Abstract
This study seeks to investigate the impact of globalisation on the architectural behaviour in the United Arab Emirates, to clarify the benefits and risks of globalised architecture in architectural behaviour. Although there are several supporters of globalisation who see the phenomenon as a means of progress and development, many experts have indicated that this phenomenon has been demolishing local culture and regional considerations, and ignoring residents’ requirements. As a result, this study presents all the views about this phenomenon from many aspects, such as political, social, economic and environmental, whereby it investigates the changes in architecture and urban planning due to global standards, methods of construction, and building materials.

The literature review was the first part of the study and the theoretical studies were divided into three pivots in this thesis: The globalisation impacts and features, the relationship between globalisation and architecture and the last pivot concentrates on the human needs in architecture. The study also concentrates on the impact of globalisation on architecture through the terminology of “globalised architecture”, and focuses on some global phenomena in the architectural domain, such as skyscrapers, multi-storey buildings and iconic landmarks.

The empirical study examines this argument about globalisation through questionnaires and interviews. A comparison is drawn between two groups: globalised houses is the first group, which reflects globalisation’s impacts on architecture, where this provides easier ways to specify features, elements and specifications for the era. In contrast, the non-globalised sample is the opposite of
the first group, because it reflects the features of houses without the impacts of
globalisation. Ultimately, the findings indicated that there are differences between
the two groups. Both samples occurred in the same place and time, but the form of
architecture and urban design has affected human behaviour. Thus, this study
suggests a paradigm that could provide more humanitarian elements in
architecture and urban design. It also suggests some general recommendations
supporting human needs, and local considerations such as standards and codes.
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Dedication
To my family: mother, father, brothers, sisters, wives and kids who
were patient along the study period.
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Abbreviations

AAM: Architects Association of Macau
A.D: Anno Domini
AED: United Arab Emirates Dirham
BRE: Building Research Establishment
CAD: Computer-Aided Design
DO: Development Office
EC: European Commission
FDI: Foreign Direct Investment
FNC: Federal National Council
GEG: Global Environmental Governance
GDP: Gross Domestic Product
HROB: High Rise Office Building
IDF: Industrial Development Funds
ILO: International Labour Organization
IMF: International Monetary Fund
KWS: Keynesian Welfare State
MRHE: Sheikh Mohammed Bin Rashid Housing Establishment
MOPWH: Ministry of Public Work and Housing
NAFTA: North American Free Trade Agreement
NMC: National Movement of Cuba
NGO: Non-Governmental Organisations
OECD: Organization for Economic Co-operation and Development
SAP: Structural Adjustment Programme
SCR: Supreme Council of Rulers
SOM: Skidmore, Owings & Merrill
SZHP: Sheik Zayed Housing Programme
T.B: Tubercle Bacillus
TCPA: Town and Country Planning Association
TNC: Trans-National Corporation
UAE: United Arab Emirates
UDHR: Universal Declaration of Human Rights
UK: United Kingdom
UN: United Nations
UNESCO: United Nations Educational Scientific and Cultural Organization
UNPD: United Nations Population Division
USA: United States of America
WB: World Bank
WHO: World Health Organization
WTO: World Trade Organization
Chapter One: Introduction

1.1 Overview
The phenomenon of globalisation has spread across the world over the last two decades and has become the primary agenda of many conferences, summits, meetings and lectures. International trade has existed for centuries, but globalisation has revolutionised the world, due to many factors. Firstly, the global use of telecommunications means, such as mobile phone and the Internet, has minimised any differences between cultures and communities. Secondly, the transportation system has greatly reduced the distance between countries and cities, whereby the world has become a ‘small village’. Lastly, branding has unified people’s tastes around the world, in terms of food, clothing, building materials and modes of transportation. Consequently, the phenomenon of globalisation has created a revolution in all aspects of society, whether political, economical, social, environmental or architectural.

Architecture is the second point of focus in this study, as civilisation consists of two components; people and the city. Human life encompasses religion and culture, while urban life is associated with the built environment and transportation system. Hence, architecture is considered as the main component of a built environment that reflects the face of civilisation, whether old or modern, developed or underdeveloped. Over the last few centuries, architecture has developed dramatically (since the industrial revolution occurred within the era of globalisation).

