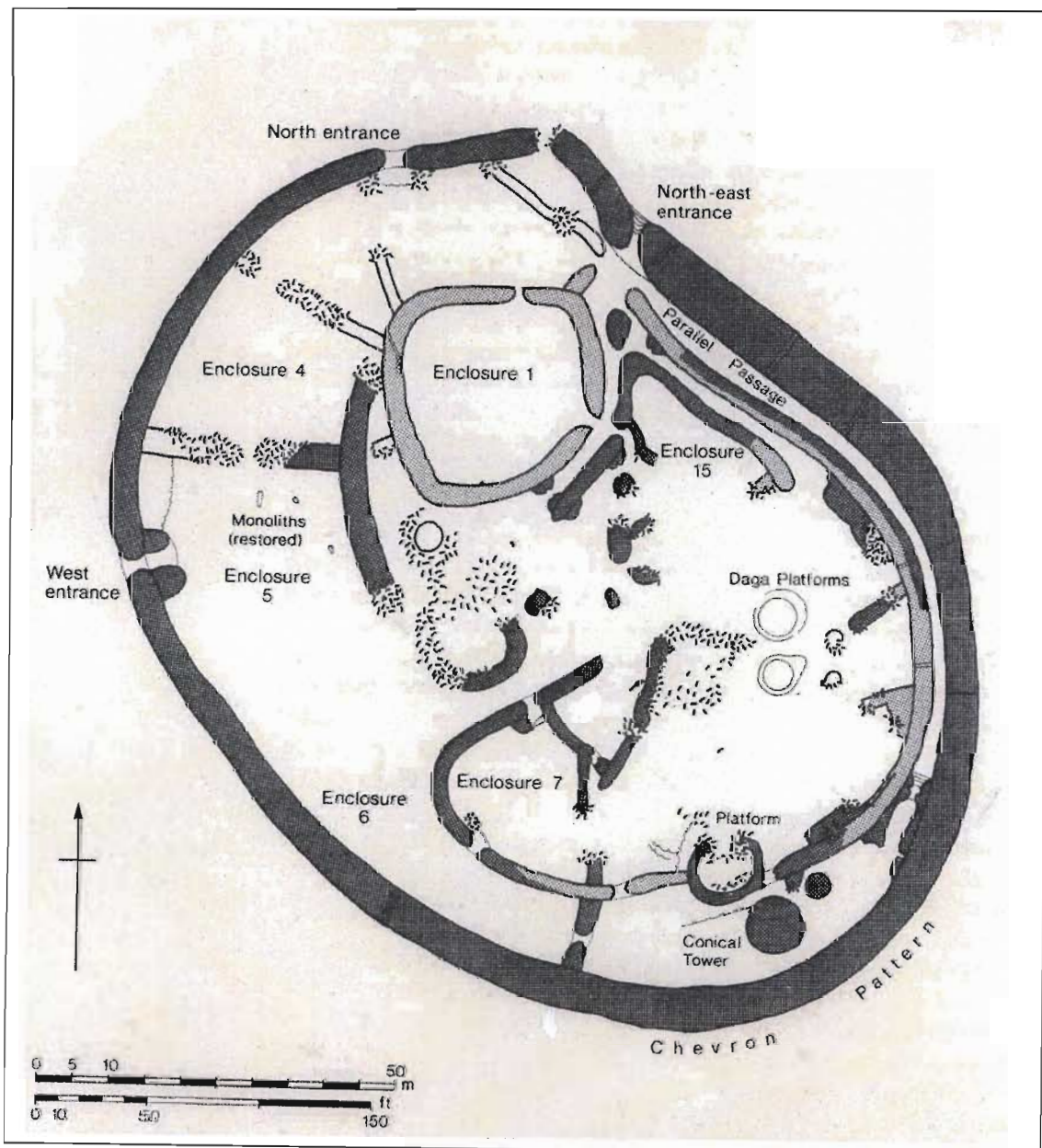


Illustration 25: Plan of chief house, Great Zimbabwe (Garlake, 1973:28).

The house was surrounded by a great stonewall about 3 meters thick and 10 meters high, which encloses an area of 90 meters by 65 meters. On top of the wall are statues of birds, which were used as a protection against lightning. These birds are also used in other cultures in southern Africa too (Illustration 26).

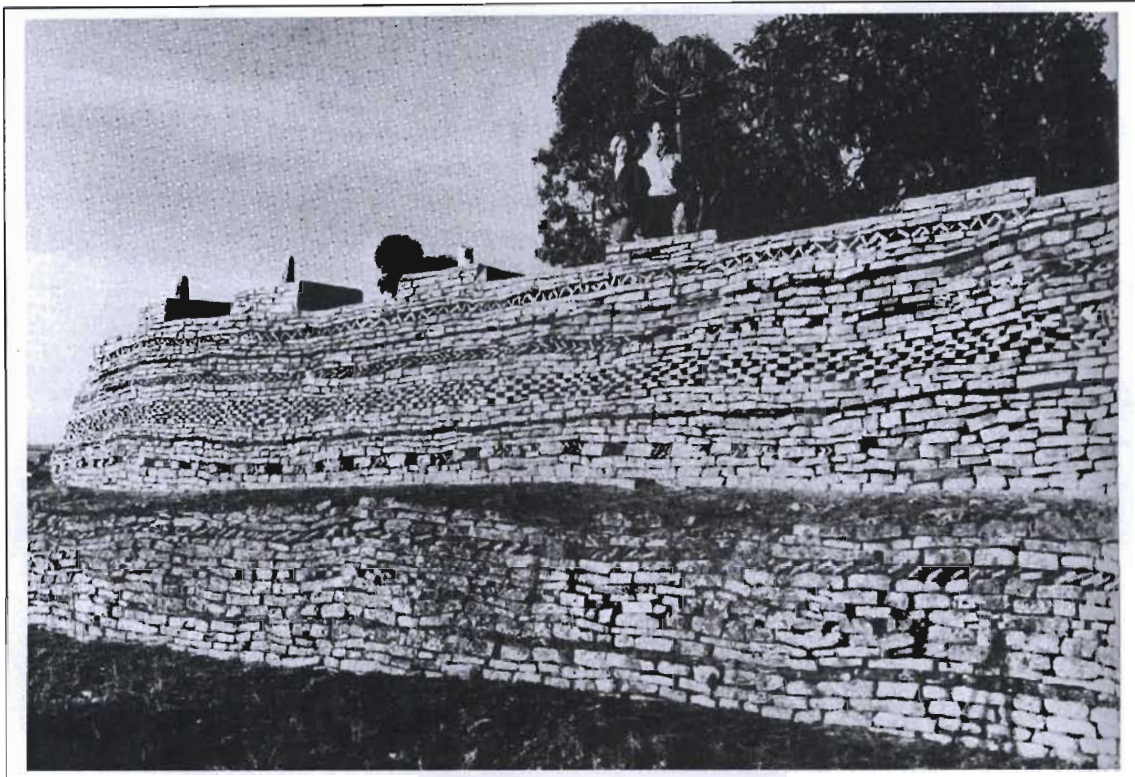


Illustration 26: Part of the stonewall (Mallows, 1984:128).

The wall was decorated with structural patterns, which are created through the arrangement of stones and by leaving gaps between the stones (Illustration 27). Moreover, in the chief's house, the building material is the same throughout with no variation in colour. According to Baumann, the structural pattern which is found at Great Zimbabwe is also used in West Africa, where it could have originated.

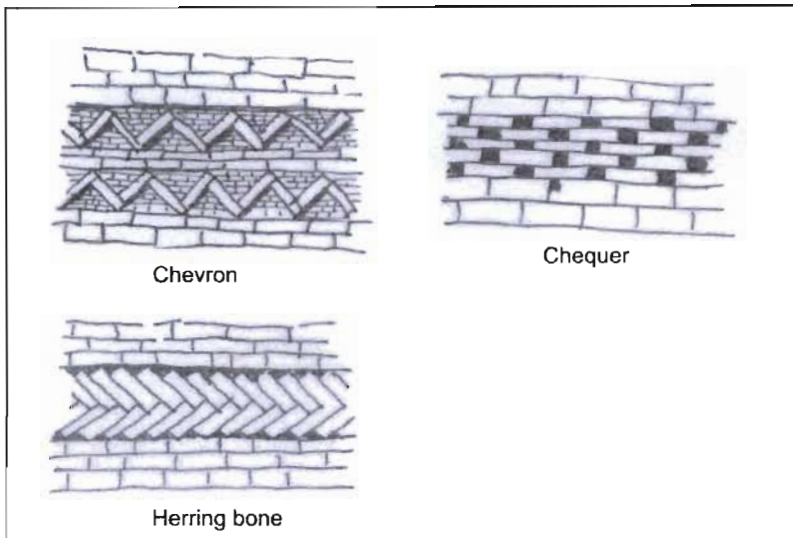


Illustration 27: Decorative pattern used in the stonewall at Great Zimbabwe.

The central cattle pattern is also found in the Bantu and Zulu settlement but it is arranged differently. The Zulu settlement layout adapted to the conditions of the regions with a smaller cattle kraal in the centre because of the need to farm. The layout shows the element of defensive spaces with the most important and secured space in the centre within the formation of concentric circles (Illustration 28).

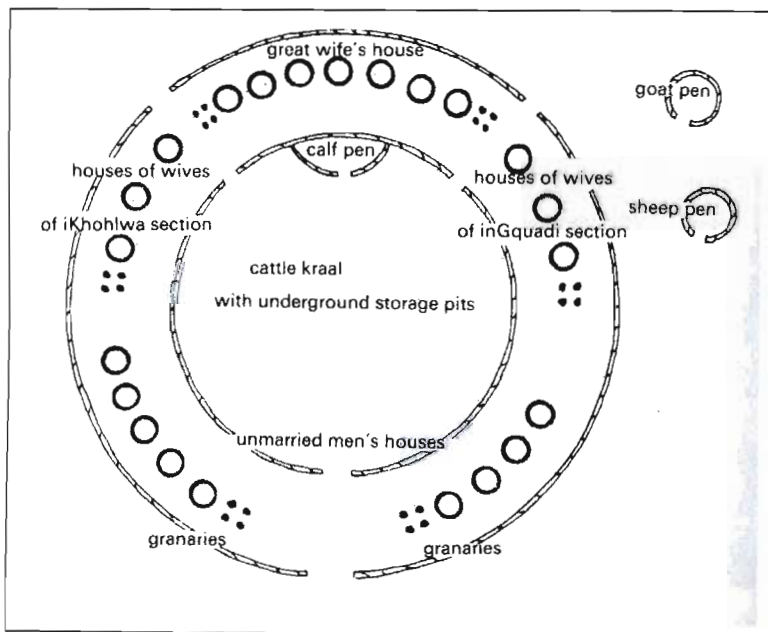


Illustration 28: Plan of Zulu Village (Denyer, 1978:112).

The houses are beehive-shaped huts using the framework of sloping caved with thatch or corbelled stone structure. (Illustration 29) The houses have adapted to mud structures which can be seen in Venda, so that the house could be decorated with patterns. These decorative motifs were abstractions of human figures, animals and nature such as trees (Illustration 30).

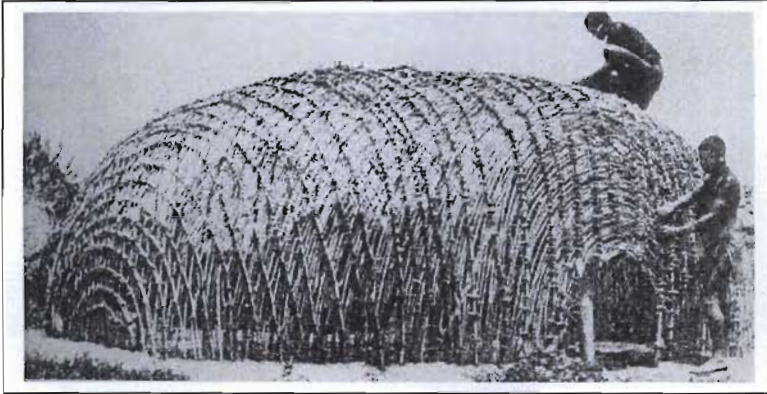


Illustration 29: Zulu hut made of thatch (Denyer, 1978:113).

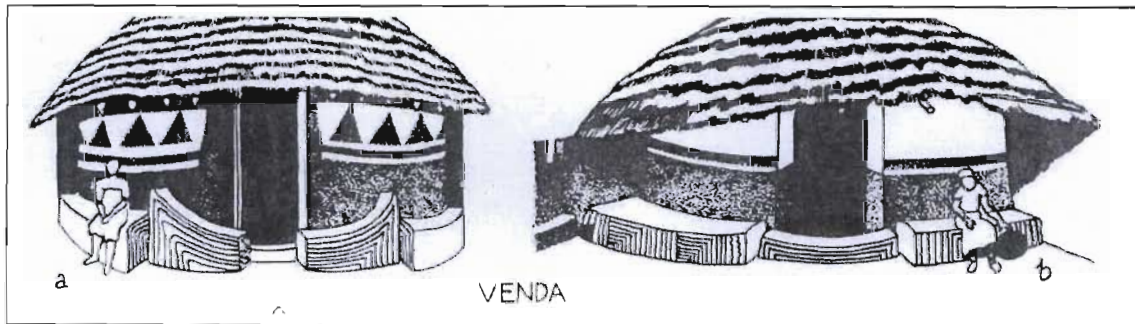


Illustration 30: Venda house with decorative patterns (Oliver, 1975:121).

4.3 CITY PATTERN OF COLONIALISM AND ARCHITECTURE

The influence of Western architecture, and the urban forms and forms of social interaction of Europe date back to the Roman times. Most of this interaction was based on the trade routes between Africa and Europe, hence the presence of Roman ruins in North Africa. This section draws attention to the major colonial era in Africa which started with the partition of Africa. During this time the colonial powers changed the African landscape drastically by employing their theories and values of social politics which are embedded into the architecture and urban form. The Western contribution of architectural styles relates to the different European countries influencing different regions. These countries include Britain, France, Portugal, Germany, Holland, and Italy. The theories upon which the architecture and urbanism based on will be highlighted through some examples of the British, the French and the Italian influence.

The different movements in architecture also enhance the political expression of the colonizers. The neo-classic is based on a revival of classic styles and was seen to be best suited to express order and hierarchy. Furthermore it underlined the political power of the ruling party or country. Therefore almost all European public buildings placed in Africa such as parliaments, courts and town halls are designed in the neo-classic style at first. Also the concepts of the modern movement were applied in designing African cities. This is visible through the separation of function such as living, working and leisure and further in separating race. As a consequence the areas in the cities were differently developed and the economic importance of the European settlers was prioritised. The creation of mono-functional areas is highlighted in the example of Algiers, a former French colony.

FRENCH

Architecture and urban design have been manipulated in the service of politics (Alsayyad, 1992:321).

The transformation of Algiers through the French influence was based on some of the modernist ideologies. "La Cite Industrielle" by Tony Garnier has been recognized as the founding document of modern planning by several planners at that time including Le Corbusier. This plan realized the desire of modernism for spatial separation of all functions in modern society. It emphasizes zoning in the urban layout, which Le Corbusier has adopted in the Plan Obus for Algiers. Le Corbusier incorporated formalism on social grounds in urban projects (Alsayyad, 1992). The Plan Obus was never implemented but the basic idea of separation of all functions such as living, work and leisure has been adopted. It was rooted in the concepts of modern movements that would have transformed Algiers into a satellite of French Capitalism. Le Corbusier proposed a rationalization and expansion of the new modern part of the city, where the existing pattern of the old city would have been untouched. The new business centre was proposed for the waterfront, which would be connected via a bridge over the old part of the city to the European resident district. It employed the concept of separation of the old and the new, or, one could assume an ethnic division (Illustration 31) (Alsayyad, 1992 :185). The concept of the Plan Obus has been included in French planning. Le Corbusier's idea of restricting the working class to the viaduct has been interpreted by the French into racial segregation.

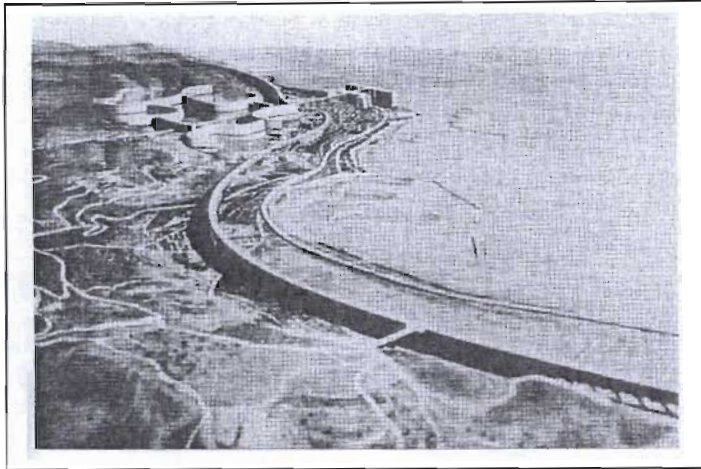


Illustration 31: Plan Obus, an aerial view designed by Le Corbusier for Algiers (Alsayyad, 1992:185).

The first intervention of the French was to destroy all indigenous property systems and apply their own vision. Therefore the traditionally urban pattern in Algiers was changed. The winding narrow street of the Islamic market was destroyed to accommodate the movement of the military troops and with that several buildings (Illustration 32). A large square was created for military purposes as a centre of control. Furthermore, existing structures such as mosques were converted into hospitals and churches. The private houses were transformed into European style residences. (Alsayyad, 1992)



Illustration 32: The Place d'Armes imposed on the urban fabric of Algiers (Alsayyad, 1992:189)

The French imposed their neo-classic architecture on the African colonies to emphasize their colonial occupation (Illustration 34). However, with the new policy of assimilation, the French attempted to associate with indigenous people and integrated the traditional building style. The neo- Moorish style was the outcome of the combination of Arabic and French architecture in Algiers as seen in the Government building (Illustration 33).

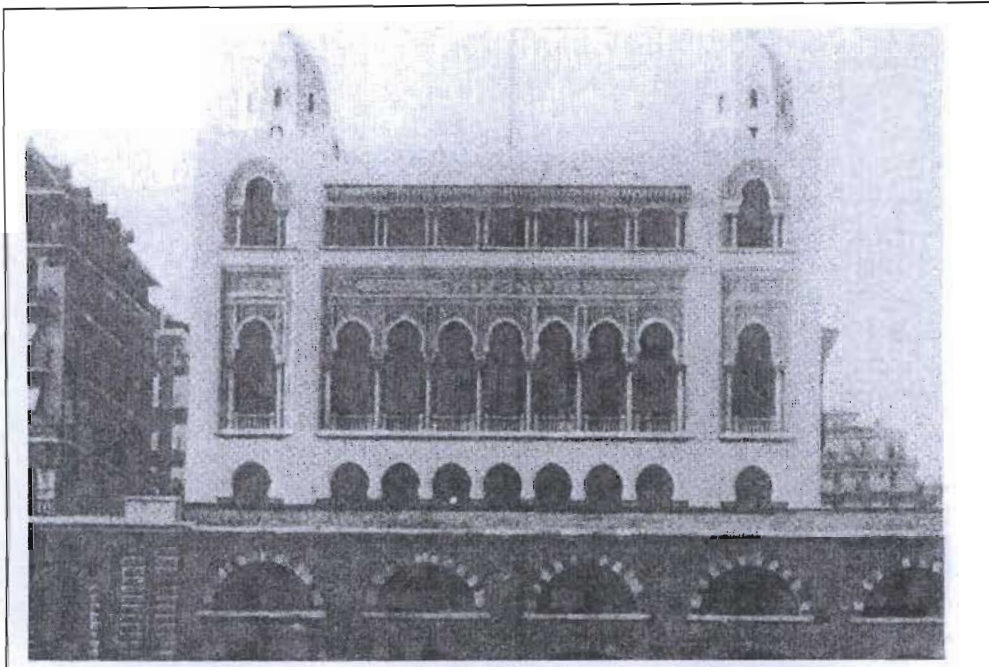


Illustration 33: Government building in the neo-Moorish idiom in Algiers (Alsayyad, 1992:191)

A pro-colonist, Marrest, wrote that “we conquer the hearts of the natives and win their affection as is our duty as colonizers” (Elleh, 1997:59). This explains the policy of assimilation, which was used towards greater gain for France through recreating their home environment in the colonies. Furthermore, the colonies were used for experimentation to find appropriate solutions for problems in France and embedded in the urban planning policy. Therefore, boulevards and the intersection of diagonal roads were imposed in the African urban cities. The planning principle is based on Baroque planning, connecting all the important places and buildings of the city through vistas. The street façade of the new part are mainly of the neo-classic style (Illustration 34).



Illustration 34: Aerial showing the neo-classic part of Algiers (Alsayyad, 1992:247).

ENGLISH

The English have a long history on the African continent, which is indicated by several architectural styles; the first architectural construction of the British in Africa was the fort, like the Portuguese. Other building types were built such as commercial and administrative buildings. Residential buildings were mostly of Victorian and Edwardian style. These buildings are found in the former English colonies in Africa, including South Africa. The principles of British in planning and architecture can be seen in Pietermaritzburg. Other public buildings in South Africa express the neo-classic styles mainly used for such building types. The architect Herbert Baker and others established the idea of the imperial style of architecture in South Africa, notably in significant buildings such as the Union Buildings and the Supreme Court in Johannesburg.

The typical layout of the English towns was based on a square or rectangular layout, with numerous long and short streets, with a grid-iron layout (Illustration 35). The usage of the lots or erven is not simply based on agriculture but also for commercial and public purposes (Haswell, 1984:41).