Architects have played a pivotal role in the transformation of vernacular architecture, whether in terms of skyscrapers, isolated small villages or global cities,
especially within the Arab Gulf region. International architects of this era, from many nations and cultures, have contributed to the building of international architecture, uniting the world. Global architects such as Norman Foster, Richard Meier and Zaha Hadid have designed buildings in many cities across the world, such as Dubai, Shanghai, New York and London.

This study discusses and reflects upon architectural activity; paying particular attention to the notion that globalisation apparently has a strong influence on architectural development. This could be referred to as ‘the globalisation of architecture’, created by human, economic, demographic, cultural, social, political and strategic factors.

The chapter concludes with recommendations and results that will facilitate the grounding of policies and strategies, such as harmonisation with cultural heritage, both ethically and in terms of contemporary life. Furthermore, the chapter summarises the architectural development and the panorama, with particular regards to the United Arab Emirates and, more generally, the Arab Gulf Region.

1.2 Research Problem
There is no doubt that globalisation has an impact on many aspects of life, such as politics, economics, culture and the environment. The impact of globalisation on architecture is readily apparent, for many reasons; firstly, architecture is a physical product, rather than a theoretical phenomenon (as is culture and politics), and, secondly, modern architecture demonstrates progress, while traditional architecture reflected the backward-looking views of the community: in modern architecture, computer modelling is the strongest factor. Indeed, established factors were based on the effects of global architecture and ignored local considerations, such as culture and the weather. This is essential, as it provides a focus on the relationship between
architecture and human needs, whether cultural or any other aspect. In order to develop architecture and urban planning that fulfils human requirements, the focus should not be global need. This study discusses the issue of the impact of globalisation on the architecture of the UAE by investigating the contours defining the form of these phenomena, as follows:

- UAE’s architecture, in general terms and in terms of housing development projects, is strongly influenced by the phenomenon of globalisation. As a result, the region may face many problems; i.e., social risks, such as distance between the various levels of communities, a lack of relationships between neighbours and an increase in poverty and crime.

- Studying the impact of globalisation, in terms of social, economic, political and environmental issues, in order to investigate the growth and development of each aspect and specify the functions of these aspects.

- Focusing on the public housing programmes and residential buildings, reflecting human needs. Residential buildings are closer to people than any other type of building, such as commercial and industrial.

- By analysing and discovering how such housing programmes ensure the fulfilment of human needs and also cater to the needs of human beings within society, taking into account cultural and environmental factors.

1.3 Research Hypothesis
Many studies have indicated that the UAE is classed as a beginner, in terms of globally-developing countries. However, Dubai (the commercial capital of the UAE) is considered as the first city to apply global standards in the Gulf States within all sectors. Thus, the impact of globalisation on the lifestyle of those living in the UAE cannot be ignored, whether in the economic or social domain. Although the benefits
of globalisation, in terms of lifestyle, are apparent (such as methods of telecommunication or transportation modes), there are many negative views and opinions on globalisation, especially in terms of culture and architecture: it is asserted that globalisation builds cities without a local identity. Some studies have referred to Dubai as a ‘city without identity’, as it is competing with other global cities by applying global standards rather than local criteria; the tallest building in the world is located in this small city.

The main hypothesis of this research is:

*The rise in global architecture is affecting the human needs of residential stakeholders in the UAE.*

This hypothesis is defined by the following points:

- By re-formulating the economic, cultural and technological aspects of globalisation, it is possible to obtain a more human architecture. Globalisation and any new ideas and products should be produced to provide comfort for people, rather than vice-versa. Also, any architecture (especially housing) should cater to people’s needs and, if it fails to do so, then it cannot fulfil their needs and should not be called a house or home.

- The possibility of adaptation between the particular characteristics of a society and the progress of modern technology; technology is indifferent, which means it does not relate to environmental behaviour. However, not all technology would be suitable for anywhere and at anytime; for example, air conditioning is unsuitable in cold weather, while glass facades are desirable in cold weather but unsuitable in hot, arid zones, as they increase the heat.
• Comfort cannot be achieved for human beings if their various identities and cultures are ignored, irrespective of the alternatives offered. Although modern technology attracts many people, local culture still holds a significant position.

1.4 Research Aims and Objectives
The main interest of globalisation is the economy and thus the economic aspect of globalisation dominates all other aspects. Although some products, such as cigarettes, harm the health and cause many diseases, production does not stop, for economic reasons. Furthermore, some products that are widely marketed, such as mineral water, damage the environment through the use of fuel, leading to increased pollution, but trade does not cease: this would harm the interests of many large companies. The architectural aspect of globalisation is also important, as unifying building materials that can be used anywhere and in various buildings (residential, commercial, industrial, etc.) increases the interests of some companies.

Residential buildings and houses have accrued their importance from the fact that a home is considered the single most expensive thing that people buy in their lifetimes. Moreover, the interest margin is very high in comparison with other goods and this has led to a focus on global companies unifying worldwide building standards, in terms of building materials. Ultimately, global codes and standards will be accepted if they fulfil human needs and are not at odds with local culture and climate. Any standards that disrespect culture and do not fulfil human needs should be rejected.

The main and general objective of this research is to reformulate the behaviour of architectural development, in order to fulfil the main needs of humans (a priority upon which other human interests are built). This can be achieved through the following aims:
• Studying the impact of globalisation and how to implement suitable architecture and eliminate unsuitable architecture in the UAE. Not all impacts are bad, while others are undoubtedly very damaging. In discussing some technical building methods that are easier to construct and decrease human risk, we should recognise the benefits of the impact of globalisation. However, in terms of applying global standards and ignoring local culture and needs, such as privacy and hot weather, the impacts of globalisation are very bad for the UAE, as they may also apply to other regions and cultures. Thus, this study aims to distinguish between the acceptable and unacceptable impacts of globalisation in the UAE region.

• Analysing and evaluating the housing environment in the United Arab Emirates. Houses unaffected by globalisation impacts and those affected by globalisation are compared and specified which sample fulfils human needs and which does not. At the end of the assessment, specifies which factors ensure that houses and residential buildings are friendly.

• Realising and considering human needs by studying the strengths and weaknesses of the current altitude and requirements. Some impacts of globalisation are beneficial and can be used in the development of architecture, in order to make it more responsive. Likewise, some impacts should be eliminated in fulfilling human needs, in terms of houses and residential buildings.

1.5 Research Questions
This research focuses on finding answers to many questions, such as:

- What are the impacts of globalisation on UAE Architecture, especially in terms of housing?
This question aims to specify the impacts of globalisation on UAE architecture. It intends to study the consequences of such impacts, in terms of architecture and the housing sector. The results help to distinguish the positive impacts from the negative ones, allowing us to retain the former and eliminate the latter. Also this study is aiming to get more details of these impacts, whether social (such as the relationship between neighbours and the rate of security for kids in the neighbourhood) or physical, such as size of plot and the built area. All this data help us to understand actual architecture in the UAE and the ways in which we could improve the situation, enabling it to become more humane.

- **Can there be a mix of modern style and cultural identity?**

This question is very important, as many researchers believe that the amalgamation of modern and traditional architecture is impossible. However, a positive answer to this question leads to the merging of the benefits of modern architecture and the cultural identity of communities. Both local and traditional elements may be combined in modern architecture to create a unique architectural and cultural identity for the UAE community. Finally, local functions and human needs in modern architecture are employed as a result of the integration of traditional and modern architecture. This blend may be more advantageous and more humane, as it incorporates modern technology and local values.

- **Human needs can be satisfied within the era of globalisation?**

This question aims to focus on the measures and methods that may help to strengthen the efficiency of globalised architecture. The most important thing in this are the differences between globalisation and human tendencies (globalisation seeks to achieve maximum economic benefits by applying a
global style throughout the world, while the human tendency seeks to understand the needs of human beings and places these as priority, which often means ignoring other factors, even economics (which is considered the basis of globalisation). Ultimately, the measures and methods of globalisation require the confrontation of economic and human factors and this demands a lot of expense, in terms of meeting human needs at the cost of losing economic benefits.

- **Do international standards provide for human needs anywhere?**

As international standards are the main components of the era of globalisation, according to Chowdhury (1985, p. 79), ‘it appears that, even in straightforward cases, physical needs are influenced by social and regional factors’. Thus, this study seeks to investigate the impact of these standards on the architecture in the UAE, especially in terms of the region being a hot, arid zone.

### 1.6 The Importance of the Research

The importance of the research can be summarised in two main objectives:

- Knowledge and discovery of the impacts of globalisation on the architecture in the United Arab Emirates and studying any problems with such architecture, in order to identify the best concepts. These objectives take many aspects into consideration, such as the political and social factors that affect the form of architecture, the relationship between traditional and modern architecture and the study of the main reasons why changes were implemented (i.e., building materials and international architects).