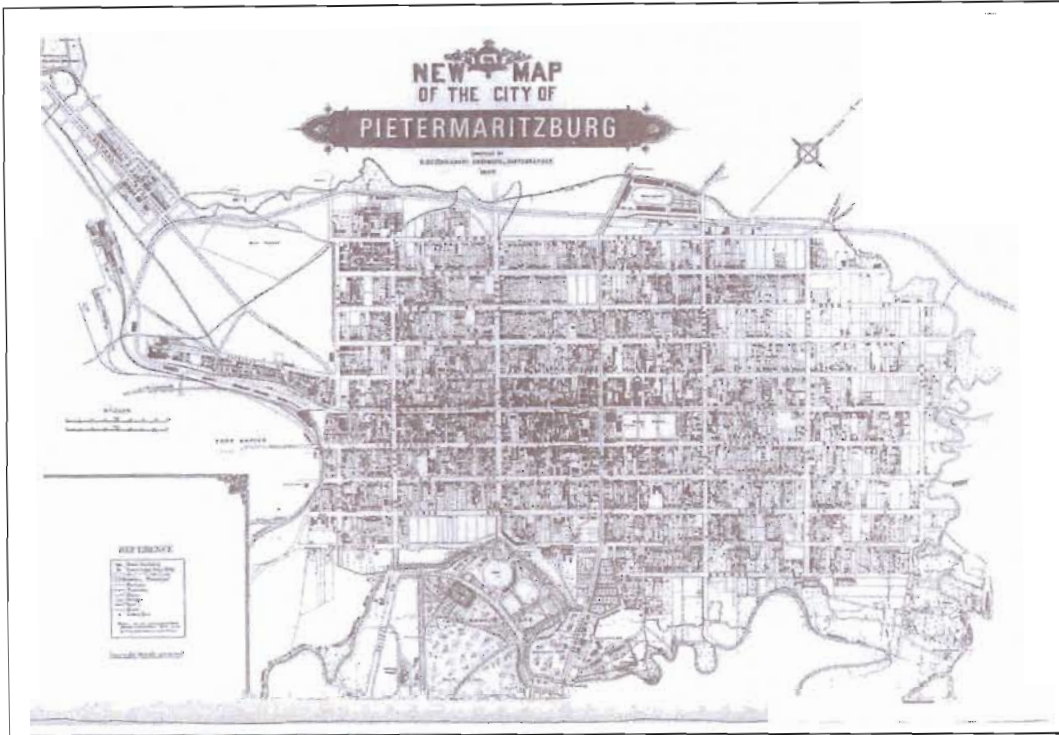


Illustration 35: Showing the general plan of Pietermaritzburg (Haswell, 1984:50).

The English would position the houses in an irregular pattern on the plot. This placement of the house would however be structured in a manner to accommodate a front garden. The streetscape includes Georgian and Victorian houses. The English churches are Anglican and Methodist, which are placed in one even with an adjacent churchyard. The church is not placed on its own prominent site as in a dorp, but rather it is made to fit into the layout of the grid. For the English the more important buildings are public and administrative buildings, especially the town hall. As a result the town hall would dominate the skyline of the town.

Commercial activities were an important consideration for planning and as such, the creation of commercial streets and corner stores followed. In English towns, the central market square would mainly later be transformed to house the prominent Town Hall and either administrative or public buildings and corner stores. Significant public buildings of the British throughout Africa were the court house, the parliament and City Hall, which were mainly designed in the neo-classical style.



Illustration 36: Legislative Council Building, Pietermaritzburg 1989 (Allen, 1986:143).

The Union Buildings in Pretoria were designed in 1910-1912 by Baker who designed several public buildings in the image of the British architecture. (Illustration 37) The structure is a monumental symmetrical complex with colonnaded parts in the center and wings on both sides. It is situated on a hill to over look the city as a result the site emphasis the importance of the building. The Union building is similar designed to the crescent in bath in English which could have been the inspiration. (Illustration 38)



Illustration 37: Part of the Union Building, Pretoria (Rencken, 1989:0)

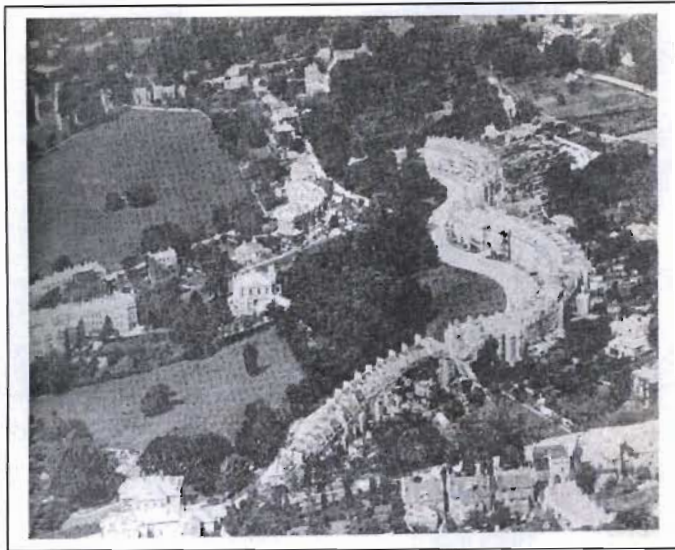


Illustration 38: The Crescent in Bath, England (Bacon, 1974:183).

The building is designed in the Renaissance style combined with English and Italian Renaissance elements; for example, the columns, arched courtyards and stone work. Moreover, there are elements of Cape Dutch details included; such as the main doorways with a fanlight decorated with wrought iron cast detail. (Illustration 39)



Illustration 39: Cape Dutch element showing the decorated fanlight (Rencken, 1989:19).

The City Hall in Cape Town is another important building designed by Reid and Green. It is designed in a classical style, with a grand portico over the double stairway which leads to the main entrance hall on the first floor (Illustration 40).

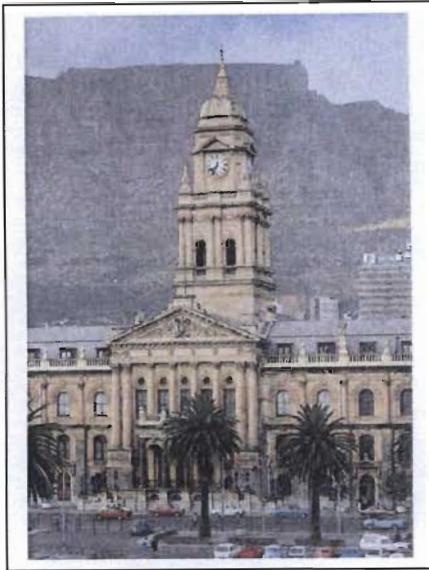


Illustration 40: City Hall, Cape Town 1905 (Allen, 1986:141)

ITALIAN

The Italians occupied regions in Africa late in comparison to other European countries. The aim was to integrate the colonies as sister states of Italy because of the heritage of the Roman Empire in the northern part of Africa. The Italians had colonies in Libya and Ethiopia where the ideology was based on the expansion of Italy and to regain the former great status of the Roman times. The structures of public character were represented in the governor's residence, churches, monuments and large piazzas.

The Roman influence in architecture is evident in the colonies such as the reproduction of the ancient classical house. It was seen to be best suitable for the region and it already existed. Alsayyad states that the Italians renamed the existing indigenous houses as Roman and Italian heritage to justify their use (Alsayyad, 1992:219).

The construction of monumental architecture was intended to underline the power of Italy such as the Arch in Tripoli, which is based on the Grand Arch in Rome (Illustration 41). The difference is that it attempts to integrate the climatic

conditions of Libya in the use of the available material. Furthermore, elements of the indigenous architecture are included in modern architectural language.

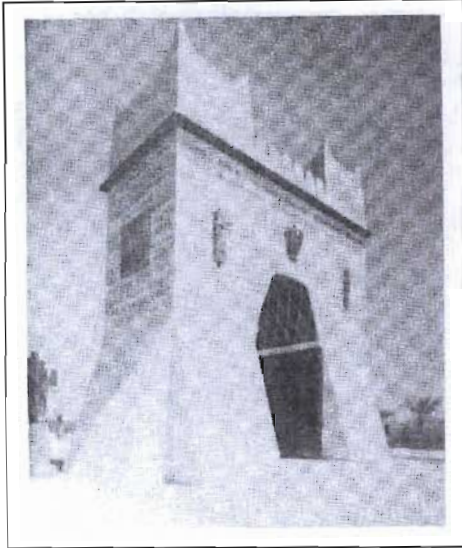


Illustration 41: The Arch in Tripoli (Alsayyad, 1992:219).

Carlo Enrico Rava, an Italian architect, debated the idea of naming the new colonial structures Mediterranean, because the building would be both Italian and African. Moreover, it meant it was modern in the functional and historical manner (Alsayyad, 1992). The Governor Volpi's villa in Libya is based on the planning principle of the tradition Roman house courtyard design (Illustration 42). The courtyard was placed in the centre with a fountain or bath and the rooms were built around it with an arched walkway.



Illustration 42: Governor Volp's villa in Libya (Alsayyad, 1992:221).

The planning of the cities in the colonies was based on the segregation of race and in zoning of industrial, residential and business areas. Civic offices and military facilities were placed in the city centre where new monumental architecture was erected to emphasize the Italian authority. The black population in the colonies was situated at the outskirts of the city in order to become invisible to the colonizers. Therefore, the traffic of caravans of the indigenous people was channelled away from the white areas and the city centres. The traffic was directed straight into the market of the black people's quarter. Barriers between the white and black areas were created with natural boundaries such as green bands or water, as in the case in Addis Ababa (Illustration 43).

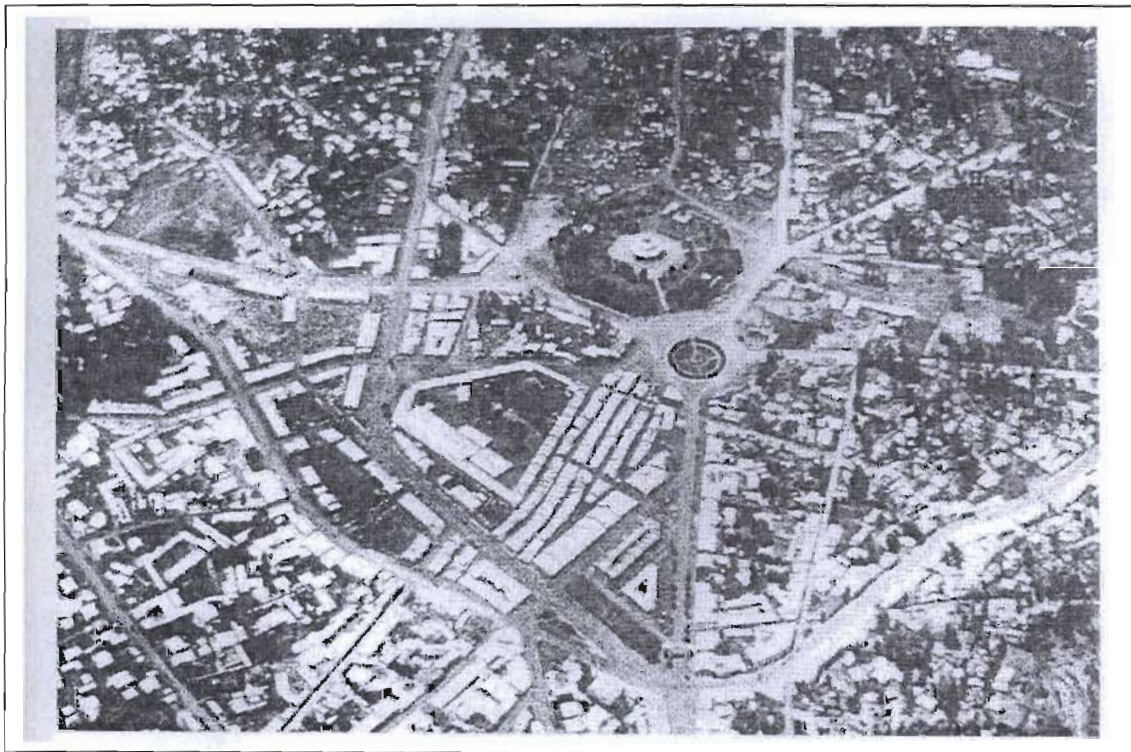


Illustration 43: Plan of Addis Ababa (Alsayyad, 1992:232).

4.4 CONTEMPORARY ARCHITECTURE

In this context, contemporary African architecture can be dated as the architectural expression of the African States since their existence. The founding of these states varies from the 1960's to South Africa gaining its independence in 1994. The following few examples will highlight the direction some architects have taken to combine all cultural aspects of contemporary societies. The search for an African identity in architecture is visible through these various attempts and it is not possible to say that there is one African style, because the different cultural traditions have diverse architectural expression. The Constitutional Court in Johannesburg is an important example to be analyzed because of its unique South African context.

CONSTITUTIONAL COURT, JOHANNESBURG 1998-2004



Illustration 44: Constitutional Court, Johannesburg 1998-2004 (Anonymous, 2004:12).

The Constitutional Court in Johannesburg was designed by OMM Design's, and Urban Solution, to express and reflect the new democratic Constitution of South Africa. The site of the Old Fort in Braamfontein in Johannesburg was chosen because of its main attraction as connection to the past its symbolic meaning.

The idea was that the building should combine symbolically the history and the future of South Africa. Therefore, the whole precinct was aimed to be developed under the name of Constitutional Hill (Illustration 45). The site was seen as one of national memory and a place for daily use to revitalize its immediate neighbourhood.

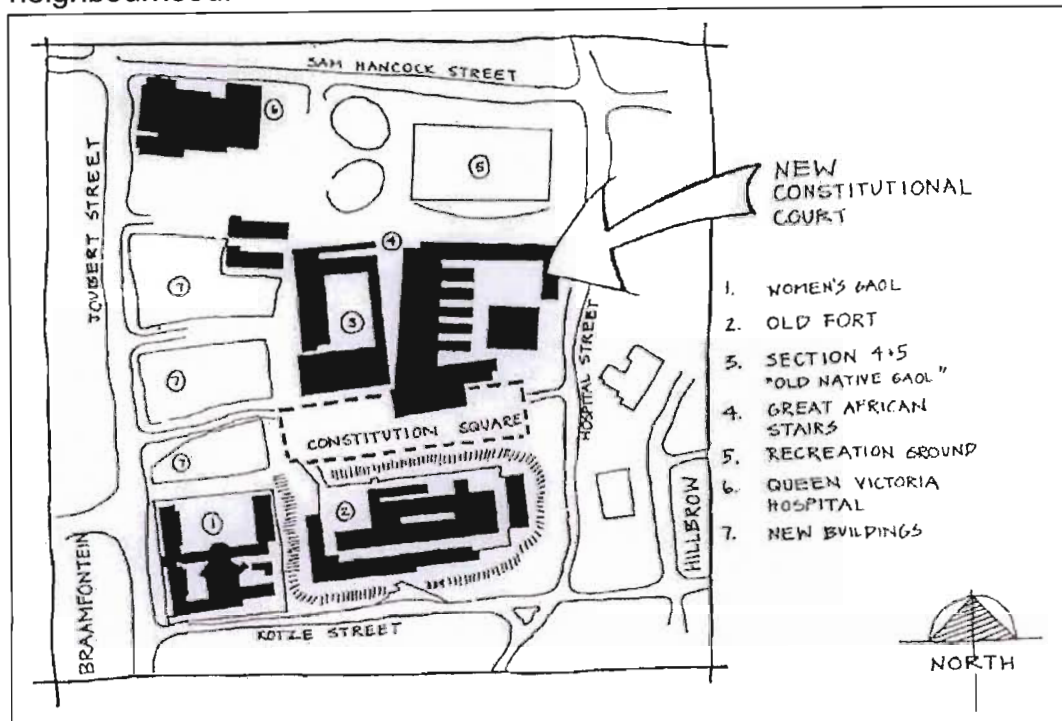


Illustration 45: Site plan showing the Constitutional Hill Precinct (Peters, 2004:2).

The concept of the design was to create a new South African architecture which would include the social and cultural aspects of the society. It would also express power without using the concept of monumentality. Hence, the structure was positioned to connect to its environment by creating the Great African stairs which lie next to the exhibition gallery and the administration block. These stairs are a series of terraces stepping down the steep site facing north (Illustration 45,46).



Illustration 46: Section through the site showing the slope down the Great African stairs (Peters, 2004:2).

The building had to respond to the climatic conditions of the area in that it included the principles of energy conservation such as natural ventilation. The areas of the court and auditorium were air-conditioned. A system of passive cooling is used where hot air is flushed out and cool night air drawn into the building. The structural mass is cooled at night and cools the interior for thermal comfort. If the heat rises during the day a fan is activated to draw air through the rock compartment (Peters, 2004) (Illustration 47,48).

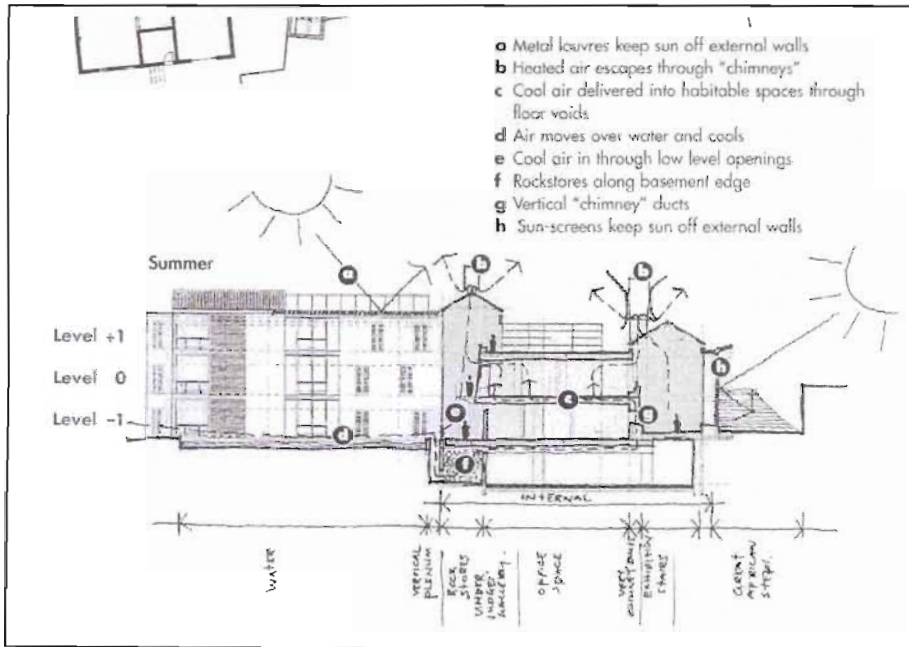


Illustration 47: Section showing the techniques for environmental comfort in summer (Peters, 2004:4).

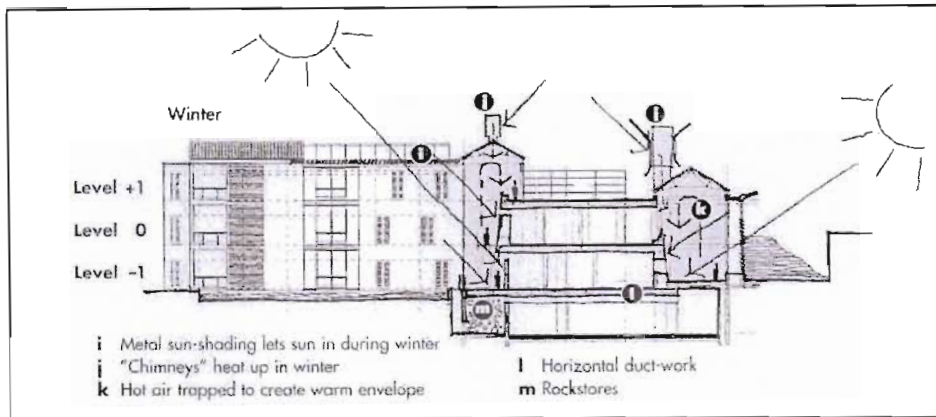


Illustration 48: Section showing the techniques for environmental comfort in winter (Peters, 2004:4).

The building is composed of a series of rectangular shapes including several small courtyards between the judges' chambers. Furthermore, the entrance and main foyer are connected to the Constitution square. The tower at the entrance of the building creates a landmark. The tower is an important element in the architecture of public buildings in European culture, but also in Africa, such as the Minaret in Islamic culture. It becomes a landmark and orientation point for the area.

Decoration of mosaic and art work underlines the identity of the building in its context. The columns in the exhibition arcade were decorated with mosaic art and the areas visible to the public were enhanced too. (Illustration 49)

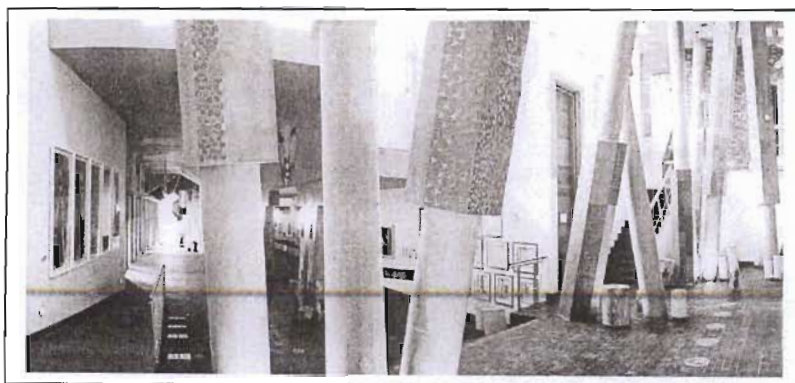


Illustration 49: Mosaic art on tilted columns by Jane du Rand (Peters,2004:4).

THE MPUMALANGA PROVINCIAL GOVERNMENT COMPLEX

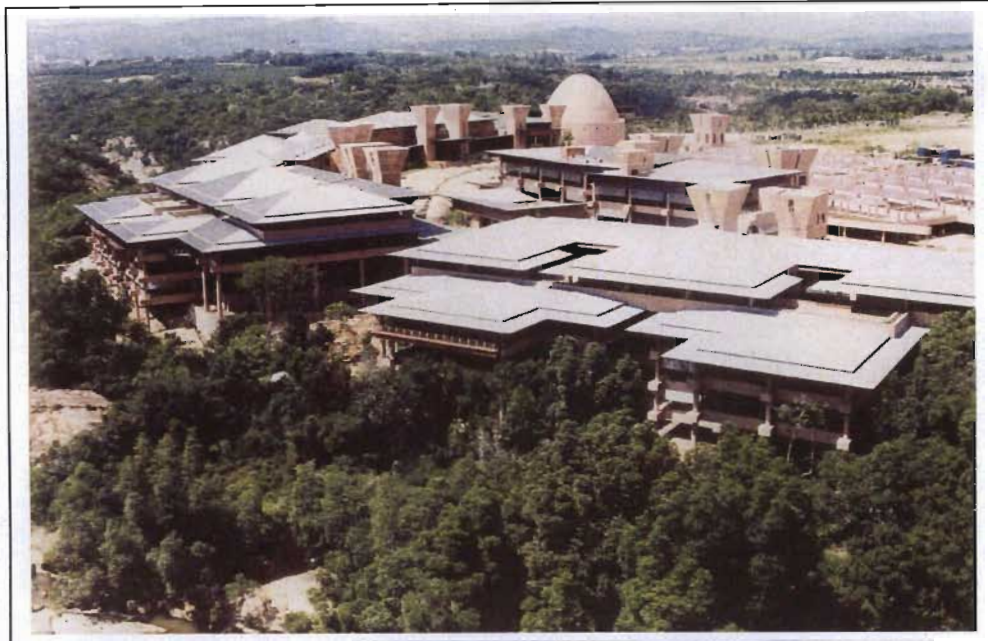


Illustration 50: The Mpumalanga Provincial Government Complex (Malan, 2001: 101).

The building was designed by Meyer Pienaar Schnepel (MPTS) and completed in 2001. The site was donated to the province by the owner. The brief of the complex was to create a seat for the legislative body of the province and to include administrative offices for the different departments.

The building is informed by several precedents drawn from the South African and international contexts. The Union Building was examined with its solid crescent shape dominating the landscape so that its power would be interpreted differently. The architects' aim was to create a more sustainable and respectful approach of integrating the building with the natural environment. Therefore, the shape of the crescent was used but with smaller building structures and the buildings height was limited to the maximum height of the trees. In between the buildings, relief outdoor spaces are created with include the natural landscape. The stepped landscape in front of the Union Building could be translated as the parking level which was set at a level lower than the buildings so as to have a clear view of the landscape without interruption.

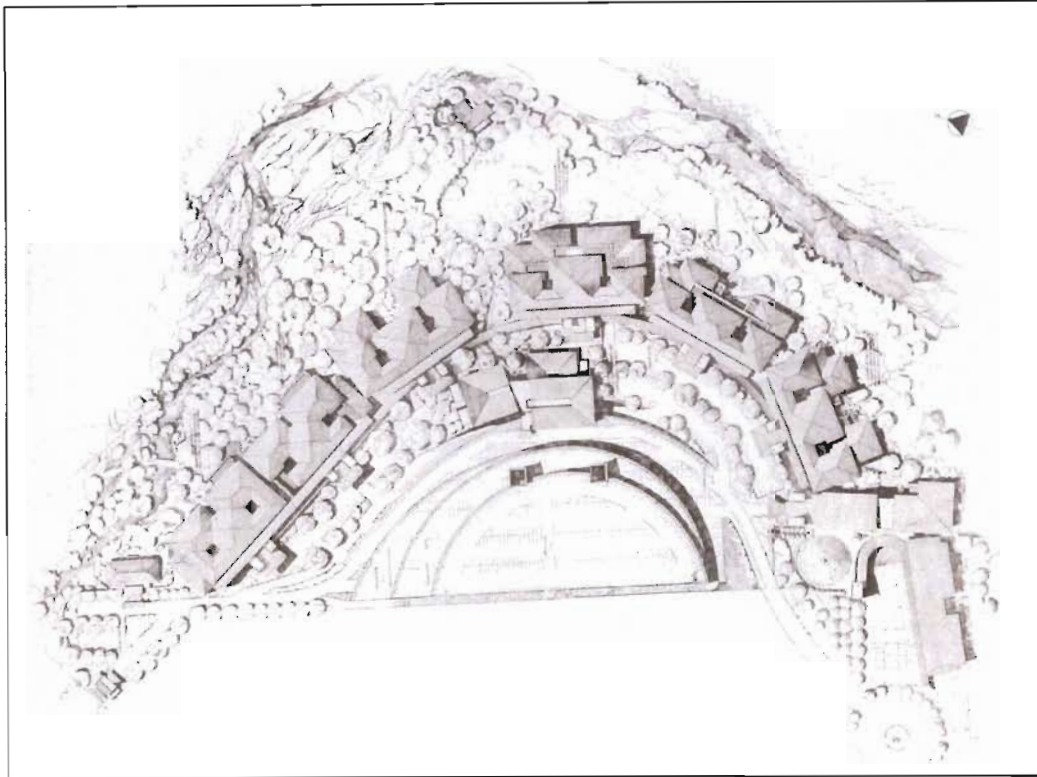


Illustration 51: Plan of the Government Complex (Malan, 2001: 26).

The plan shows how the building complex engages with its environment and the outer circle facing the forest and river is more open with verandas and featuring trees in the deck structure. The inner edge looking towards the parking deck is more solid integrating with the functional circulation areas. The area around the legislative dome has a grand plaza of more organic shape than the rest of the buildings, which are rectangular shapes (Illustration 51,52).

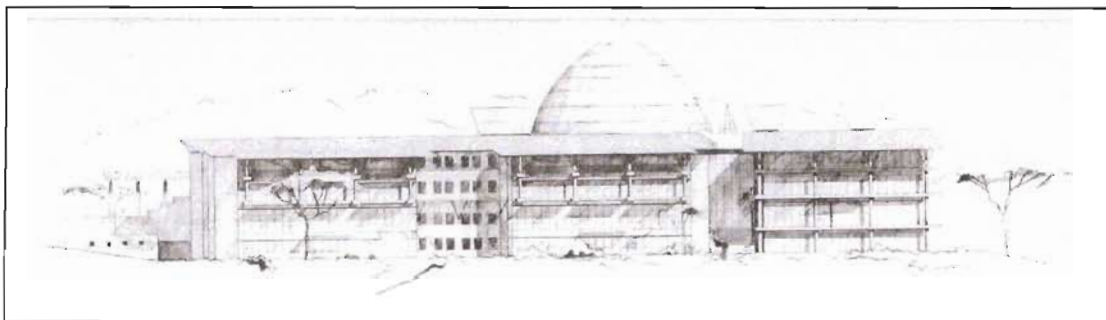


Illustration 52: South elevation showing how the building relates to the forest (Malan, 2001: 37).

The tower shapes placed within the inner circle are used as service facilities for the buildings. The model from which they were derived was the differently shaped in Great Zimbabwe and could further be linked to the granaries used in traditional Africa. These towers were also used to define the entrance, which is achieved to create a grand entrance. They are set on a podium and the scale of the column symbolizes the power of the function (Illustration 53). It has been transformed into the contemporary architecture language, which relates to classical architecture in Europe and traditional African architecture, which uses iconography to enhance the building structures.

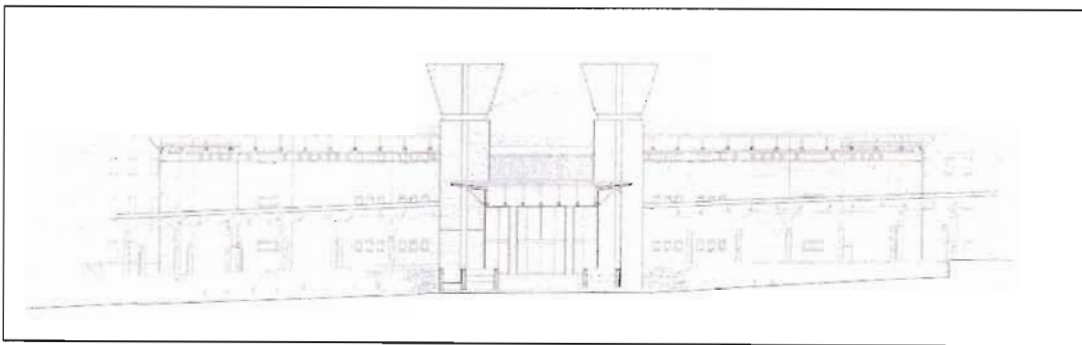


Illustration 53: Main entrance on the West elevation (Malan, 2001: 31).

The precedent of the dome of the Legislative building is the corbelled stone domes in the Karoo, a vernacular structure. (Illustration 54) The dome in the government complex is only structure used as a landmark and is a symbol for the province. It is constructed of structural pre-cast concrete ribs clad with brick panels cast on site.



Illustration 54: the corbelled stone domes in the Karoo as precedents for the dome of the Legislative (Malan, 2001: 75).

The influence of vernacular architecture in South Africa is evident in the design such as the scale of the buildings, the forms, the textures and decoration. The use of pattern on the wall was done mainly by women using traditional patterns translated into a contemporary idiom of African structures. The room of the Legislative has been decorated with patterns to create its identity. The synthesis of Western and African elements creates a South African identity that embraces past and future tendencies (Illustration 55,56).

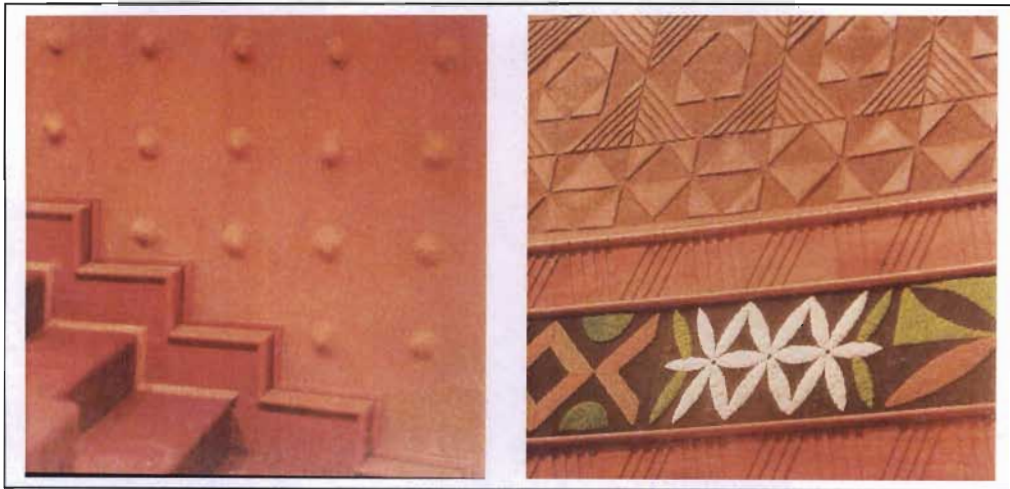


Illustration 55: Patterns used building (Malan, 2001:45).



Illustration 56: Room of the legislative (Malan, 2001: 39).

OAU CONFERENCE HALL, ABUJA 1991



Illustration 57: OAU Conference hall, Abuja Nigeria (Frampton, 2000:202).

The OAU Conference Hall, designed by Albert Speer and Julius Berger, is situated in Abuja, Nigeria. The building is located in the international zone of the city and the architects' aim was a response to the context of Africa. Therefore the shape refers to the traditional African building form in that it is a low-rise structure. The construction is based on a large hall with a large curved roof with spans of 70 meters and supported by large columns in two rows. The columns' sizes are important and create a link to traditional African architecture where important building functions are highlighted through decorative columns as in the Yoruba palaces. In the conference hall the columns are enhanced through red colour. The building has a prominent public space in front with a fountain, emphasising the significance of the function it houses (Illustration 57).

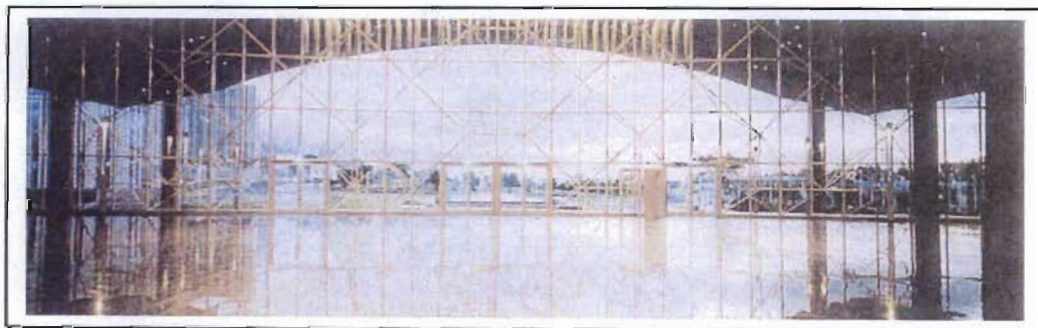


Illustration 58: Conference Hall showing the transparency (Frampton, 2000:203).

The materials used are mainly glass and steel, which at night create the transparency of the building. This could symbolize the openness of the OAU to its members. The conference hall can seat 1,800 people and is equipped with state-of-the-art audiovisual services (Illustration 58). Other facilities are included such as committee rooms, VIP conference areas, dining facilities and a presidential lounge in the adjacent building (Frampton 2000).

Another example is the Headquarters of the Bank of West African States, Ougadougou, Burkina Faso, which shows the aim of creating a new African architectural identity. The Headquarter was designed by Wango Pierre Sauwdogo and was completed in 1990. The structure consists of cubic forms including elements of traditional African architecture. The Islamic influence is visible through the small windows in the tower attached to the main building. The building material is of current technology combined with traditional building techniques to emphasise Africa's cultural heritage (Illustration 59).



Illustration 59: Headquarters of the Bank of West African States, Ougadougou, Burkina Faso (Frampton, 2000:200).

4.5 CONCLUSION

The foregoing discussions about traditional architecture express the ideas, and community dialogue implicit in the designers: and also all the dynamics that influence the architecture, such as the complex component of the Yoruba style or various cultural functions. Various religious buildings manifest the verticality and monumental architectural expression which is visible within the limits of the technology and material available to them, as is evident in the Islamic architecture across Africa. The materials used are mainly dependent on the region with most settlements built in mud, wood, stone and thatch. The diverse functions articulate the diversity and complexity of architectural form with aesthetic details through decoration, symbolic form and architectural motifs. The circular form is an important element that has been used throughout the different ethnic groups significantly placed in the settlement as a meeting place, market or kraal.

The influence of the colonial era is still visible in the architecture and the urban form that was applied by the different colonial powers. The main principle was to create spatial separation within the cities according to racial distinction, which was interpreted from the modern movement of separation of function. Public buildings were mainly designed as replicas of those in Europe in order to recreate the image of the colonial powers as identification. Buildings such as the town hall and parliament were represented in the classical style such as the town hall in Cape Town. On the other hand, the urban planning principles were based on the modern movement with integration of Baroque and other principles, as seen in the city of Algiers.

The examples used show how the different elements of African and European influence have been translated into contemporary architectural language. The elements used as decorative pattern have been recognized and well used in the Mpumalanga Provincial Government Complex. It is integrated into the natural

environment in a gentle way, while the other buildings are situated in the urban areas where the design of horizontal spread is not possible. The considerations are different because of the response to the neighbouring buildings and language of the immediate context. The Constitutional Court in Johannesburg attempted, with the Great African steps, the integration between indoor and outdoor facilities and synergy with the historical neighbouring building.

CHAPTER 5

PRECEDENT STUDIES

5.1 INTRODUCTION

Several examples of similar building types will highlight the architect's intentions of architectural expression, the arrangement of functions and the technology applied. The building will be analysed as to how it responds to its context and how it enhances the infrastructure of its city. The United Nations has placed several regional centres across the world in order to reach as many people as possible. Three UN buildings will be documented and investigated on the basis of their architecture, functions, style, technology and aesthetic form. Moreover, the symbolic element that expresses political unity, either of continental or of global entity will be examined. In addition, the two EU parliament buildings in Brussels and Strasbourg will be used as examples because the EU is based on a similar structure to that of the AU.

5.2 UN ORGANIZATION, CONCEPTS AND ARCHITECTURE

The United Nations or UN is an international organization that came into existence to address conditions prevailing after the Second World War on 24 October 1945, with 51 founding member states. In 2005 the UN consisted of 191 member states, which have representatives in the General Assembly and its President is elected from among these representatives. The forerunner of the United Nations was the League of Nations, established in 1919 "to promote international co-operation and to achieve peace and security". It was an organization conceived in similar circumstances during the First World War as the UN was at its time. The aims of the UN are to assist in resolving international conflicts, facilitate formulating policies and help to prevent further wars in the world. It is not a world government and does not make laws. It has placed several regional centres across the world with different departments and organisations. The four headquarters are in New York, Vienna, Geneva

and Nairobi. The Headquarters are linked through a network of information centres (UNICs), services (UNIS) and offices (UNOs) which are located in 57 countries. The informational support is provided through the centers and services for the affiliated countries. (United Nations www.org.un) (Illustration 60)

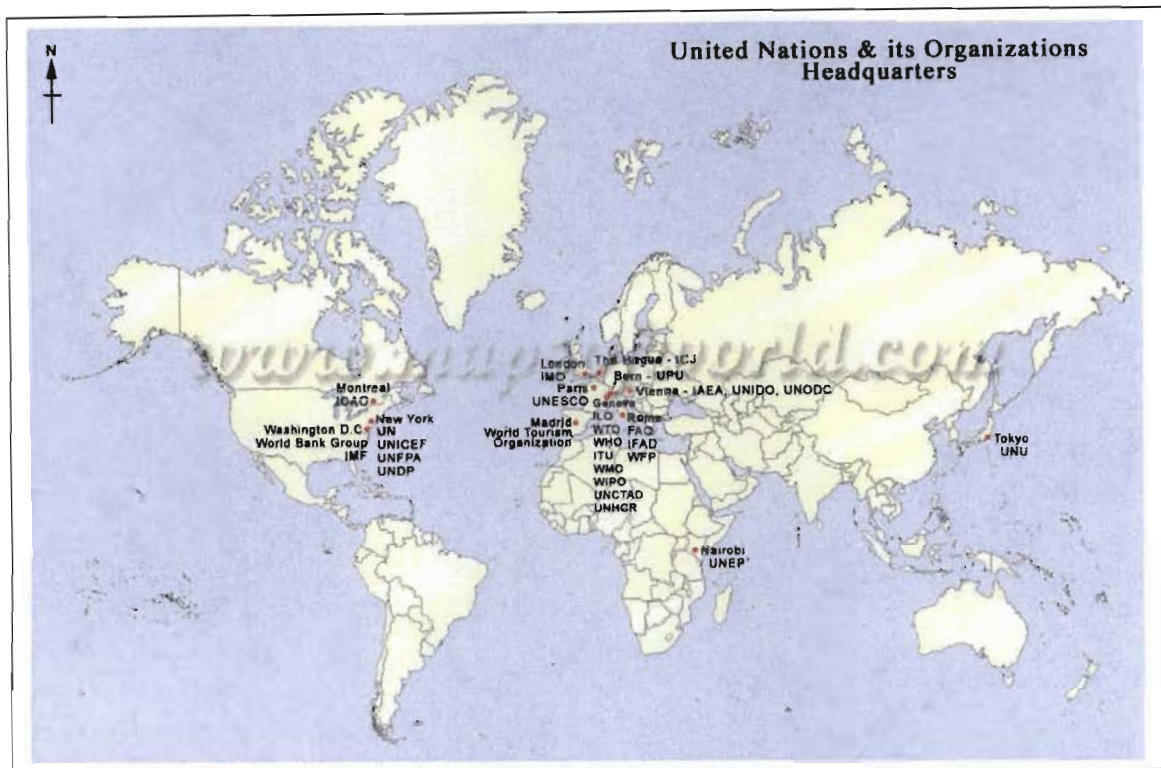


Illustration 60: Map of UN Headquarters and Organisation (www.mapsofworld.com).

The United Nations has six main organs. Five of them are based at UN Headquarters in New York: the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council and the Secretariat. The sixth, the International Court of Justice, is located at The Hague in the Netherlands. The Secretariat carries out the administrative work of the United Nations as directed by the General Assembly, the Security Council and the other organs. At its head is the Secretary-General, who provides overall administrative guidance, based in the Secretariat of the UN headquarters. (www.org.un) (Illustration 61)

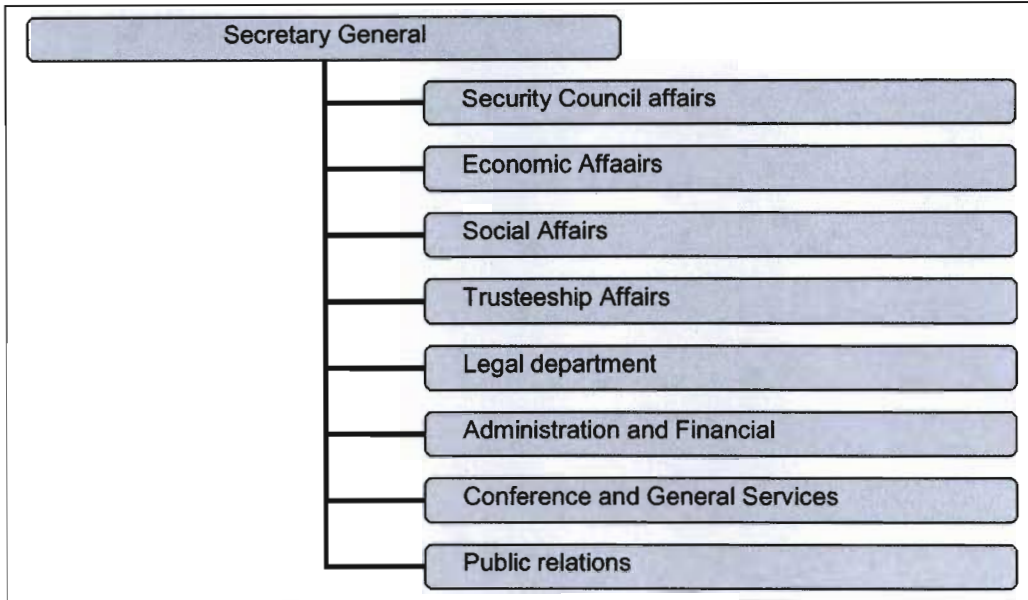


Illustration 61: The Secretary General with the eight departments.

The largest headquarters is in New York consisting of 5000 UN staff, the next is Vienna with about 4000 staff. The smallest headquarters is in Nairobi with 3000 staff.

UN – HEADQUARTERS, NEW YORK 1948-1952

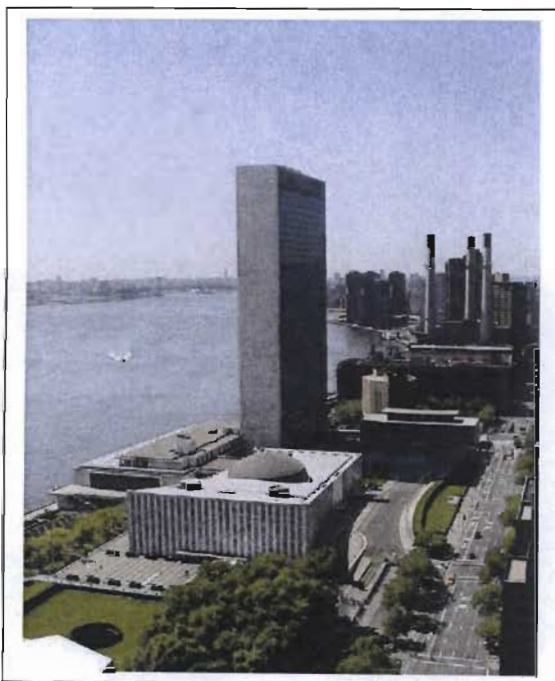


Illustration 62: UN Headquarters New York (www.emporis.com).