- The identification of the ‘paradigm’ to suit globalisation that considers the existing phenomenon and the human needs that are needed to understand the culture and environment of the United Arab Emirates. According to Moore, (1979, p. 21) ‘environment-behaviour studies are the view of design and of
the environment which places the values, needs and preferences of users at the forefront of the design process’. However, the suggested prototype should fulfil many needs relating to culture and environment, the layout of the urban form for the neighbourhood and the houses reflect human satisfaction and the fulfilment of needs. Thus, places everything in this paradigm that fulfils human needs, in accordance with the results of the theoretical and empirical study.

1.7 Dissemination

The results of this research can be utilised by the following sectors:

- **Decision Makers in Housing Programmes**: the majority of houses have been built by public housing programmes, whether federal (such as the Sheikh Zayed Housing Programme (SZHP) or local, (such as the Sheikh Mohammed Bin Rashid Housing Establishment (MRHE) in Dubai. Some of these programmes do not just build houses; they are also involved in planning neighbourhoods and dividing the plots, thus contributing to the design of housing forms. Also, the Housing Programmes have direct contact with the clients, as the loans and grants are issued by these programmes.

- **Local Planning Authorities**: consider the main bodies responsible for the planning, designing and developing of residential areas in the UAE. The federal government gave the local authorities of each emirate the responsibility of planning their cities, specifying the use of land, dividing the plots and choosing the size of plots in accordance with the needs of each emirate.

- **Housing Research Centres**: consider the main sources for any development. These centres focus on the many aspects of housing; for
example, the social aspect concentrates on any social problems within the residential environment and economic aspects study the gap between the price of houses and the incomes of citizens.

- **Social Affairs Authorities**: these focus on many social issues, such as relationships between neighbours, problems faced by children in the cities and the rates of crime and poverty in the community.

- **Municipalities**: are responsible for approving housing planning and specify the building materials and everything else relating to buildings. The standards, codes and instructions are approved by the municipalities and so their impact on the form of the architecture is readily apparent.

1.8 **Thesis Structure**
The study is divided into nine chapters: five chapters are dedicated to the theoretical Part of the work, while the other three chapters discuss the fieldwork and the last one concentrates on the conclusion and the recommendations.

**Chapter One- Introduction**
In the first chapter, the research is summarised, outlining the research problems, questions, hypotheses, aims and objectives. Then it discusses the importance of the research and dissemination. Finally, it outlines the research structure which is divided into theoretical work and field work.

**1.8.1 Part One - Theoretical Perspectives (Literature Review)**
Part one highlights previous studies discussing the subjects of globalisation, modernisation and capitalism and the impact of these on architecture, culture and identity. It also compares phenomena such as the traditional and modern and alienation and identity and, finally, it discusses the many phenomena initiated by globalisation and the modern progressive world, such as density, poverty and crime.
Chapter Two- Globalisation: Aspects and Features

This chapter outlines the phenomenon of globalisation. Firstly, the aspects of the impact of globalisation are discussed. Secondly, the features of globalisation are highlighted, such as its basis on ignoring time and place. Finally, it highlights some case studies, featuring a global city.

Chapter Three – Architecture and Globalisation

Chapter three discusses the globalisation aspects and their impact on reshaping the aspects of life, particularly architecture. Finally, it defines the identity of and the relationship between culture and architecture.

Chapter Four- Human Needs in Architecture

In chapter four, there is a focus on human needs in general, especially the social aspects of architecture and housing. The purpose of this is to find the specific elements of architecture and housing that enable the accommodation of human needs.

Chapter Five- Housing in UAE

This chapter concentrates on housing in the UAE in general, including traditional housing before the discovery of oil and during the oil era. Furthermore, this chapter outlines the housing programmes in the UAE (federal and local government).

1.8.2 Part Two: The Empirical Study

The empirical part of this study is divided into three chapters. Firstly, the research methodology focuses on the methods employed in this study. Secondly, the fieldwork concentrates on various issues, such as the classification of samples. Finally, the main chapter of the empirical study contains an analysis and discussion of the results.