The UN Headquarters in New York was designed by the planning office under the direction of Wallace K Harrison. A board of design consultants assisted the team that was given the project. They were comprised of well known architects such as Oscar Niemeyer and Le Corbusier. The site for the building consists of 18 acres. It was bought by John D. Rockefeller in Manhattan and donated to the United Nations. The site is located on First Avenue between 42nd Street and 48th Street and next to the East River. The entire area around the site had to be change in order to accommodate the headquarters. The heavy traffic along First Avenue has been rerouted through a tunnel past the site and the street has been widened to enhance the importance of the UN complex. (Churchill, 1952) (Illustration 62,63)

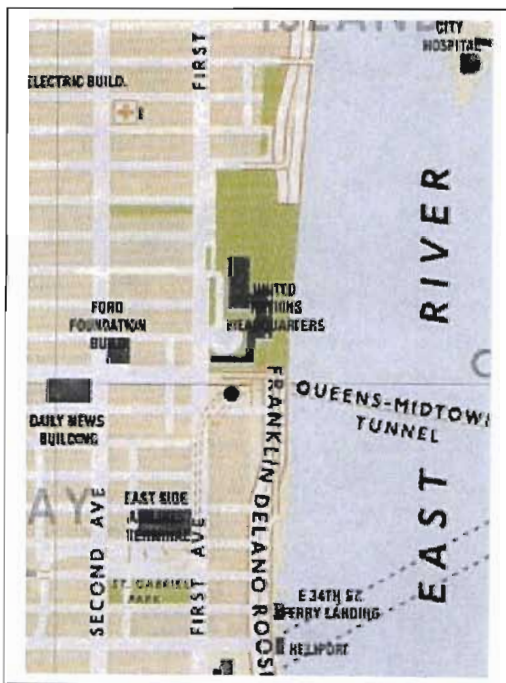


Illustration 63: Location Map of Manhattan showing the site of UN Headquarters (Fischenbeck, 28.12.2005).

The concept of the building form is based on early sketches by Le Corbusier (Illustration 64). The vision of Le Corbusier for the United Nations Headquarters was based on an idea of a 'world capitol' including a secretariat, assembly hall, a library, world legislative center and an entire city for the functionaries and employees. Le Corbusier initially perceived the site should be bigger than the area of Manhattan but it could not be accomplished (Moos 1985).

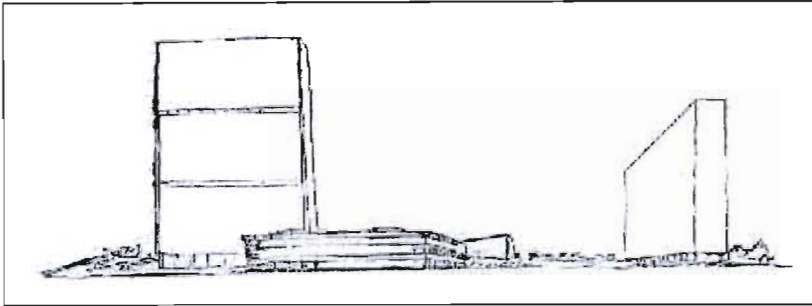


Illustration 64: Le Corbusier early study for the UN Headquarters in New York, 1947 (Moos, 1985:80).

The design of the UN Headquarters is based on five essential decisions made in the early stages such as that the complex would consist of four buildings, the Secretariat building, the General Assembly building, the Conference building and the Dag Hammerskjold Library. The secretariat would be placed at the south end of the site because of the highest daily population flow, so it would be close to the 42nd Street and the cross-town transportation. The building would be a high-rise structure to accommodate the large number of offices, which is easier vertically than horizontally, considering the cramped urban site at the East River. Its orientation was considered east-west to avoid the greater over-shading of the site, taking into account higher cost for heating and air-conditioning (Churchill, 1952) (Illustration 65).

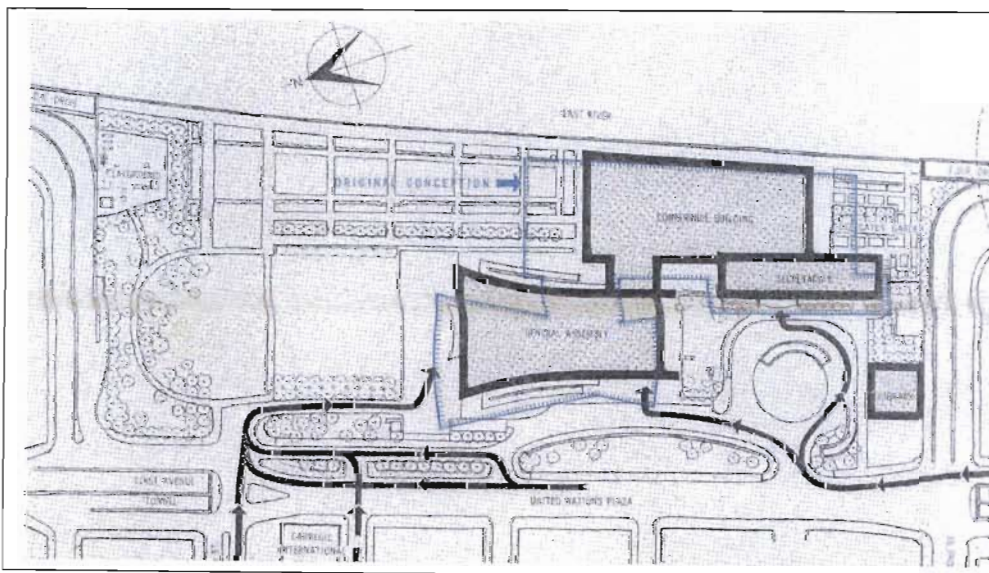


Illustration 65: Site plan of the UN-Headquarters New York (Churchill, 1952:106).

The Secretariat is a 39-storey building with three basements and it houses different departments of the United Nations. It visually dominates the group of buildings by its height and position next to the river with clear views. The three basement storeys are mainly used for services, parking and for a few additional conference rooms (Illustration 66)

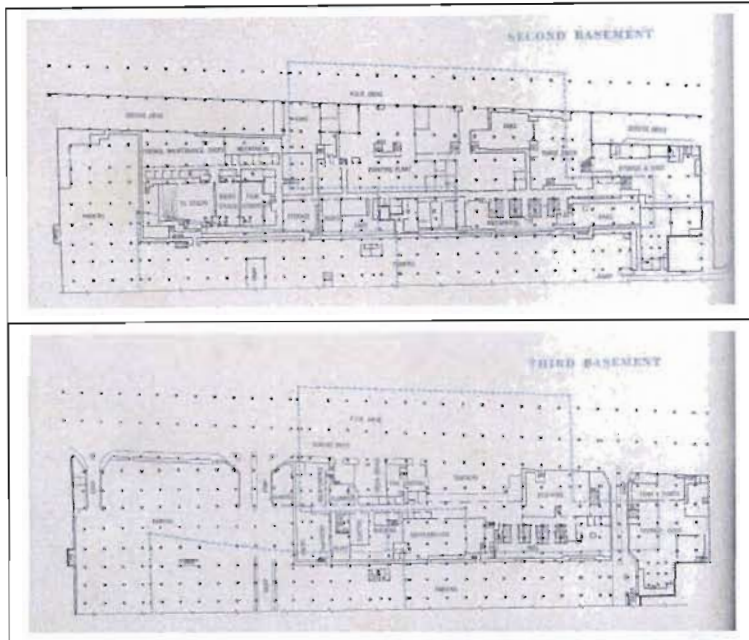


Illustration 66: Plans of the two basement levels (Churchill, 1952:108).

The national backgrounds of the staff have been considered and interpreted into the design so that the climate can be regulated in each wing of the building. Furthermore, all windows can be opened and heat-absorbent glass is used because of the hot West sun; however, it was not necessary for the east facade. The architects decided to keep it on all sides so that the building colour has the continuity of vast green glass facade. The large glass front has the problem of creating glare in the office which has been solved by using Venetian blinds in the interior. The utility floors of the Secretariat building are differently expressed with high grill bands, but its locations are not as rhythmic in relationship to the whole facade. It could have been placed in more dynamic way to enhance the verticality of the building (Churchill, 1952) (Illustration 67).

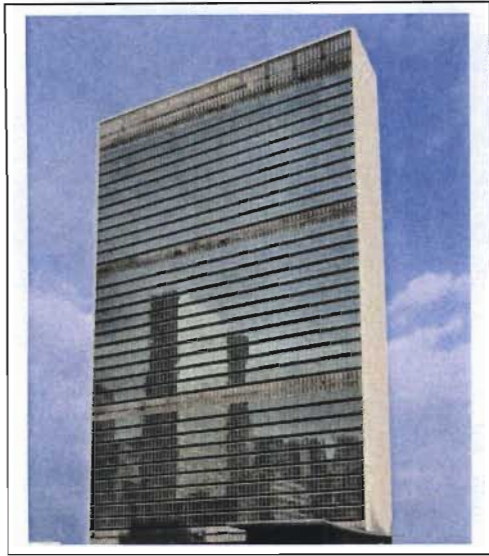


Illustration 67: Elevation of the Secretariat building (www.emporis.com).

The circulation in the UN Headquarters is based on the different groups of people that use the facilities such as the UN personnel, the public, the delegates and the press. Therefore several entrances for each group are provided (Illustration 68).

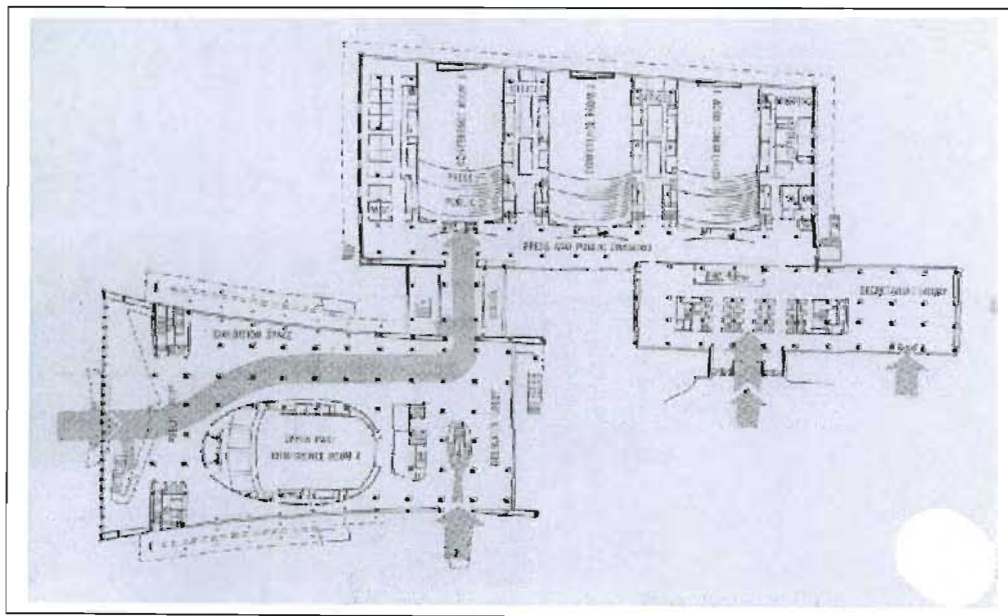


Illustration 68: Ground floor plan of UN buildings, showing the different entrances (Churchill, 1952:110).

The main entrance to the Secretariat building consists of a big open space and its interior treatment attempts to relate to the outside plaza with floor-to-ceiling windows. The plaza is a large open space of a circular form with pedestrian and car access. It is a dominated space to enhance the significance of the United Nations and is decorated with all flags of the UN members and underlined with a large fountain in the centre (Illustration 65,69). This concept is also used in UNO city, Vienna. On the other hand, the entrance does not have the same detailing of a grand entrance into a significant building. It rather seems to have been a later consideration in the design stage, with the canopy over the entrance being reminiscent of a Porte coheres at a hotel.

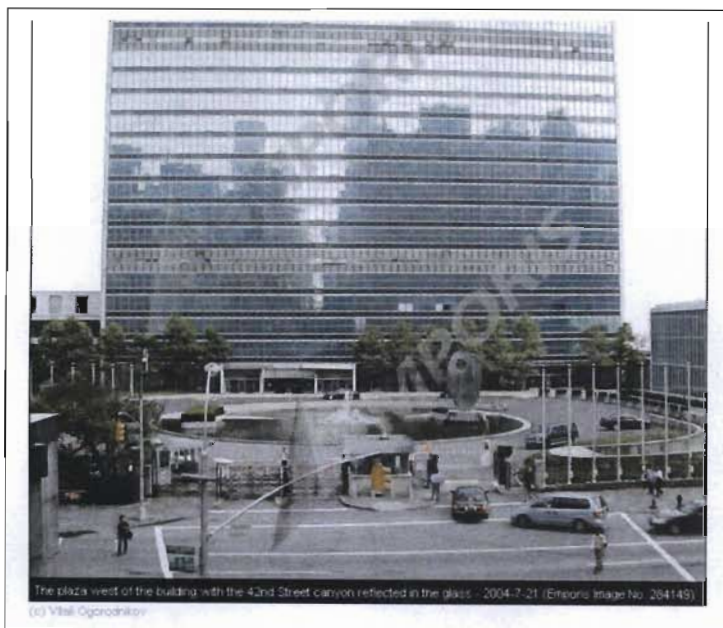


Illustration 69: Entrance of the Secretariat building (www.emporis.com) .

The General Assembly is one of the important functions of the UN, where all representatives discuss current issues. The building is a trapezoid shape in the centre of the main assembly room, is highlighted through a dome-like roof structure that protrudes outwards. It is not very visible from the outside and therefore loses the symbolic character of a dome (Illustration 70).

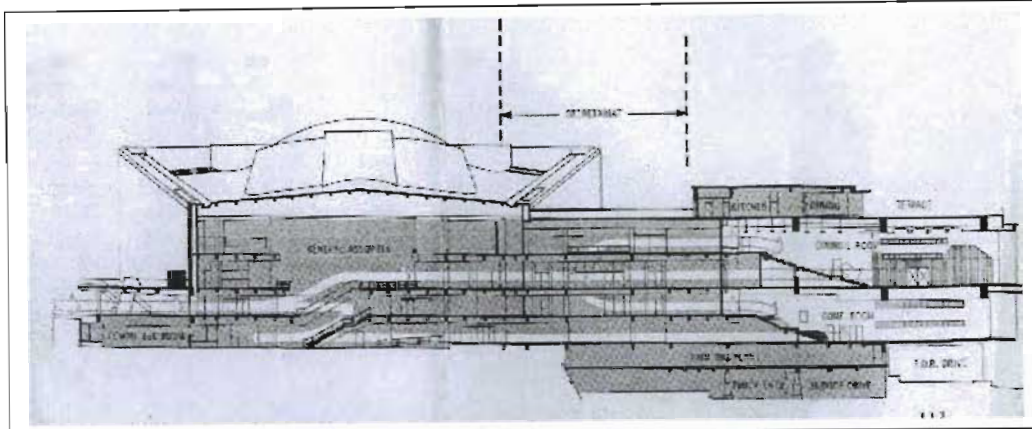


Illustration 70: Section through the assembly room (Churchill, 1952:111).

UNESCO, PARIS 1953-1958



Illustration 71: UNESCO building in Paris (www.unesco.org).

The UNESCO project was headed by three architects. Marcel Breuer who designed the main office building in a Y-shape and the Conference Hall in the shape of an egg. For the overall planning Bernard Zehrfuss (France) was in charge and Pier Luigi Nervi designed the structural component of the main buildings with 72 ribbed concrete brut pillars. Well-known architects such as Walter Gropius, Le Corbusier, Ernesto Rogers, Sven Markelius and Lucio Costa were involved in the research for the architectural expression of the building before the construction began. The site was donated by the French

government and is located at the Place de Fontenoy, next to the École Militaire (Illustration 71) (www.unesco.org).

The UNESCO Headquarters in Paris is divided into three major function zones, the Y-shaped office building or Secretariat, the trapezoid shaped conference building and the rectangular shaped delegates' office building. Each of these functions is expressed in a different form and the Secretariat is the dominant structure that houses all the departments of the UN. Through the placement of this structure and its shape it creates three different outdoor spaces, which are differently designed. The advantage of the Y-shape is that it has a central space or node, where the central horizontal circulation connects with the three entrances of each outdoor space (Illustration 72).

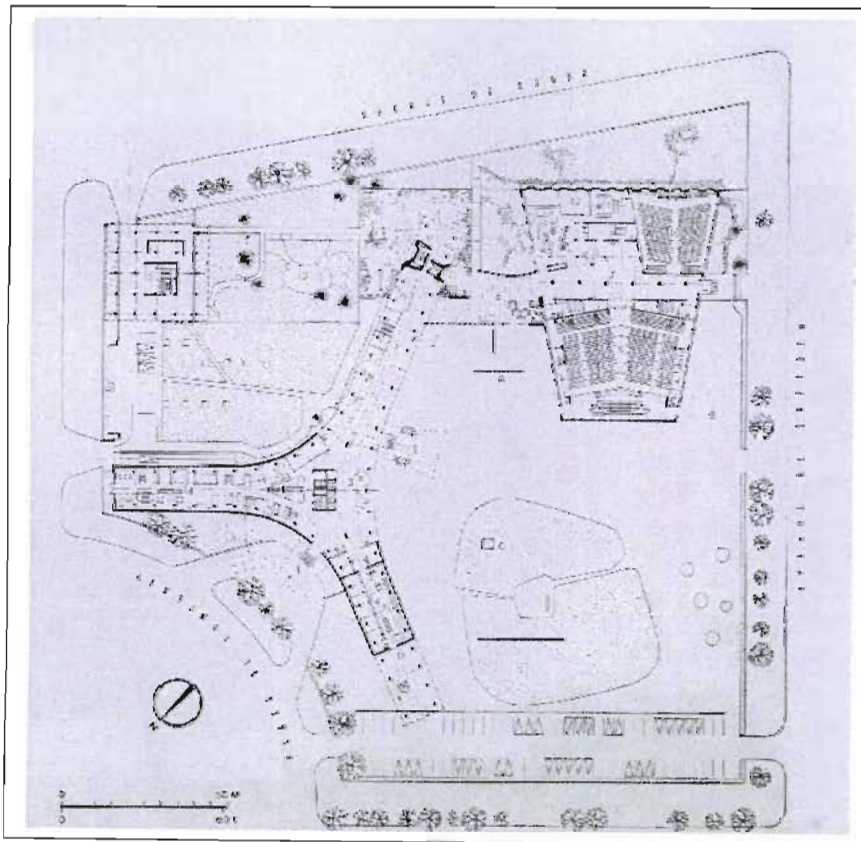


Illustration 72: Ground floor plan UNESCO (Praeger, 1962:78)

The Y-building a reinforced concrete structure is eight stories high and placed on 72 pilots. This building concept is linked to Le Corbusier's principle of elevated structures. The floors are folded reinforced concrete slab spanning the Plenary Hall. The load was carried down over the facade to create the end

of the walls. The load of the conference hall is carried by central columns transferred by the cross beam (Illustration 73).

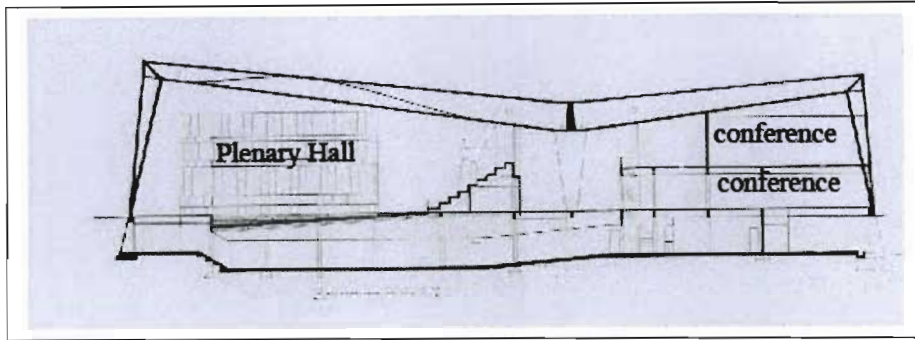


Illustration 73: Longitudinal Section of the Conference Building (Praeger, 1962:83).

Praeger argues that Breuer's exploitation of texture was an important element and that it underlines the tension of the slab-like walls of concrete blocks and open perforated patterns as in the facade of UNESCO (Praeger, 1962:23).

The facade of the conference building is made of concrete and its surface was faceted into smaller areas and subdivided. The tie rods were designed to be integrated as a surface pattern. The conference building and the secretariat is connected with a lobby, which is designed as a multipurpose space for the delegates (Illustration 72,74). As in the UN Headquarters in New York the building complex has several entrances to accommodate the different people such as the delegates, the staff and the public.

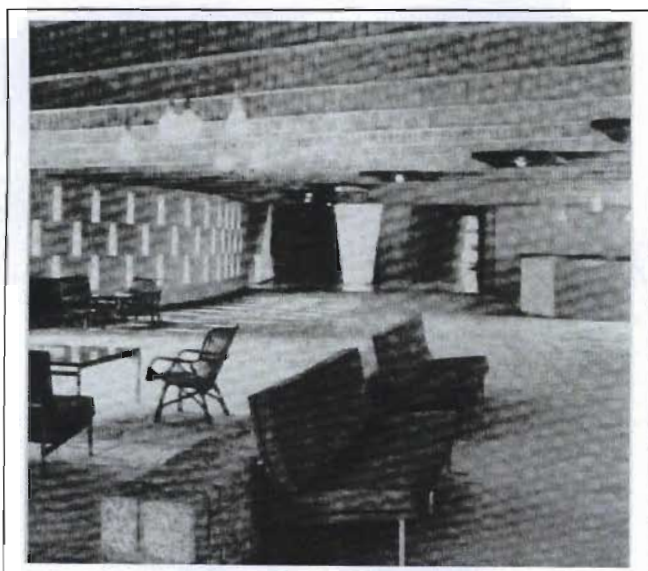


Illustration 74: Lobby between conference building and Secretariat (Praeger, 1962:84).

In the initial design works of art were included with paintings, sculptures and other artistic forms. Further art pieces were donated by different countries to enhance the symbolic meaning of UNESCO (Illustration 75,76,77). Two paintings that have been contributed are from Joan Miró and Joseph Llorens Artigas 'The Wall of the Sun' and 'The Wall of the Moon'. The paintings were initially placed outdoors, but to protect them from the damage of acid rain these have been placed in an enclosed building.

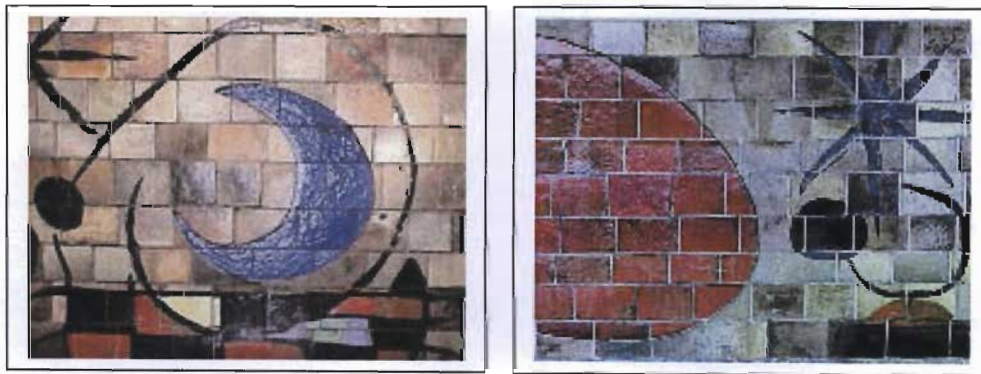


Illustration 75: showing part of the painting by Joan Miró and Joseph Llorens Artigas 'The Wall of the Moon' and 'The Wall of the Sun' (www.unesco.org).



Illustration 76: "The Symbolic Globe" (1995) by Erik Reitzel. *Denmark* (www.unesco.org).

The Symbolic Globe was a donation to UNESCO for its 50th anniversary by the Danish Ministry of Culture. The globe is the symbol of the United Nations and is constructed as a four-ton spherical grid composed of 10,000 rods and joints of extra-hard aluminium bolted together (Illustration 76).



Illustration 77: Painting "Unesco" by Le Corbusier, Gift from Switzerland in 1962 (www.unesco.org).

UNO CITY, VIENNA - JOHANN STABER 1973-1979



Illustration 78: UNO city, Vienna

The UN building in Vienna, better known as UNO city or Vienna International Centre (VIC), was designed by Johann Staber an Austrian architect. It is located at the north of the Danube River surrounded by its banks and the natural environment of small forest. It is next to a transportation node, which is 10 minutes away from the city centre via the underground. The site is rented from the Austrian Government for 99 years for a symbolic rate of one Austrian Schilling per year. Numerous international conferences and meetings are held annually at the Vienna International Centre, but larger events are held in the adjacent Austria Centre. The area around the UNO city, known as Donaupark area, has been developed in the last 10 years with several high-rise buildings for office and residential use (Illustration 79).



Illustration 79: Map showing the UNO city complex in its context (www.planetware.com).

The concept for the building form is based on the Y-shape similar, to the Secretariat building of UNESCO in Paris. The UNO city office towers are based on the connection of Y-shapes or trefoil which reminds one of honeycomb. The concept of city within city is embedded in the design through the arrangement of the office towers, the accommodation and the area in which it is situated. The placement of the new landmark of the UN buildings respects the historical heritage of the inner city.

The trefoil shape of the four headquarters building is designed to create an inner arc to accommodate the main entrance, a grand public space with a central feature. The other advantage of the shape is that each office has good daylight. The main horizontal and vertical circulation is placed as a central node through the trefoil shape with various staircases at the connection points to the adjacent shape (Illustration 80).

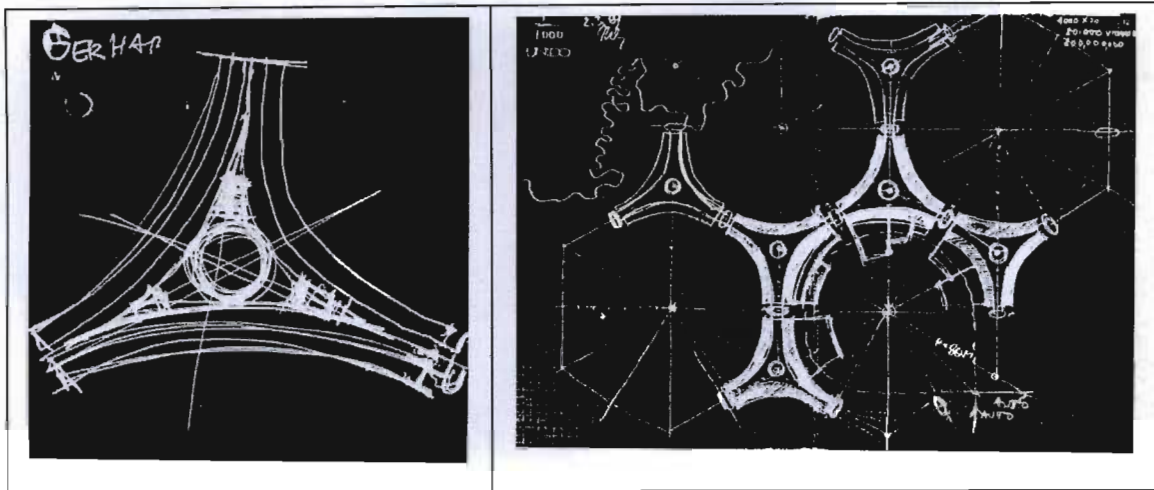


Illustration 80: Early sketches of the concepts of developing the trefoil shape (Architect & Builder, 1982:2).

The complex consists of uniform Y-shape towers which vary in height between 60 meters and 120 meters. The higher towers are used for office accommodation. The lower towers which connect to the Austrian centre are used for parking facilities and services such as telecommunication, stores and workshops, restaurants and medical and social care facilities (Illustration 81).

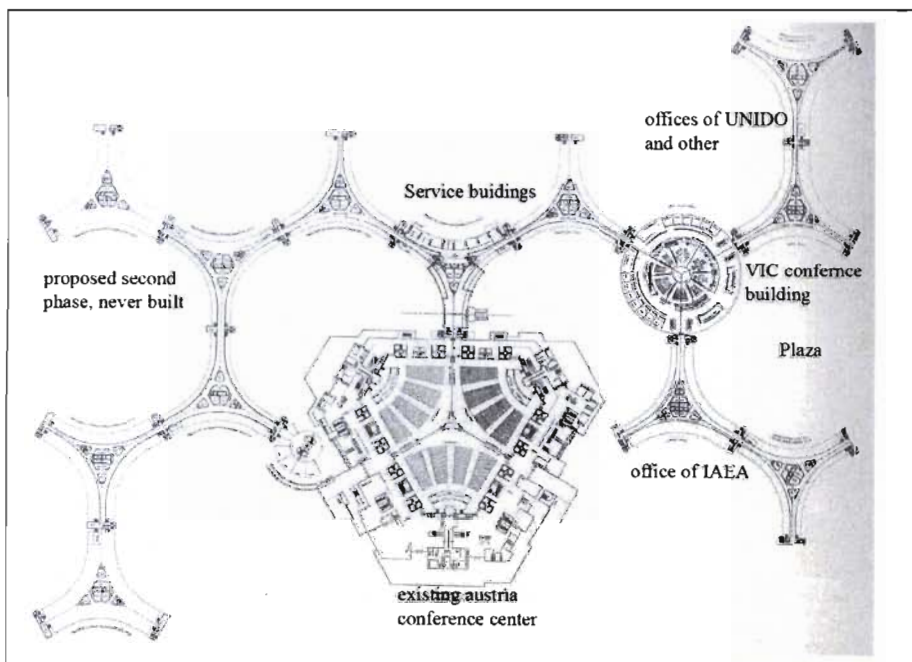


Illustration 81: First floor plan showing the different UN organization (Anonymous, 1982:4).

The plans for the Y-shape offices are the same, which creates a problem of orientation within the building. Therefore the use of colour co-ordination was implemented which should assist one in finding the way around. The buildings are constructed of reinforced concrete with steel and glass facade. The principal construction of the towers is based on a load-bearing bridge-like floor structure with stabilizing centre shaft and constructed of pre-cast elements and cast in place concrete. The central shaft consists of the lift shaft and the foyers. The three support columns are used for the services and utilities (Illustration 82).

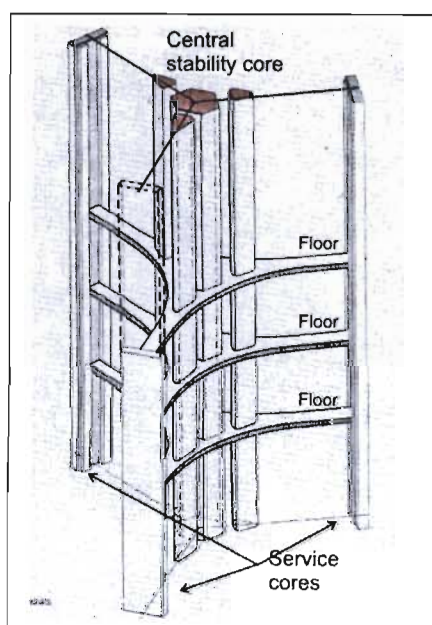


Illustration 82: Structural concept of bridge-like floors between concrete towers (Anonymous 1977:33).

The facade is build of panels, which are clad on the outside with galvanized steel sheets for fire protection. The aluminium frames are lined with asbestos to achieve higher fire resistance, because at that time fire-proof glass was not obtainable. Today the building is under reconstruction to exchange all asbestos material as a result of known health damage. This can only be done in stages which has necessitated in temporary office structures on the site that help to assist the process (Anonymous, 1977).

The conference building is a circular structure constructed with six reinforced concrete service shafts for stairs lifts and other utilities. The upper floors are

light-weight concrete slabs with sheet metal troughs supported centrally through steel hangers of the roof and attached through concrete rings to the service shafts (Anonymous, 1977).



Illustration 83: Conference building with the plaza.

The conference building consists of three levels and the conference halls are arranged around the central service core including foyers, lounges, small rooms and offices for the conference organizers. The plaza in front of the building consists of a large circular fountain with flags (Illustration 83). All 191 member flags have been added circa 2004 to connect to the plaza in New York. The open space functions as a release space for the UN staff, because due to security reasons all windows closed. The plaza in Vienna has a freedom bell, which is used once a year on Freedom Day (Illustration 84).



Illustration 84: Freedom bell in the UN plaza, Vienna.

In the entrance hall of the conference building all flags of the UN members are placed in alphabetical order on the ceiling (Illustration 85). Donated paintings from several nations are placed within this space which connects with the vision and work of the United Nations.(Illustration 86) Some paintings were bought from well-known Austrian artists and architects, for example Hundertwasser (Illustration 87). The hall is also used as multipurpose space for exhibitions and other functions.



Illustration 85: Picture of the entrance hall of the conference building.



Painting by Japanese artist
Sagenji Yoshida

"HO-O Raigi"
Sacred birds will descend
only when peace and
justice reign in the world

Illustration 86: Painting donated by Asia Crime Prevention Foundation.



Illustration 87: Painting 'La Pioggia-City under the rain' F. Hundertwasser .

The interior of the conference room is designed in the seventies style, of wooden wall and orange carpet. The conference room is a half-circle with a podium at the centre. Interpretation booths are situated a level above the conference room (Illustration 88). These rooms are needed because the UN has six official languages that have to be interpreted.



Illustration 88: Typical conference room in the conference building.

5.3 EU ORGANIZATION, CONCEPTS AND ARCHITECTURE

The European Union was established in 1992 by the Treaty on European Union. Before that date it existed through a series of predecessor relationships dating back to 1951. The institution established and has administrated the common single market with a single currency since 2000. The currency has been adopted by 12 of the 25 member states. The most important EU institutions are the Council of the EU, the European Commission, the EU Parliament and the European Court of Justice (en.wikipedia.org).

The European Union has two parliament seats: one in Brussels first occupied in 1997, and one in Strasbourg completed in 2000. Spring argues that it creates rather a confusion that one institution has two very similar buildings with the same accommodation and usage. It is questionable if the two parliament buildings are an advance or a rivalry between two nations. (Spring,

1999:49). The building in Brussels hosts committee meetings three weeks a month, while the parliament in Strasbourg is inactive. Moreover, the Parliament's Secretariat is placed in Luxemburg (Spring, 1999).

EU PARLIAMENT BRUSSELS



Illustration 89: EU Parliament Brussels (Spring, 1999:53).

The EU Parliament was designed by four architectural studios and headed by Paul Hof and Joseph Polet. The site is near the European Commission and the EC Council of Ministers. The building consists of two buildings along the axis formed by the rue de Luxembourg (Bouquillon, 1993).

The building, also known as the European Ellipse, was intended to accommodate international congresses and was later transformed into the parliament. The design of the building is a synthesis of the past and the present by using a simple, strong form: the ellipse. The concept of the ellipse shape was chosen because it best expresses the concept of the Union. Furthermore, classic architectural form was integrated, such as the column of the structure. In addition the materials and technology reveals the use of current technology. The facade is made of black anodised aluminium, glass and grey granite (Illustration 90) (Bouquillon, 1993). It is connected with the

idea of permitting transparency of the parliament activities to the public. These concepts are also used in the Parliament of Strasbourg.

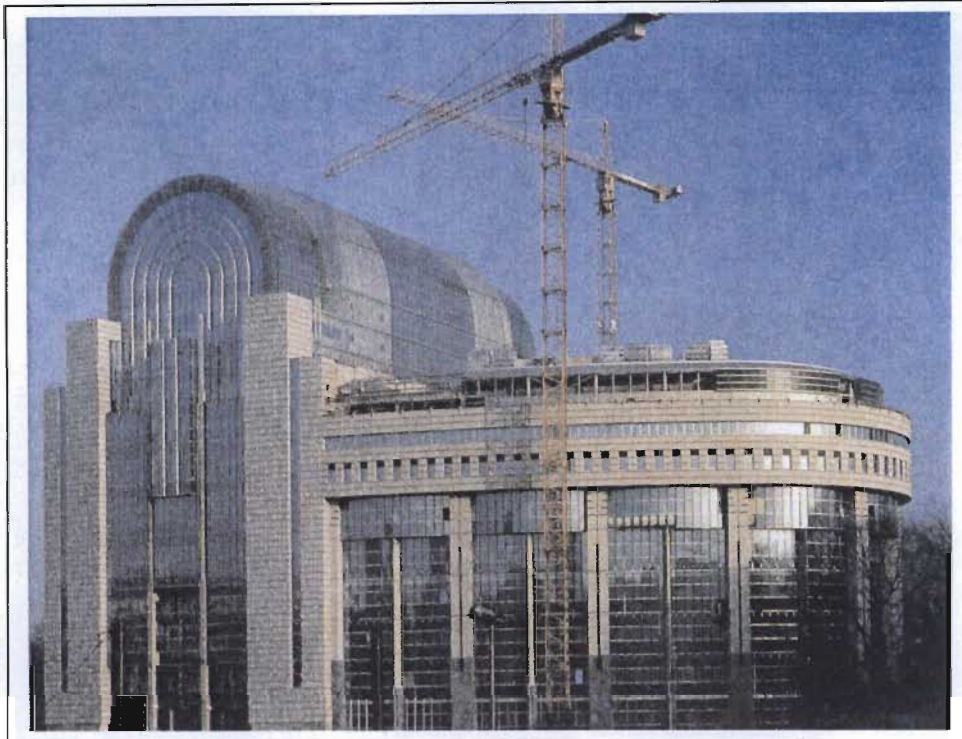


Illustration 90: Facade of the EU Parliament (Bouguillion, 1993:43).

The plan is an ellipse shape, which in elevation is based on an arc, like the EU parliament in Strasbourg. The ellipse shape houses the function of the conference rooms, surrounded with offices. This building is connected to a linear structure, where the offices for the parliament are placed, as well as small work rooms and entertainment facilities such as refreshment bar and shopping facilities. More conference rooms are placed along the canal (Illustration 91). The two buildings are connected with a bridge over the river. The same concept of splitting the parliament and the administration complex through the river is used in the parliament of Strasbourg.

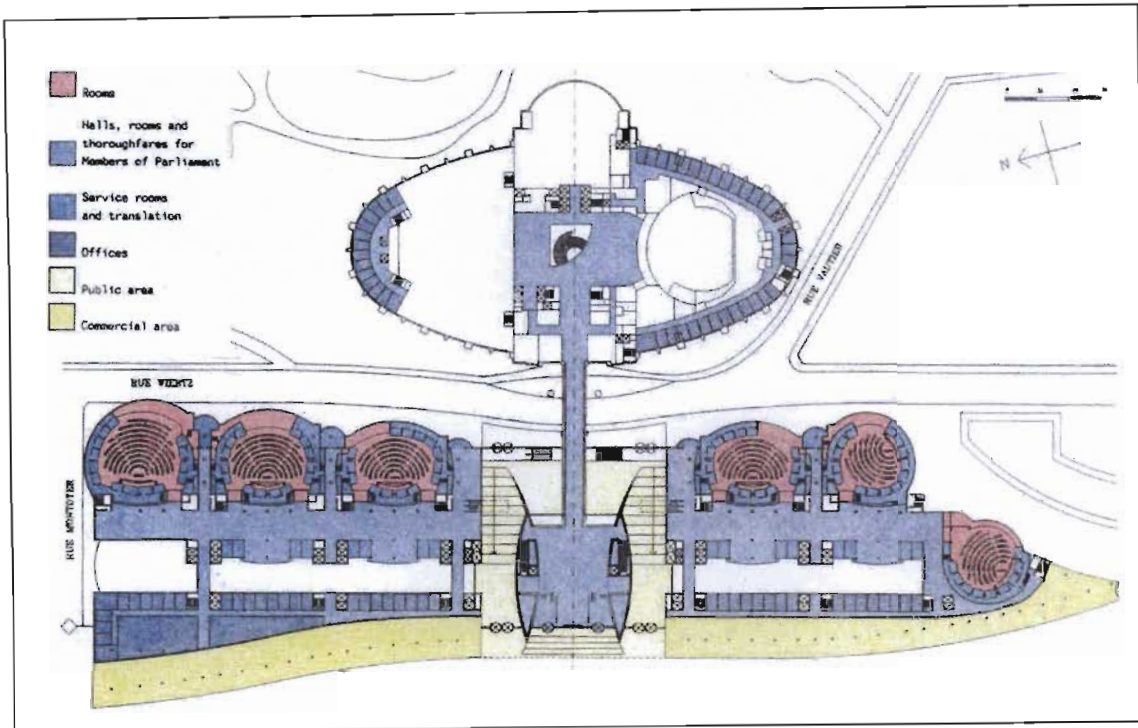


Illustration 91: Ground floor plan of the EU, Brussels (Bouguillon, 1993:44).

EU PARLIAMENT, STRASBOURG

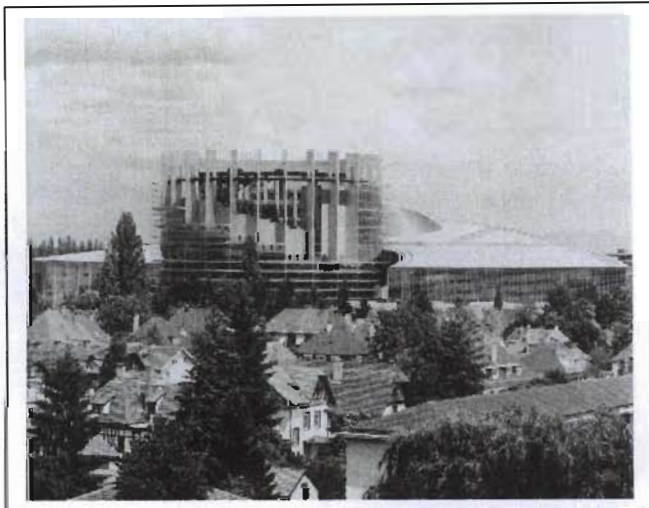


Illustration 92: EU Parliament, Strasbourg (Mourier, 1999:56).

The European parliament was designed by Architecture Studio after winning the competition. The site is situated north-east of the centre of Strasbourg where the river Ill joins the canal that links to the Marne. It is located next to the Council of Europe and the Palace of Human Rights.

Mourier states that the building mirrors the development of the city in the global village and strategically binds to city to be communal rather than merely national (Mourier, 1999:41). The EU parliament has embedded several concepts such as the transparency of its institution to all its members and the process of reaching its aim. These are translated into architecture using the three geometric figures: the arch, dome and the tower (Illustration 93). The Architecture Studio's standpoint was to create a monument of democratic times which should have a link to the past and represent future aspirations.

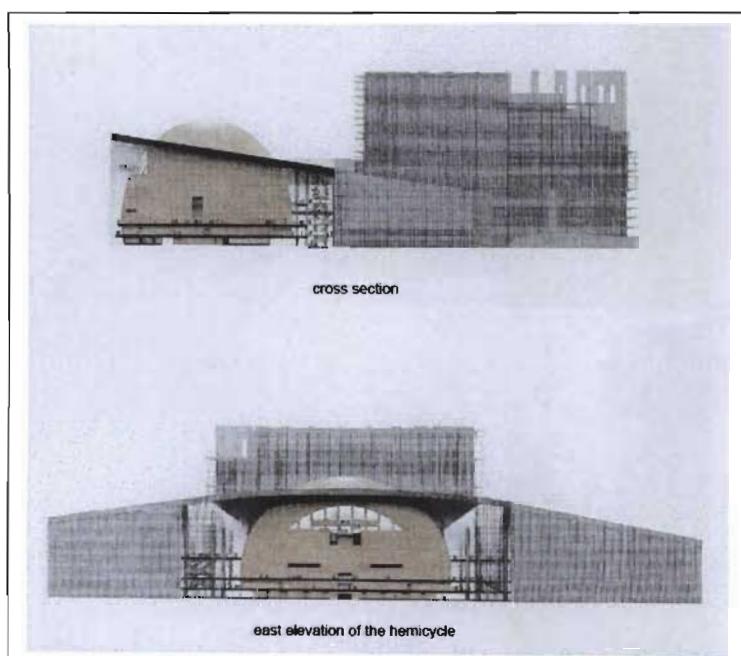


Illustration 93: Section and elevation showing the three elements, arch dome and tower (Mourier, 1999:25).

The building consists of a great arc that follows the course of the river and at the midpoint it reaches a height of 43 meters. Behind the arc another strong form, a cylinder, which is half inside and half outside, protrudes out. It accommodated 17 storeys of offices with outdoor relief spaces for the staff. The ellipse cylinder is stepped towards the city to allow light into the open created plaza and the offices.

The building is a landmark next to a river, where the tower emphasizes the significance of the EU functions. It accommodates the offices and related relief spaces for the staff. Moreover, the stepped level contains a stepped

suspended roof garden connecting with the outdoor relief spaces. The stepped roof garden was intended to respond to the rich natural environment of Strasbourg. The arc contains the dome-shaped debating chamber with 1430 seats, 750 seats for the parliament members and 650 seats for the visitors. It protrudes out of the arcs and is clad with curved timber board on the inside with oak and outside with cedar (Mourier, 1999) (Illustration 94).