Chapter Six - The Research Methodology
This chapter focuses on the methods applied in this research and will discuss the research environment in the UAE. This is followed by the research methods that will be employed in this research, including statistics and case studies, sample surveys, interviews and questionnaires.

**Chapter Seven- Fieldwork**

This chapter focuses on the methods and measurements that followed the empirical study. The first research method is the questionnaire, which is divided into two parts: user and designer, also there are interviews with decision makers and experts.

**Chapter Eight- Results, Analysis and Discussion**

This chapter displays all the results of the survey and the fieldwork (the questionnaires and interviews are presented in two parts). These findings were analysed by comparing the results of the various fields, and the findings were discussed by comparing the theoretical data and the results of the empirical study.

**Chapter Nine - Conclusion and Recommendations**

In the final chapter, the research concludes by discussing the results and outlining recommendations. The conclusion incorporates all the results and findings from the theoretical and empirical studies, while the recommendations will feature some suggestions to improve and research and fulfil the objectives of the study.
Chapter Two: Globalisation: Aspects and Features

2.1 Introduction
This chapter begins by tracing the phenomenon of globalisation right from the 16th century, through the Nineteenth century and the 1960s and, finally, to the 1990s, when the expression came into being. The definition of globalisation as an all-encompassing phenomenon will also be examined, as will the effects and nature of globalisation, in terms of trade and independent states. Furthermore, the chapter will highlight several political aspects of globalisation, following the fall of the Soviet Union and the New World Regime.

The chapter also focuses on the social aspects of globalisation, featuring the city of Shanghai as an example, considering human rights and environmental perspectives in relation to this. Some architectural aspects of globalisation are discussed in terms of time and space and in relation to local and regional architecture.

Additionally, some background information is provided on the early development of global cities and how some cities, such as New Mexico and Johannesburg, bore the impact of migration, due to global trade. Finally, global poverty and relevant issues are mentioned, such as the crime and congestion that arose as a result of the impact of globalisation.

2.2 Historical Background
This section emphasises on globalisation and its historical background, in addition to the nature of the world and how it evolves. Initially, it would be useful to gain an understanding of the history of this phenomenon and the different definitions of globalisation as asserted by various writers and researchers. Although it is difficult to specify an exact date, in terms of the advent of globalisation, there are many studies which indicate some facts about this. According to Hirst and Thompson...
globalisation and economic activity appeared after the Second World War, particularly in the 1960s: this was due to the emergence of the activities of the National Movement of Cuba (NMC) and the rapid growth of international trade during those years. According to Cable, the term *globalisation* was first used forty years ago, based on economic references; however, the notion of the relationship between modernisation and the global market ‘has much earlier origins, in the writings of Saint-Simon and Marx’ (Cable, 1999: p.10).

Alternatively, Lechner and Boli (2003), in their book *The Globalisation Reader* discuss historical globalisation, asking the question ‘Is Globalisation New?’ In answering this question, the authors state that many scholars indicate that globalisation began in sixteenth century Europe: at that time, the Europeans established worldwide trade and the methods of fostering interaction between people, both economically and socially. However, other scholars state that it was at the end of the nineteenth century when the phenomenon of globalisation became more apparent; this was the time when millions of people migrated, trade opened and the movement of capital, people and goods across national borders became easier. Many researchers share Lechner and Boli’s view that it is difficult to identify the specific date, in terms of the origins of globalisation. Robertson (1992: p.8) states: ‘the term *globalisation* was taken up in academia during the mid 1980s and its usage increased dramatically after that time’, while Featherstone and Lash (1995: p.1) inform ‘since the start of the 1990s, globalisation has become an influential paradigm in the human sciences’.
2.2.1 Definitions
According to Holm and Sorensen (1995: p.11), globalisation is ‘the intensification of economic, political, social and cultural relations across borders’. Furthermore, the dictionary and the introduction to *Global Environmental Governance* (GEG) offer three definitions of the term *globalisation*. Firstly, it is ‘the increasing worldwide integration of markets for goods, services and capital, which began to attract special attention in the late 1990s’. Secondly, it is ‘a term used to encompass a variety of changes that were perceived to occur at about the same time’. The third definition, adopted by the United Nations, states that globalisation is ‘a term used to describe the increasing flow of goods, services, capital, technology, information, ideas and labour at the global level, driven by liberalisation policies and technological changes and considered by proponents to be an integration and inclusive force’ (Saunier and Meganck, 2007: pp.147-148).