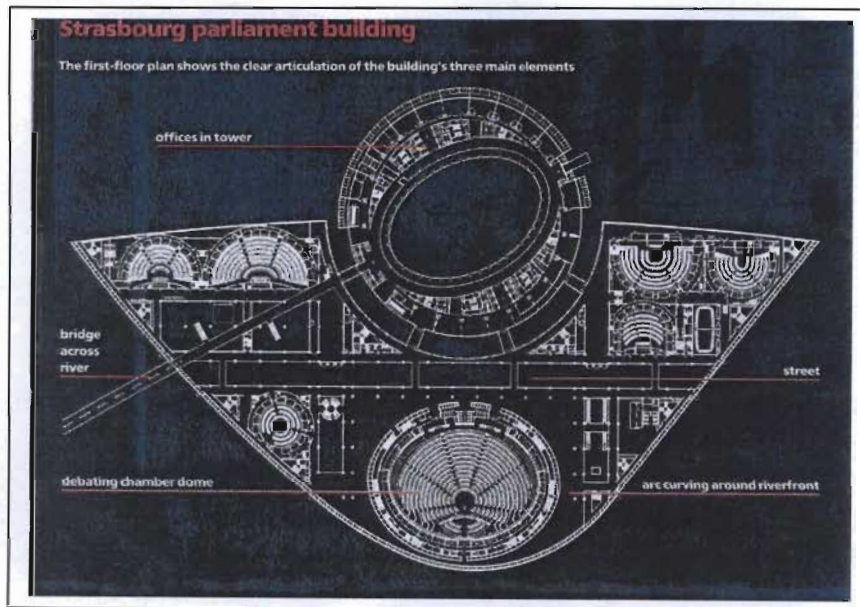


Illustration 94: Plan of EU Strasbourg (Spring, 1999:51).

The facade is made of blue tinted glass, which reflects the water during the day. At night the lights inside the building show the transparency and the dome structure containing the parliament's chambers. The light is reflected on the surface of the water and creates a mirrored image (Illustration 95).

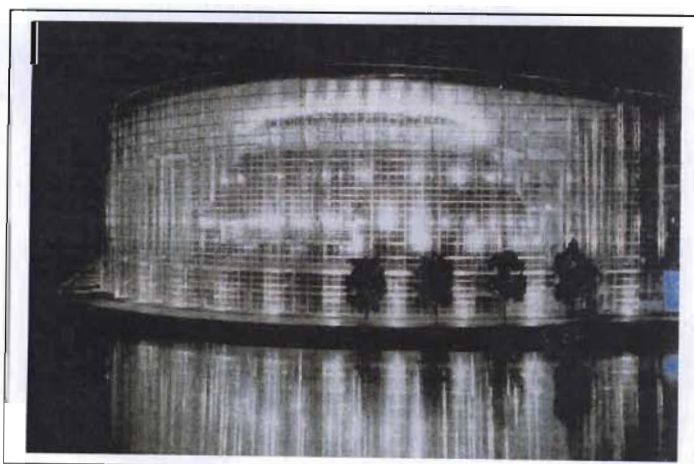


Illustration 95: EU Parliament chamber inside the building at night (Spring, 1999:51).

The parliament buildings are designed using basic geometric forms of circle and ellipse shapes which relate to the idea of the union. The tower, dome and arc are important elements that throughout history have been used to symbolize power in various building types, such as town halls, churches, castles and parliaments. The structures are similar in construction, using the same concept of synthesis of the classic architectural style and the existing technology. The appearance is very similar in terms of expression of power and monumental architecture, even though the concepts are translated differently into the design. The two complexes are both constructed in steel and concrete with a large glass facade.

4.5 CONCLUSION

The UN buildings are situated in their context to enhance the infrastructure of the city through their significance in the world view. The UN New York as well as the UNO-city Vienna are connected to a transportation system and placed next to a river, underlining their power and forming part of the identity of the building. The expression through form states the power of the United Nations and is achieved through the structure of the secretariat buildings of high-rise structures with a uniform office facade treatment using the international style. The UN used a different style to traditional headquarters of governments, because its institution represents the common goals of its members. Therefore the international style was used to express a united front and the interior was adapted to show the different identities of peoples' origins as shown in the UNESCO building in Paris. The UN New York included temperature adjustments according to the peoples backgrounds.

Furthermore, the creation of a grand entrance can be seen to enhance the importance of the building. Historically, town halls and parliaments are placed with a dominated public space in front, to highlight the power of the ruling party, because architecture is a tool to express power in structural form. The design of the plaza in Vienna is a harmonious element derived from the composition of the office building shapes. This is hardly achieved in New

York, where the rectangular shape was the dominant element used for the buildings, but the plaza was imposed to be circular.

Another common point is the complexity of the brief where the major components are separated for functional reasons, such as office, conference rooms, entertainment facilities and education services such as libraries. These are communicated through diverse architectural forms and therefore office buildings are mainly high-rise towers and conference halls are lower structures articulated differently.

The accommodation brief of the EU parliaments and the UN headquarters are similarly based. The main functions are offices and conference rooms but include several other facilities such as entertainment and relief spaces. The secondary facilities are important for the people who work in those buildings and visitors such as the public and media. These examples are evidence of the complexity of the different groups occupying the building and how each of them is catered for.

CHAPTER 6

CASE STUDY

6.1 INTRODUCTION

Durban Central Business district is the case study area which is the heart of the city. This area has been analysed and highlighted as an area for revitalization because of the problem of decentralisation. Furthermore a few key buildings will be used as examples to give an understanding on headquarter design, architectural languages and linkages in Durban. Several proposals highlight the attempts of how to improve the infrastructure in this area.

6.2 BACKGROUND OF DURBAN

The Durban area was first settled in 1824 and the central grid laid in 1845, which consisted of three main east-west streets and shorter cross-streets at right angles to the bay. The three east-west streets, Pine, West and Smith Streets formed part of the commercial development of the city. The market square was developed as the civic centre with the city hall, the post office and the railway station to the north, the latter having been converted into the Workshop shopping node. The first industrial area in Durban was situated at Maydon Wharf. The development of residential areas occurred along the transportation routes.

The expansion of the Durban was linked to the model of the American cities in the 1930s of concentric rings with the centrum as the Central Business District and the residential areas on the outskirts. This resulted, during the Apartheid era, in the Group Areas Act, upon which Durban, as were many other South African cities, was restructured. Only the white affluent population's residential area was located within the Centrum of Durban, along Victoria Embankment. The Indian coloured and Black population's residential areas were located on the outskirts of the CBD with physical barriers. This mix

of cultures are reflected in the architectural styles in Durban such as Art-deco period, the Indian influences, the Islamic.

As a result the city today is fragmented and is functionally separated. During the Apartheid era the planning was based on segregation of race and the notion of zone planning. The working area was in the centre surrounded by the residential areas. The areas have been given a spatial function and the parts were not integrated to each other to create a mono-functional city.

Within the central area of Durban two commercial nodes were established through the effect of the Group Areas Act. The Indian commercial area was concentrated on the north of Pine Street and west of Albert Street, and the white commercial area in the south of Pine Street.

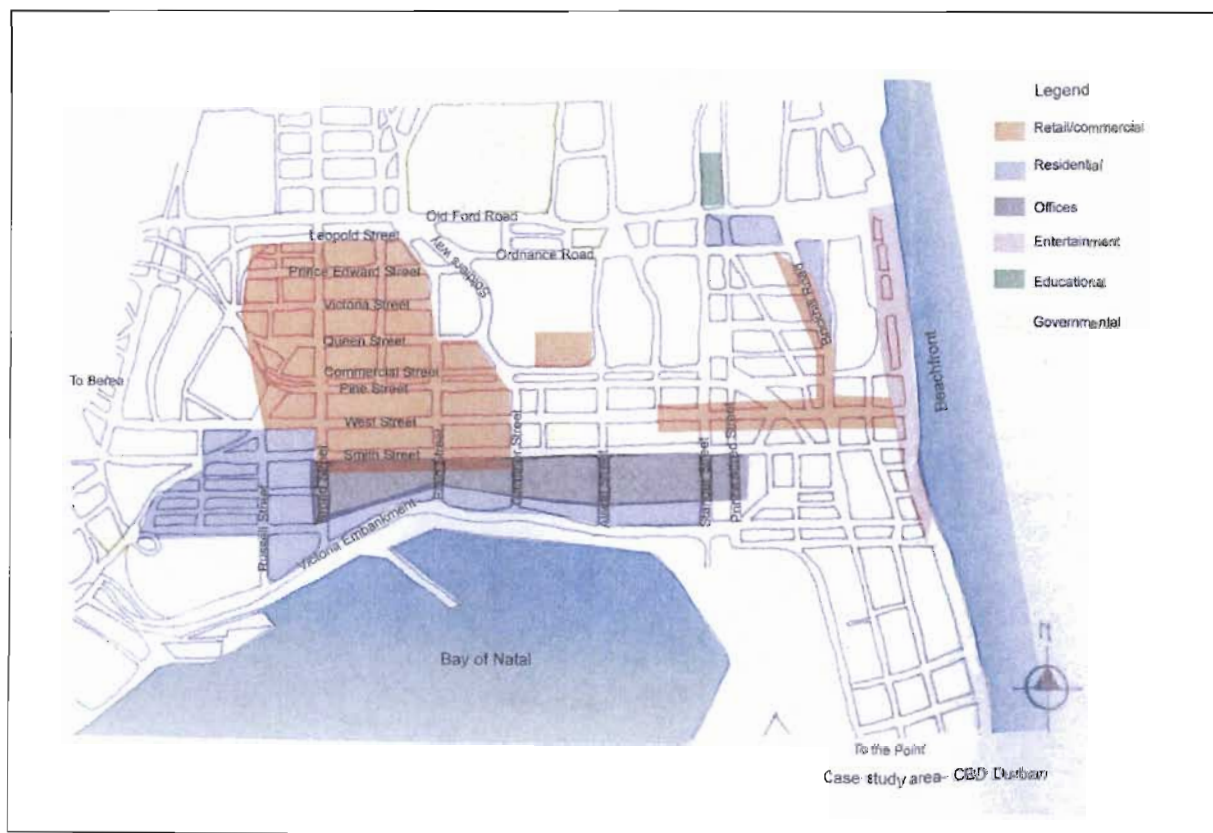


Illustration 96: Case study area

The city centrum is a hub for commercial activities and through a study of land surveys the different areas in Durban CBD have been identified. Nodes of commercial centres throughout the city create a dilemma of decentralization

within the city centre; this results in a problematic image of the city centrum. Durban has only one major public transportation node within the city centre which fragments this area. The major pedestrian movements within the centrum are concentrated along commercial streets such as West Street to the Workshop, and Victoria Street towards Berea Station. Along the Beachfront there is higher pedestrian activity because of the recreational zone with hotels and informal markets. Several high activity nodes have been recognized in the city, around Berea station because of the mix of the Victoria Street Market and the transportation node. The Workshop area consists of informal trade, a formalized shopping centre, well functioning open spaces and municipal buildings in the surroundings such as the Post Office and City Hall. Another high activity node is at the intersection between West Street and Point Road, due to fast-food outlets, with shopping, taxi stops, and entertainment at bars and club and the link to the Beachfront.

Durban CBD has few Headquarter buildings, which have been primarily located in the north of Durban. This results in the decentralization of office accommodation of the city centrum, because of lack of security, high crime levels and problems of parking facilities in the city center. Therefore the areas on the outskirts have been preferred. These headquarters are situated in isolation, in gated office parks, with high security and sufficient parking services. The problem is that these areas mainly cater for car accessibility, unlike the city centrum. Furthermore the problem of mono-functional zones has been created as satellite working areas are at a great distance to residential areas. The disadvantage of locating the offices on the periphery of the city is the loss of city centrum vitality and the creation of smaller centrum nodes in Durban.

INVESTIGATION OF LOCATING THE AU WITHIN THE URBAN CONTEXT

Within the city centrum the open space system exists mainly around the city hall and the Workshop with Central Park (Illustration 97).

The problem is the relationship between Central Park and Workshop in size and that it's the only connecting building.

The Medwood Park somehow is in better relationship to its surroundings between the workshops, next to the building and the City Hall. The problem is two major streets that pass on either side, which create a disconnection from the City Hall space and the Workshop locomotive square.

The Farewell Square could be called a dominant square when looking at the ground figure relationship and as a heritage site.

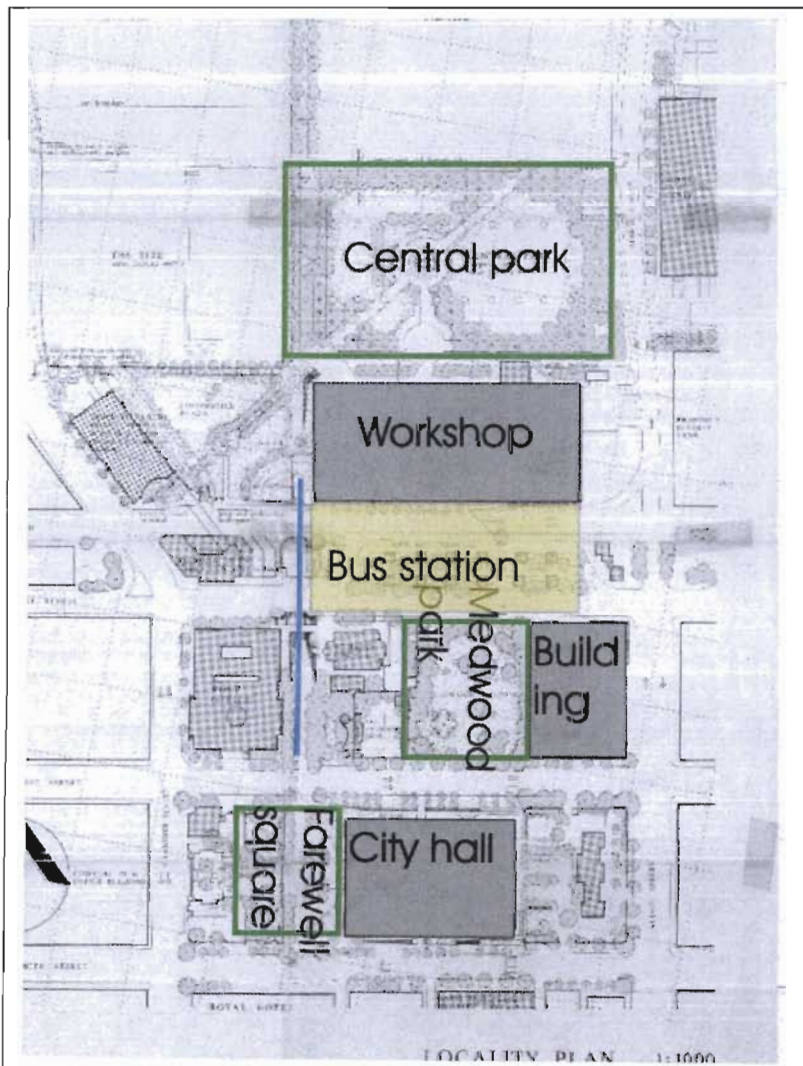


Illustration 97: Urban public space and strategic buildings

The Central Park behind the Workshop is an open public space, which only links to the Workshop. (Illustration 98,99) Its size is open to debate about it dwarfing its surrounding. There are no neighbouring buildings, which could interact with the space and form a sense of security. The activities are limited, because of the infrastructure around. People need to get there by car or public transport to actually enjoy the open space in the inner city. The area closest to the Workshop has high activity levels because of the informal trade, the restaurants relating to the space and the Fleamarket on Sundays. The northern part of the space is a dead zone because no relationship has been formed. Therefore this are could be used as a point for redevelopment in the city to activate the central park on all sides and to activate the surroundings.

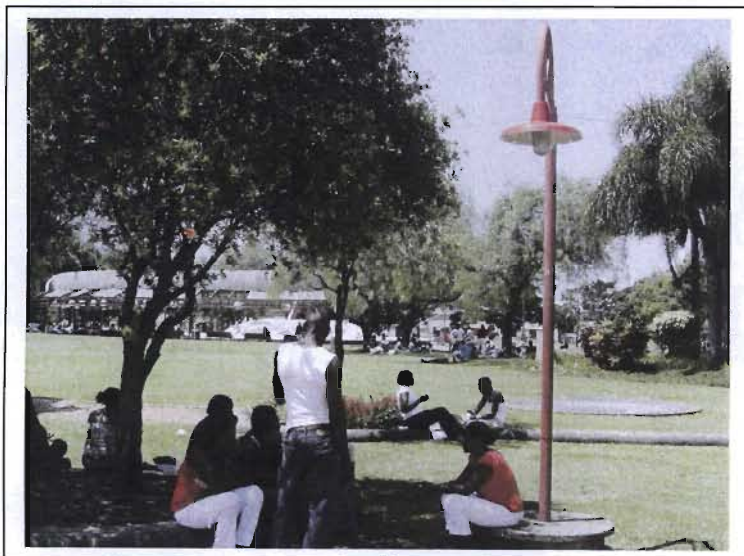


Illustration 98: Central park closest to The Workshop.



Illustration 99: North part of Central Park.

6.3 KEY BUILDINGS

Two headquarters have been defined as key buildings in these office parks to highlight the architectural interpretation of office design.

HULETTS HEAD OFFICE



Illustration 100: Huletts Head Office in La Lucia Ridge, Durban

The Huletts head office was one of the first structures situated in the La Lucia Ridge area of Durban in a decentralized area from the city centrum. It was designed by Hallen, Theron and Partners in 1973 and the brief was to create a head office for 4000 sqm to bring the different located offices into one place. The structure set the standards for decentralized commercial nodes for this area. The site formerly used for agricultural use of sugar cane, is situated on the hillside overlooking the sea. The building is a three-storey rectangular structure with an enclosed air-conditioned environment. The concept of a temple standing alone in the landscape is hardly visible today because of the development of numerous head offices in this area. Furthermore the building is hardly noticeable because of the extensive landscaping around it. The natural environment has the advantage of softening the edge of the building, which is only an aesthetic element rather than a relief space (Illustration 100).

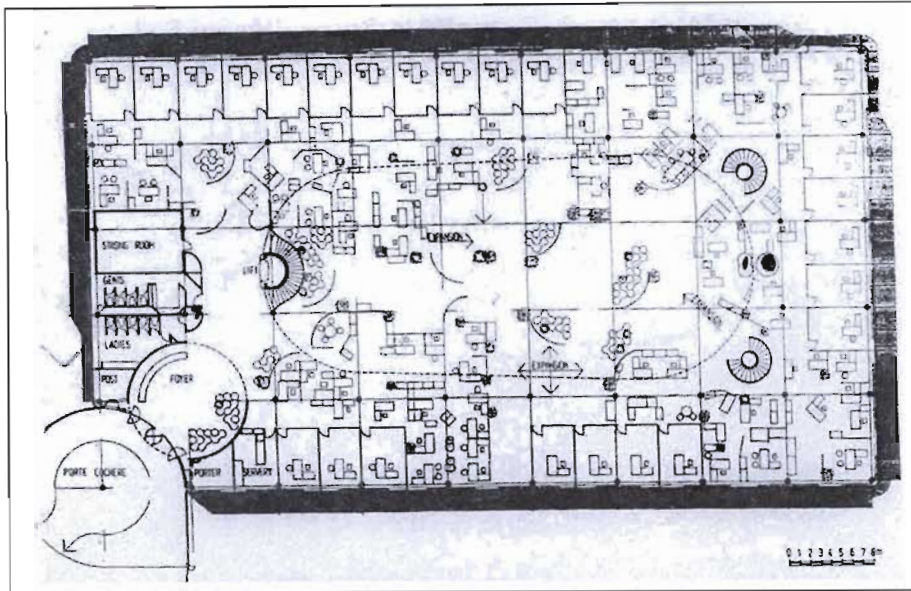


Illustration 101: Ground floor plan, Huletts Head Office (Hallen 1983:4)

The office design is based on the mixture of open plan offices and office cubicles which are located along the edges. The central space is a double volume which allows for expansion of open plan office space (Illustration 101).

After evaluation, the building seems to be internalized, without any connection to the climate of Durban, which allows for open spaces and terraces as relief spaces for the staff. The open space in the centre which is proposed for expansion of office desking could have been proposed as a central meeting space. As a result of the internalization of the design and missing outdoor spaces it could not adapt to the policy a smoke-free area which other structures in the area have acknowledged, such as the Unilever Headquarters with its large terrace looking towards the sea (Illustration 102).

UNILEVER HEADQUARTERS



Illustration 102: Unilever headquarters

Unilever Headquarters is located in the La Lucia Ridge area and was designed by Boogertman and Urban Edge. The design manual of Moreland stipulates the faced treatment, the parking requirement of four bays by 100 sqm for office accommodation and landscaping requirements. Therefore most buildings like the Unilever Headquarters have an extensive use of glass and strong forms. The building is situated to overlook the sea with a large terrace as relief and restaurant space. The context of gated internalized office parks creates facilities of restaurants and cafes within the building. The parking area is designed in such a way that it is hardly visible from the street and surrounded by trees and bushes. The landscaping in the design manual also states what kind of trees, flowers and bushes have to be planted and the need for indigenous plants.

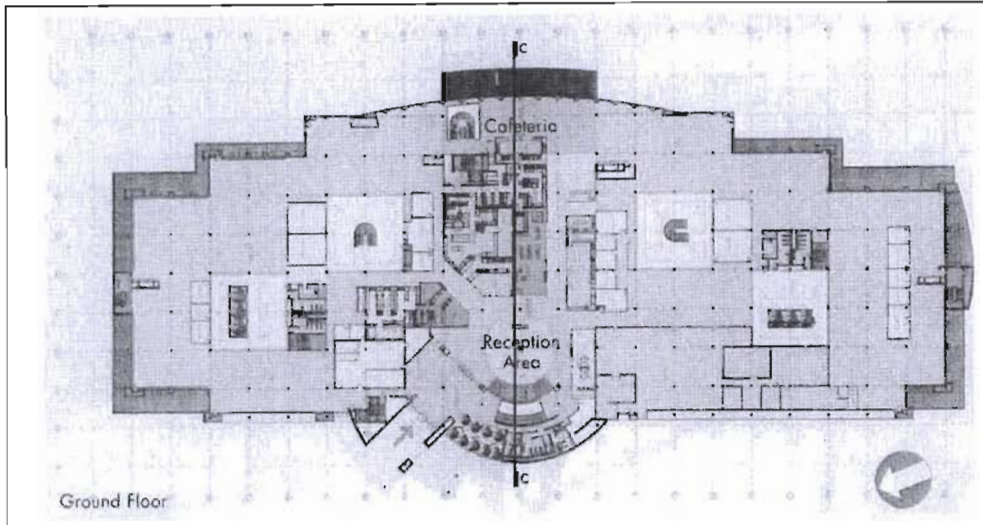


Illustration 103: Ground floor plan (Peters, 2003:4).

The accommodation schedule of the building includes office space, laboratories, shop, restaurant and cafes. The main entrance is on the short access with a double volume. Two small relief spaces with planters have been placed at opposite ends as a double volume space (Illustration 103).

INTERNATIONAL CONVENTION CENTRE (ICC)

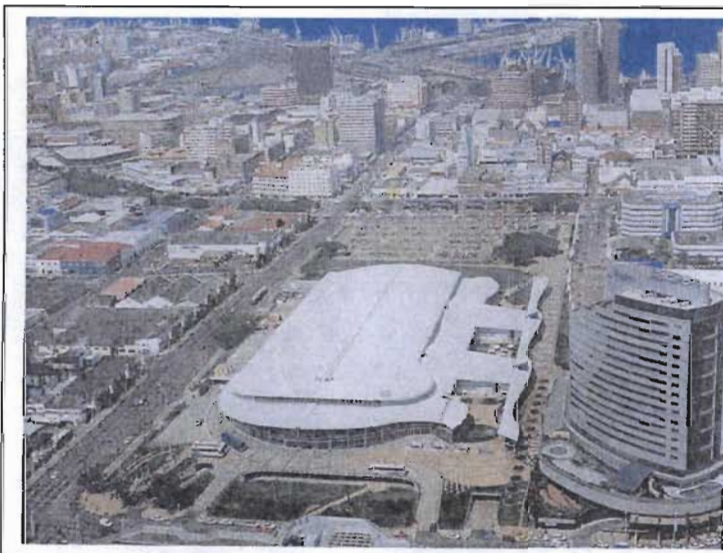


Illustration 104: ICC in its context, showing the part for the extension (Ansell, 1998:9).

The International Convention Centre (ICC) is another key building used because of its location within the CBD of Durban and its impact on the image

of the city. It was designed by Stauch Vorster Architects in association with Hallen Custer Smith and Johnson Murray Architects in 1997.

It is located on Walnut Street close to the major transport nodes and along accessible road links between the city and the outskirts. Furthermore its relation to the beachfront and the harbour is another advantage for linkages to residential, industrial and recreation vicinities. Another positive aspect of this structure is that it draws people back into the city and has the possibility of creating an anchor for further development of related public buildings.

The building accommodation brief was to accommodate parking for 700 vehicles and conference rooms for 1800 delegates. The conference rooms are designed to be adaptable in space with movable seating areas and moving panels to divide the space in various facets. The rooms can be divided into maximum of 20 rooms of various sizes. The break-away rooms are connected to a separate courtyard.

Three main halls were designed to open up to form 7000 sqm of open space. Other functions are included such as a business centre with secretarial facilities, a preparation room, a first-aid centrum, a delegate participation system and interpretation facilities in five languages. Hall 2 can accommodate 3000 people; Hall 3 can be used for 2000 people (Illustration 105,106).

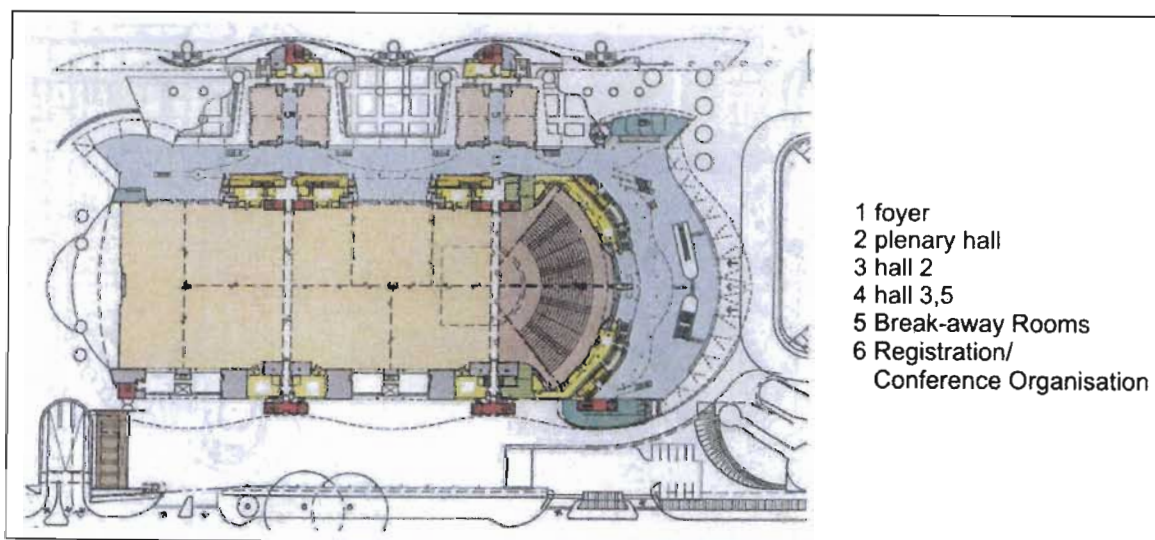


Illustration 105: Ground floor plan of ICC (Stauch Vorster Architects, 1995:20).

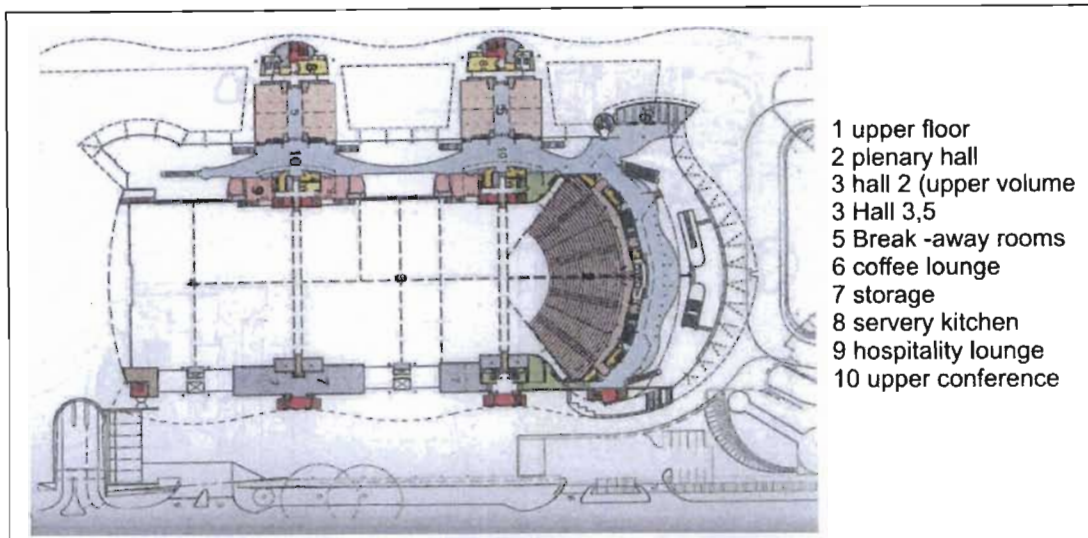


Illustration 106: First floor plan of ICC (Stauch Vorster Architects, 1995:20).

The parking is a semi-parking level which was affected by cost and lifted the building half a storey. This had the advantage that the symbolic importance of the building's function has been enhanced, because throughout history important structures were mainly positioned on a significant place in the urban infrastructure, centrally and possibly on a higher point. The services are in the basement level and another entrance foyer allows for arrival by car (Illustration 107). With the extension of the ICC another entrance foyer has been added which suggests that the ICC could be separated into two buildings. The information given by Wick Usher, the project architect on the site of the extension of the ICC, included that the function of the new extension is more multifunctional as it designed to accommodate various sport facilities.

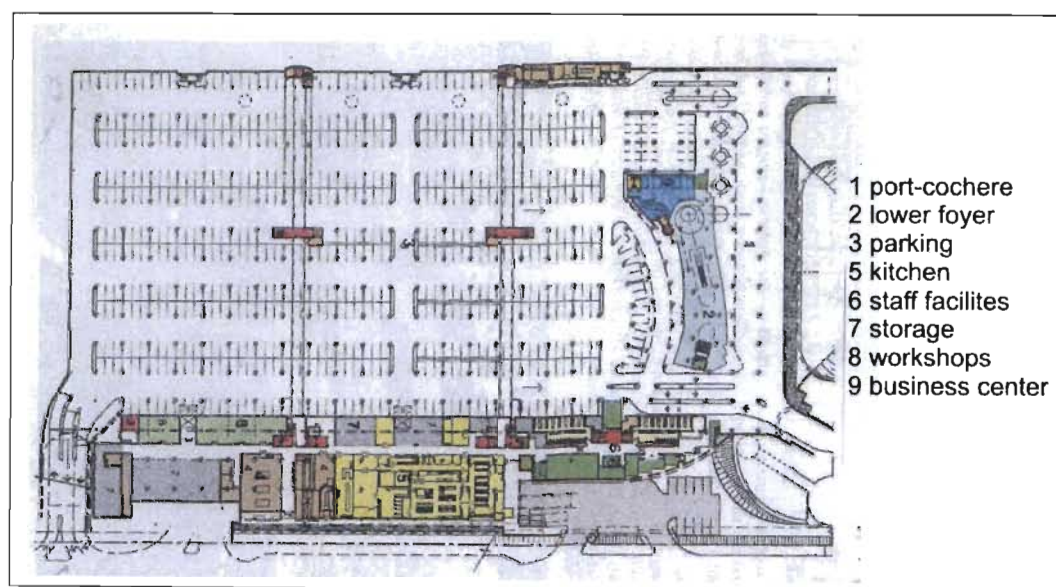


Illustration 107: Basement parking (Stauch Vorster Architects, 1995:20).

The extension of the ICC has recognized the need for indoor sport facilities and indoor concerts therefore the design varies from the original in that the noise level has to be kept inside. Also, to accommodate various sports, the floor is bare concrete which can be manipulated for the different surfaces needed. The roof structure is positioned higher at 12 meter which is the requirement for indoor sport, whereas the old part of the ICC has a clearance height of 10 meters.

The ICC is connected to the Hilton Hotel and its climatic response of several smaller private outdoor gardens as relief and informal meeting spaces is a positive aspect. Furthermore the concept includes a hierarchy from public to semi-public to private space (Illustration 107).

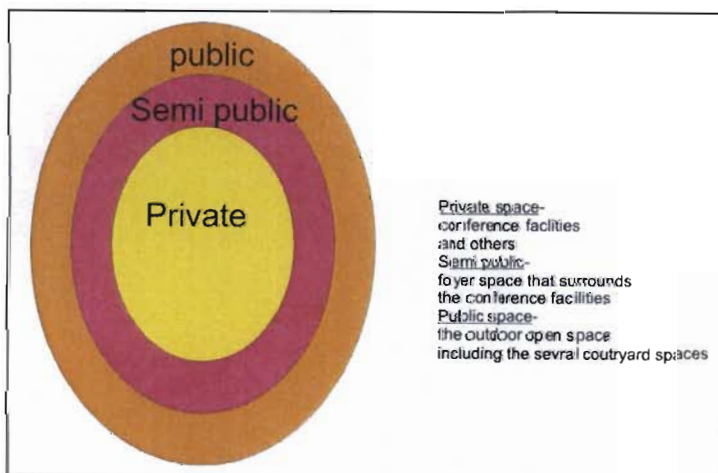


Illustration 108: Interpretation of ICC

The structure is designed of a steel frame with a glass front of 10 meters height. The roof structure is an undulating curve which takes its reference from the ocean or waves as an identification of Durban being a coastal city (Illustration 109).



Illustration 109: Facade of ICC.

The interior foyer has a triple volume to accentuate the grand entrance, with a gallery space. It is decorated with African patterns on the wall of the gallery space (Illustration 109).



Illustration 110: ICC foyer.

AFRICAN ARCHITECTURAL LANGUAGE

The context of Durban is similar to many other African cities with its existing multiplicity of architectural language. This is a result of existing traditional African architecture and the impact of European architectural style introduced during colonialism and global architectural trends. African architectural languages have been integrated to create a new African identity, which acknowledges and celebrates African heritage as can be seen in the two examples of the Durban environment. The interpretation of what the new identity could be is visible in the newly built Ushaka Marine World and Sibaya Casino structures, which include South African traditional symbols and patterns (Illustration 111,112).



Illustration 111: Sibaya Casino, view of the entrance.

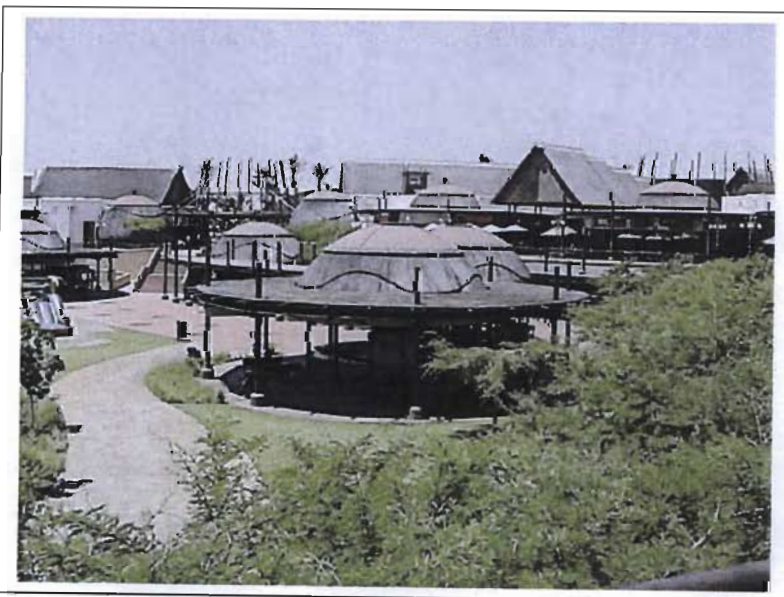


Illustration 112: Ushaka Marine World.

6.4 PREVIOUS REPORTS FOR REVITALIZATION OF DURBAN CBD

Pervious reports of how to revitalize the CBD of Durban have highlighted the problems and the potential solution. These concepts revolve on the key issues of decentralization, improvement of transport systems, pedestrian streets, historic civic core, important linkages and the physical appearance of the Centrum. The proposals include several architectural interventions to improve the infrastructure.

The following reports give suggestions of how to improve the physical environment and draw people back into the 'heart 'of the city:

- Beach and City Committee (May 1985) Centrum Workshop Proposal
- D'Urban Changes Forum (Undated) Centrum- heart of the city
The proposal examines the linkages within the city and how to enhance these linkages
- City Engineer's Unit (September 1998) Centrum Development Precinct
- Derek White (2006) Proposal for Centrum Site behind the Workshop

The proposal from the Beachfront and City Committee recognized the area behind the Workshop to be key for development. The development should be complementary to the activities existing in the CBD. The primary issues were to create a meeting place of cultures, integrated into the open space system of the study area. Several proposals were included into the report which all included a mixed use environment of different accommodations. Two schemes are highlighted to explain their interpretation of how to improve the quality of the chosen environment.

Proposal 1 of the group suggested activating the site with public and residential buildings, shops and office spaces. Furthermore another open space was created to relate to the public and residential structures. Also the idea of extending Queen and Victoria Streets with relating accommodation of offices and shops has been recognized as connecting elements to the west. Relating to the Exhibition Centre a hotel was placed on the north corner of the

site. The advantages of this proposal are that new relations are created. Questionable is the creation of another open space of the space size. Rather, the existing central park should be enhanced and another open space should be differently used such as Group 6 suggest, with a recreational node in the city centre. This scheme zones the different components as: to the North East the residential area, to the north-west the recreational area with amusement parks and water feature, to the south-west a cultural area. Therefore the pedestrian volume in the area would increase and new pedestrian paths are included such as the west-east connection through the site with two nodes along the central park. The suggestion of placing the recreational area away from the existing exhibition centre is debatable (Illustration 113,114).

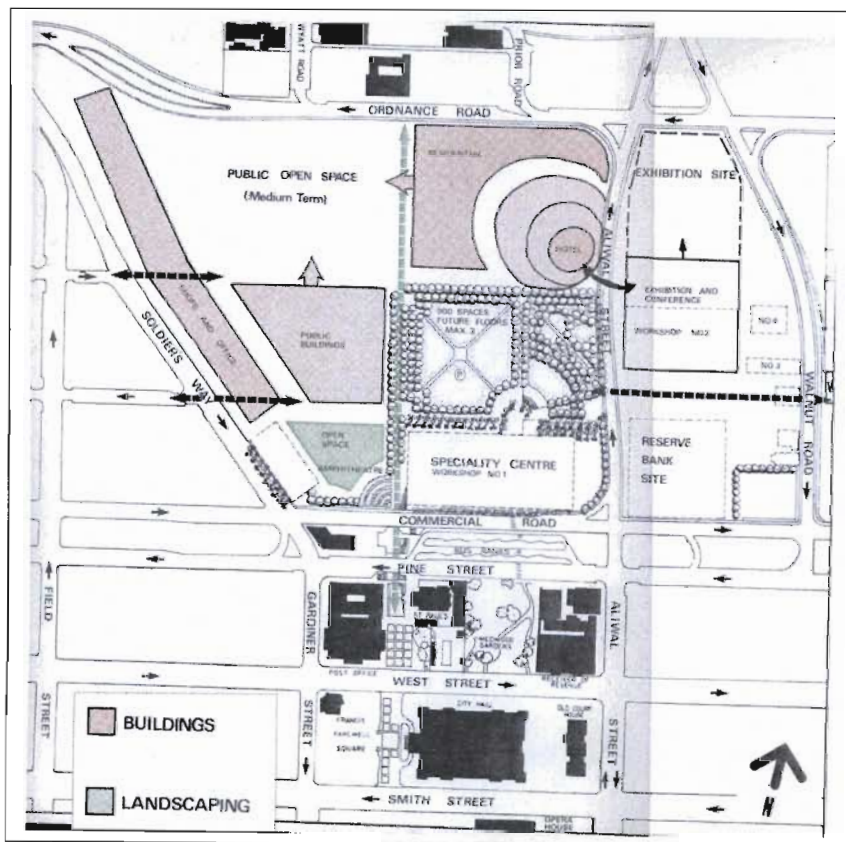


Illustration 113: Proposal for centrum site by Group 2 (Beach, 1985:8).

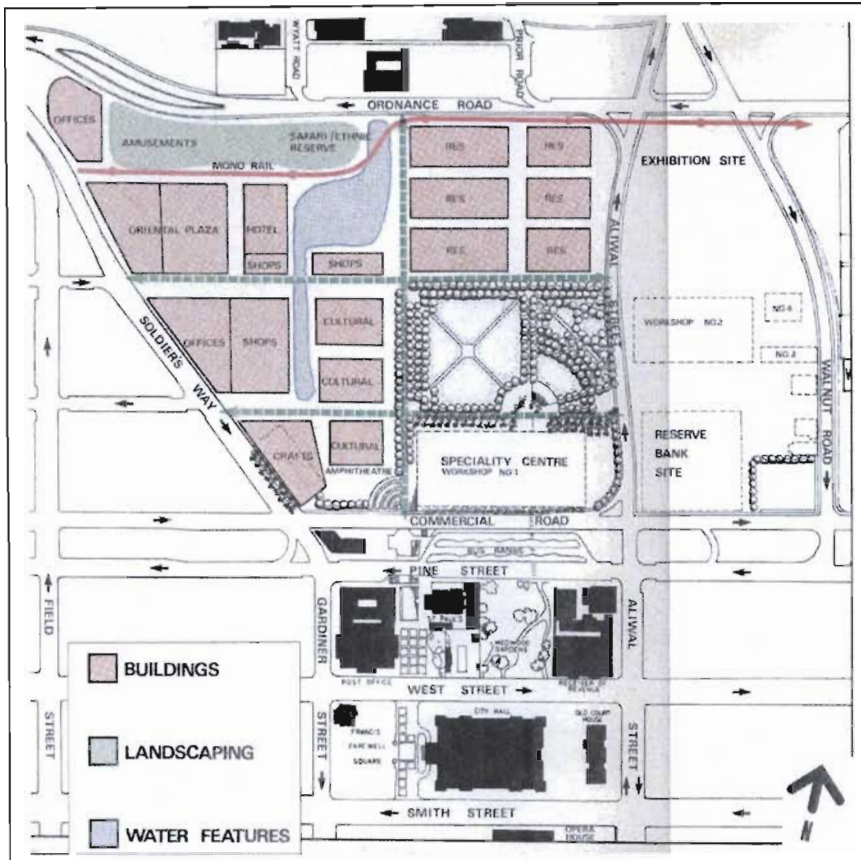


Illustration 114: Proposal for centrum site by Group 6 (Beach, 1985: 12).

The d'Urban Changes Forum report highlights the importance of inner city linkages from the centrum outwards. The aim is to realize the city's potential to shape its structure and function. This proposal, as do the previous ones recognizes the strong linkages to the west and suggests a Victoria Street promenade from the Warwick Triangle to the city centrum leading to a new form pedestrian node surrounded with new structures. To the north it creates a link to Durban station which currently is an isolated transportation node for pedestrians (Illustration 115).

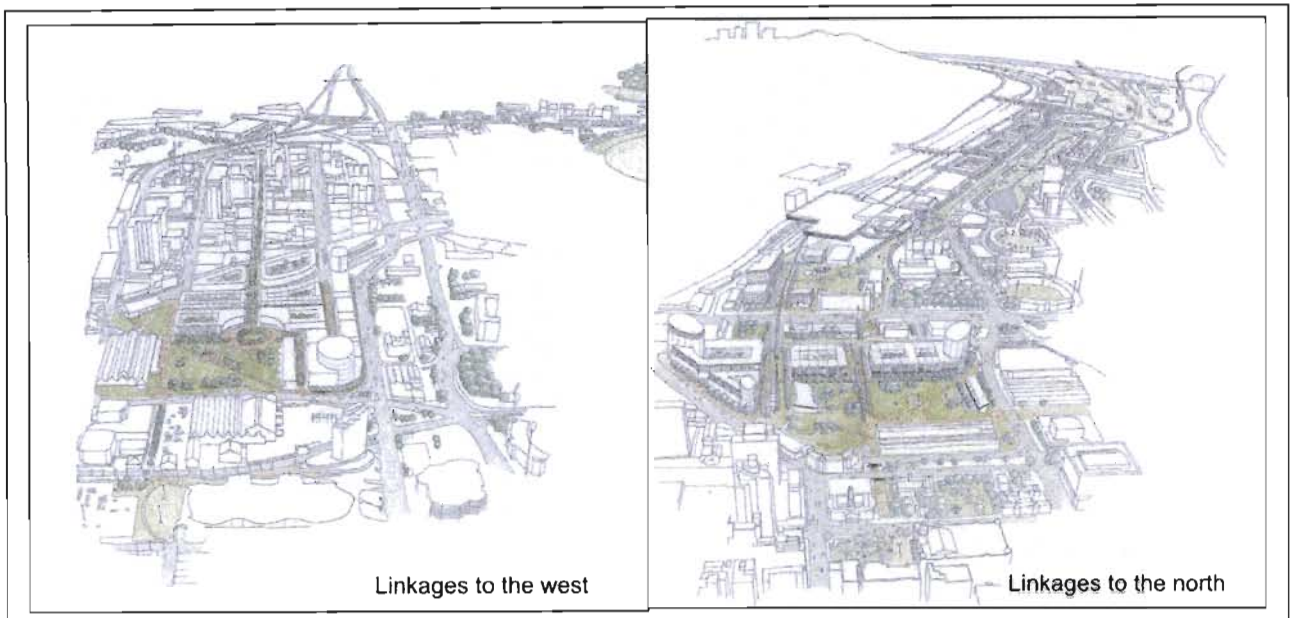


Illustration 115: Proposal of linkages from the centrum west and north (d'Urban Changes Forum).

City Engineer's Unit also identified the centrum site to be solution for revitalization of the city. As in the previous proposal the link to Victoria Street is a crucial consideration as is the link to the ICC. It also recommends softening the hard edges of Soldiers Way taxi rank with landscaping. A mixed use environment has been proposed, with a central open space differently utilized than the Central Park. (Illustration 116)

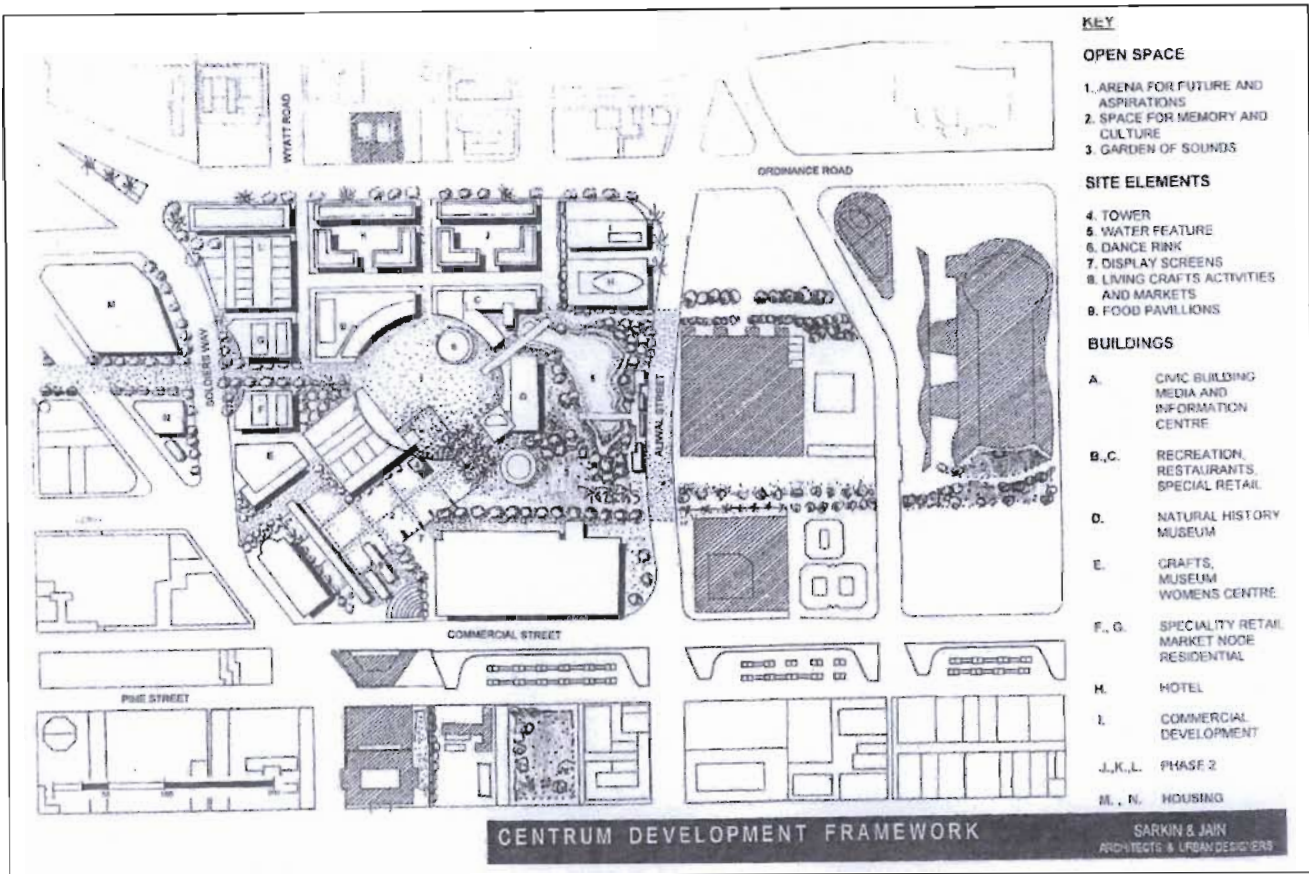


Illustration 116: Proposal for centrum site (City Engineer's Unit, 1998:37b).

The latest proposal is currently in process and Mr. White explained in an interview the content. The future development around the city centrum is to organize spaces according to their function by creating different precincts: the heritage precinct, the ICC precinct, Governmental precinct. The existing heritage sites around this area will be reorganizes for example; certain functions currently situated in the City Hall are moved to the site on Ordnance Road. The City Hall is currently under construction to create more office space and the existing art gallery will be enlarged (Illustration 117).

The area located for the governmental precinct is anticipated to have one semi-parking area which addresses part of the inadequacy of parking facilities within the city.

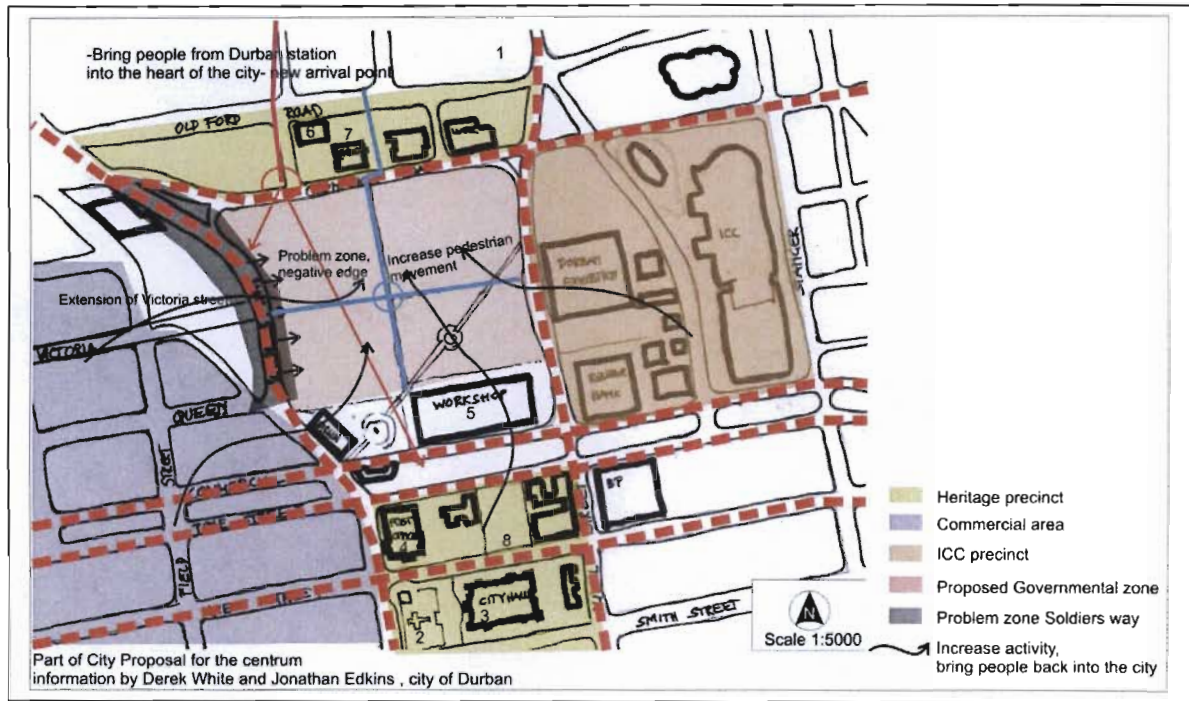


Illustration 117: Future precincts in the CBD

6.5 CONCLUSION

The case study area has recognized an area within the CBD to be a dead zone and ideal for development. An example of the central park which has at present areas with hardly any activity could be enhanced by creating other structures that relate to the existing surroundings. The land use survey gave a brief understanding of the different facilities placed within this area and that the historical heritage is located around the city hall.

The proposals discussed have identified the centrum site behind the Workshop to be the key for further development, which include urban planning interventions such as linkages to other parts in the city and architecture. Also the transportation system is a key issue to be addressed and the proposal by Mr. White to connect Durban Station via interim stations to the inner city could strengthen the inner city, and delegates coming to ICC could have an ideal arrival point that the city is currently lacking.

The headquarters designs in the La Lucia area are designed as internalized structures and have hardly any consideration for Durban's climate, which is ideal for outdoor spaces. The Unilever building has included terraces as relief spaces and in response to the new smoking policy in South Africa. The structures mainly consist of one block which is different in form but hardly allow for natural ventilation and courtyard designs.

The ICC is a fine example of a response to Durban's climate, by creating several informal outdoor meeting spaces. The conference design is flexible and multifunctional spaces are the vision at the present, in that the building will be used to its maximum. The extension has acknowledged the shortcomings of the old part, in terms of indoor sports facilities and an option of hosting a large concert.

CHAPTER 7

CONCLUSION AND RECOMMENDATION

The first chapter provides a brief historical background of Africa which is important for understanding of the African Union existence and the different problems and challenges it faces today. This leads to the need for a centre of the African Union to have a meeting space to discuss current issues and create future methods for constructive changes for development throughout Africa.

The second chapter demonstrates the different attempts to unite Africa with the Pan African movement which was the source of the establishment of the OAU. The transformation to the existing AU resulted because different topics have been the key for new development strategy. Currently the AU does not have a seat in any specific country. The seat of the former OAU is in Addis Ababa, which could continue to host the political section of the AU. The example of the United Nations of creating regional centres with specific organization is the model that could be applied for the AU buildings. The UN administrative headquarters is in New York, as Vienna hosts the technical section. This proposes that Durban could be the host for the Economic division of the AU. This model has the advantage that several members' states will profit in terms of economic growth.

Durban is an ideal host for the Economic hub because of its economic growth in the last few years and it has the largest port in Africa. In addition, the infrastructure is able to support such a centre because of the existing transport system, the converted airport for international arrivals and the new proposed airport in the north of Durban.

The brief can be derived from existing similar buildings such as the EU parliament and the UN headquarters but bearing in mind that the needs have changed. A building of this nature should be designed to allow for further

expansion which suggests that an urban cramped site with limiting extension is on favourable. Another important factor for location, as seen in the site chosen for the UNO city in Vienna, is the connection with similar functions such as conference facilities. Moreover has it become an anchor for further development which currently creates another office node in the city. In the case of Durban the problem of decentralization of the city core recommends that the city centrum would be ideal for the location of the building with its preferred linkages to the recreational services along the Beachfront and the Hotel mile. Another motivation is that of creating a good quality city heart that to which people are drawn.

Durban is a seat of multiplicity and a city of multicultural group which the AU building could express in the diversity of its members while promoting the vision of unity. The precedents of traditional architecture have pointed to several key elements that create a new African architectural language in a settled way. Therefore the use of patterns as symbolic representation and decoration inside and outside the buildings is one of the key elements.

Other key elements derived from the precedents are the use of geometric forms such as the circle which is found across Africa. The axial path is another element which is found in most settlement layouts throughout Africa that leads to an important space. The creation of landmarks of the traditional Islamic architecture as a guidance and enhancement of importance of a place, the function is important to be integrated into the AU building.

These traditional settlements were conceptualised as a good response to the climatic situation in the various regions including outdoor spaces for daily activities. This can be translated into public-related activities on the ground floor such as restaurants, shops and exhibition areas.

As seen in the International Convention Centre (ICC) in Durban, the need for multifunctional spaces is fundamental so that the building is used to its maximum and uses opens spaces. The linkages to the Hilton Hotel are preferable. The ICC is able to host functions that include 10000 people and therefore is ideal to be connected to the AU centre.

Through the case study of the CBD Durban, a specific site has been suggested for development in several proposals over the years. The information of the current proposal by Mr. White and the discussion with him identifies the centrum site behind the Workshop to be ideal for the location of the building. The reasons are the connection to the Durban Exhibition Centre, the ICC, the proposed hotels around the ICC and the transportation node opposite the Workshop. Furthermore could it activate the CBD, and the buildings along Victoria Street that have been left to decay would be refurbished for the image of the city. Also the accessibility from the outskirts via cars is well structured. Different nodes of attraction would be achieved such as the existing Beachfront, the Point development and the proposed AU centre. It also would activate further development in the area.

BIBLIOGRAPHY

- ABCD.** (April 2000). ABCD Workshop. Durban: Unpublished report
- AFRICAN UNION SUMMIT.** *Transition from the OAU to the African Union AU.* www.au2002/docs/background/oau_to_au.htm. Downloaded: 19.07.2005
- AJALA,A.** (1973). *Pan-Africanism: Evolution, Progress and Prospects.* London: André Deutsch
- ALLEN,C.and MORRIS,J.** (1986). *Architecture of the British empire.* London: George Weidenfeld and Nicolson
- ALSAYYAD,N.** (1992). *Forms of Dominance-On the architecture and Urbanism of Colonial enterprise,* Aldershot: Avebury
- ANONYMOUS.** (1977). UNIDO building Vienna. *International Construction:* April p30
- ANONYMOUS.** (1982). UN-City Vienna. *Architect and Builder* :April p.2
- ANONYMOUS.** (1998). A new Symbol for a new Democracy. *SA Architect:* August p 30
- ANONYMOUS.** (2005). *Alghathafi tells African Leaders 'If only we had Listened to Nkrumah'.* *New African:* August/September p.31
- ANONYMOUS.** (2005). *Fast Forward Johannesburg, New architecture and Urban planning in South Africa.* Berlin: Aedes
- ANONYMOUS.** *World map of United Nations Headquarters.* www.mapsofworld.com/un-hq.htm. Downloaded: 21.07.2005
- ANONYMOUS.** *United Nations headquarters, New York City.* www.aviewoncities.com/nyc/unitednations.htm. Downloaded: 21.07.2005
- ANONYMOUS.** *The Scramble for Africa: Berliner Conference 1884-1885 to divide Africa.* www.homestead.com/wysinger/berliner-conference-doc.html. Downloaded: 30.07.2005
- ANONYMOUS.** *From Kwame Nkrumah, I Speak of Freedom.* www.africawithin.com/nkrumah/speak_of_freedom.htm. Downloaded: 9.08.2005
- ANONYMOUS.** *The Parliaments of Parliaments. L'Architettura:* nos 492 p610 www.marxists.org/subject/africa/nkrumah/neo-colonialism/ch01.htm. Downloaded: 9.08.2005
- ANONYMOUS.** *Kwame Nkrumah1967-African Socialism Revisited.* www.marxists.org/subject/africa/nkrumah/1967/african-socialism-revisited.htm. Downloaded: 9.08.2005
- ANONYMOUS.** *UN Headquarter New York.* www.greatbuildings.com . Downloaded: 10.10.2005.
- ANONYMOUS.** *Donaupark -UNO City map.* www.planetware.com/map/vienna. Downloaded: 28.12.2005
- ANSELL,D.**(1998).PME"98 Winner – International Convention Centre, Durban. *ProjectPro:* May p.8
- AU** .(May 2004). *Africa, Our Common Destiny - Guideline Document, Prepared by the commission of the African Union.* www.iss.co.za. Downloaded: 19.07.2005
- BIOBACON, E.**(1974). *Design of Cities.* London: Thames and Hudson
- BIOBAKU, S** (1973). *Sources of Yoruba history.* London: Oxford University Press

BEACH and CITY COMMITTEE. (May 1985). *Centrum Workshop Proposal*. Unpublished report

BENNET,D.(1987). *A Guide to the History and Architecture of Durban*. Durban: City Council

BOUGUILLON,M.(1993).The European Parliament HQ. *L'Arca*: September p.43

BROOKS, A. (Nov 2003). *African Nationalism*.
www.geocities.com/genebrooks/african-nationalism.html/20058.
 Downloaded:21.07.2005

BRUWER,A.(1969). *Zimbabwe Rhodesia's Ancient Greatness*, Johannesburg: Hugh Kearthland

CARTER G. and O'MEARA, P. (1985). *African Independence, The First Twenty-Five Years*. Bloomington: Indiana University Press

CHALIAND,G. (1980). *The struggle for Africa*. London: the Macmillan Press

CHURCHILL,H. (1952). United Nations Headquarters- A description and appraisal. *Architectural Record*: July p.104

CITY ENGINEER'S UNIT. (September 1998). *Centrum Development Precinct*. Unpublished Report

D'URBAN CHANGES FORUM. (Undated) .Centrum- heart of the city. Unpublished Report

DAILY NEWS. (01.09.2004). *KZN pushing for Pan African Parliament*. Durban

DECALO,S. (1989). *Psychoses of Power: African Personal Dictatorships (2nd edition)*.London: Florida Academic Press

DENYER,S. (1978). *African traditional Architecture*. London: Heineman

DEPARTMENT OF HOME AFFAIRS. *African Union in a Nutshell*.
www.dfa.gov.za/au.nepad/au_nutshell.htm. Downloaded: 19.07.2005

DMOCHOWSKI,Z.(1990).*An Introduction to Nigerian Traditional Architecture Vol 2: South-West and Central Africa*. Lagos: The National Commission for Museums and Monuments

ELLEH,N.(1997). *African Architecture*. New York: McGraw-Hill

FISCHENBECK, T. *United Nation Headquarter*. www.fh-hhg.de.
 Downloaded: 28.12.2005

FRAMPTON,K. (2000). *World architecture 1900-2000- A Critical Mosaic Vol6*. Wien: Springer Verlag

GARDI,R.(1973). *Indigenous African Architecture*, New York; Van Nostrand Reinhold company

GARLAKE,P.(1966). *The early Islamic Architecture of the East African Coast*. London: Oxford University Press

GARLAKE,P.(1973). *Great Zimbabwe*. Aylesburg: Thames and Hudson

GRAHAM,F. (1959). United Nations Headquarters, New York. *International Lighting Review*: Vol 10 No3 p109

GUIDONI,E.(1975).*Primitive Architecture*. Milan: Electa Editrice

HALLEN,H.(1983). Temple in the Canfields. *Architect and Builder*: June p.2

HARGREAVES, J. (1988). *Decolonization in Africa*. New York: Longman

HASWELL, R. (1979).*The Making of Historic South African Townscapes; A study in Urban Morphology*. Pietermaritzburg: University of Natal

HASWELL, R. (1984). *An Historic Townscape Conservation Scheme of Natal* Pietermaritzburg: The Natal Town and Regional Planning Commission

HODGSON, R. (1963). *The changing map of Africa*. Toronto: D. Van Nostrand

HUFFMAN, T. (2000). Mapungubwe and the Origin of the Zimbabwe culture. South African Archaeological Society Goodwin Series: p14

IAEA. *The Vienna International Centre (VIC)*. www.pub.iaea.org. Downloaded: 10.10.2005

KOTZE, H. and STEYN, C. (2003). *Africa Elite Perspectives: AU and NEPAD*. Johannesburg: Konrad-Adenauer-Stiftung

KULTERMANN, U. (1963). *New Architecture in Africa*. London: Thames and Hudson

KRAF-ASKARI, E. (1969). *Yoruba towns and cities*. London: Oxford University Press

MACKENZIE, J.M. (1983). *The Partition of Africa*. London: Methuen

MALAN, C. and MCINERNEY, P. (2001). *The making of an African Building, The Mpumalanga Provincial government Complex*. Johannesburg: Meyer Pienaar Tayob Schnepel

MALLOWS, W. (1984). *The Mystery of great Zimbabwe*, London: Robert Hale

MALOKA, E. and LE ROUX, E. (2000). *Problamatising the African Renaissance*. Pretoria: African Institute of South Africa

MERCURY. (08.04.2004). *SA wins Bid to Host Pan African Parliament*. Durban

MERTENS, C. *25 Years Vienna International Center*. www.eduhi.at/dl/folder-18-08.qxd.pdf. Downloaded: 20.08.2004

MOOS, S. (1985). *Le Corbusier elements of a synthesis*. London: The MIT Press

MOURIER, P. (1999). *The European Parliament in Strasbourg*. Les Éditions de l'imprimeur

MULEMFO, M.M. (2000). *Thabo Mbeki and the African Renaissance*. Pretoria :Actua Press

OBADINA, T. *The myth of Neo-Colonialism*. www.afbis.com/analysis/neo-colonialism.html. Downloaded: 9.8.2005

O'CONNOR, A. (1983). *The African City*. London: Hutchinson group

OLIVER, P. (1975). *Shelter, Sign & Symbol*. London: Barni&Jenkins

OLIVER, P. (1987). *Dwellings-The house across the World*. Oxford: Phaidon

PETERS, W. (1999). Steel Architecture- ICC :Structural Frame. *KZ-NIA Journal* : January p.2

PETERS, W. (2003). Unilever Head Office, 15 Nollswoth crescent, La Lucia Ridge. *KZ-NIA Journal* : February p.4

PETERS, W. (2003). Constitutional Three decades late: Huletts Head Office. *KZ-NIA Journal* : March p.2

PETERS, W. (2004). Constitutional Court, 1 Constitutional Hill, Johannesburg, 1998-2004. *KZ-NIA Journal* : January p.2

PRAEGER, F. (1962). *Marcel Breuer Buildings and Projects 1921-1961*. New York: Praeger

RAPOPORT, A. (1969). *House, Form and Culture*. New Jersey: Simon & Schuster

RENCKEN, C. (1989). *Union Building, the first 75 years*. Pretoria: Promedia

ROTH, M. (1994). *Understanding architecture*. Great Britain: Herbert Press

SPRING, M. (1999). The European parliament, Strasbourg. *Building*: 8. January p.49

STANLEY ,H. (1997). *The Uniting of Europe*. London: Routledge

STAUCH VORSTER ARCHITECTS. (1995).ICC Durban. Architecture SA: January/February p.11

THOMPSON, V.B. (1969). *Africa and Unity: The Evolution of Pan-Africanism*. London: Longman

TURNBILL,B. (Feb-March 2004). *Influences in Africa- Part-One the African Union*. www.thewhitefathers.org.uk/374info1au.pdf. Downloaded: 21.07.2005

UNESCO. (1985). *General History of Africa VII – Africa under Colonial Domination 1880-1935* . California: University Press

UNESCO. Virtual Gallery-UNESCO. www.unesco.org/visit/uk/v4/index.htm. Downloaded: 28.12.2005

UNITED NATIONS. *About the United Nations*. www.un.org. Downloaded: 21.09.2005

UNITED NATIONS. *United Nations Information Service Vienna*. www.unis.unvienna.org. Downloaded: 21.09.2005

WHITE,D. (2006). Proposal for Centrum Site behind the workshop, Unpublished Drawings

WORONOFF, J. (1970). *Organizing African Unity*. Metuchen: The Scarecrow Press.

YOUNG, C (1982) *Ideologies and Development in Africa*, London: Yale University Press

ZEHRFUSS, B.(1959). UNESCO building, Paris. *International Lighting Review*: Vol 10 No3 p89

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