Another useful definition, by the World Bank, states that globalisation is ‘the process by which markets and productions in different countries are becoming increasingly interdependent, due to the dynamics of trade in goods and services and flows of capital technology’ (World Bank, 2000: p.7). A more simple and straightforward definition is offered by Milward (2003: p.11): in his opinion, globalisation is the ‘movement of goods, services, capital and labour around the globe in a co-ordinated and institutional interconnectedness’. According to Abd Alhalim (2007: p.286), globalisation may be defined as the ‘integration and democratisation of the world’s culture, economy and infrastructure through transnational investment, the rapid proliferation of communication and information technologies and the impacts of free-market forces on local, regional and national economies’.
For renowned sociologist Robertson (1992: p.8), the concept refers to the ‘compression of the world as a whole and as a concrete global interdependence and consciousness of the global whole’. In terms of the social (humanity) perspective, Albrow (1990: p.8) defines globalisation as ‘all those processes by which the people of the world are incorporated into a single world society’.

Pfaff (2000: p.2) sees globalisation as a phenomenon: it is ‘the product of technological developments that allow integrated global communications and the possibility of real-time financial transactions and globalised manufacturing. ‘These are politically and socially neutral’, Pfaff further adds that globalism is an ideology and demanded that these resources be placed at the service of deregulated markets; furthermore, he asserted that the action of the marketplace would bring large social and political benefits. Satler (1999) offered a more interesting definition of globalisation; one that understands the essential need to preserve and respect diversity, as well as the seemingly disparate philosophies of space, people and their interactions with and within the built form. That is, an architectural (and social) terrain that one could call global in the deepest sense of the term.

Thus, the phenomenon of globalisation is not only one component; rather, it is divided into many aspects, such as politics, society, economics, etc. There is no specific definition of globalisation, due to the fact that the term is associated with many aspects and parts.

2.2.2 Dimensions of Globalisation

With regards to the definitions above, one cannot underestimate the impact that globalisation has had and continues to have on almost all aspects of our daily life, behaviour and thinking. This chapter will feature a brief discussion of the impact of globalisation, in terms of the political, social, economic and environmental arenas,
as shown in the Fig (2.1). This is followed by a general description of the main features of globalisation and of what distinguishes this era from other periods. There will be a focus on the dimensions of globalisation, through questions such as ‘what are the components of globalisation?’ ‘is globalisation good or bad?’ and ‘what are some opinions about the nature of the phenomenon?’.

**Fig (2.1) Dimensions of Globalisation, (Muller, 2008)**

Williamson (2002: p.1) in his technical paper entitled *Globalisation – Good or Bad?*, discusses the phenomenon of globalisation from perspectives such as benefits and risks, politics and sovereignty, nations, multinational firms and Non-Governmental Organisations (NGOs). With regards to economic globalisation, Williamson asserts: ‘while it encourages free trade across borders, without any protection, in truth, America’s businesses were protected from foreign competition in the Nineteenth century, as were companies in more recent success stories, such as in South Korea’ (2002: p.2). Thus, he states that a free market opposes historical and statistical evidence; he also states that the power of multinational firms and global financial markets adversely affected the sovereignty of countries by imposing tax
rules and exchange rate policies. When discussing labour rights, he asserts that multinational firms are benefitting by ‘employing sweatshop labour and then skimming off huge profits while paying very little tax’. Finally, he emphasises that NGOs, such as the World Bank (WB) and the International Monetary Fund (IMF), have not come into being through election; thus, they serve the body that created them.

In comparing the benefits and risks of globalisation, Herman (1999: p.3) has written extensively about this phenomenon. In his technical paper, titled The Threat of Globalisation, Herman states: ‘as an ideology, globalisation connotes not only freedom and internationality. As it helps realise the benefits of free trade and thus comparative advantage and the division of labour, it also supposedly enhances efficiency and productivity. Because it is seen as beyond human control, it further weakens resistance’. The author outlines many benefits of globalisation, with the exception of human rights, stating:

*Globalisation has an aura of virtue. Just as ‘freedom’ must be good, so globalisation hints at internationalism and solidarity between countries, as opposed to nationalism and protectionism, which have negative connotations. The possibility is that cross-border trade and investment might be economically damaging to the weaker party, or that they might erode democratic controls in both stronger and weaker.*

According to Held (2001: p.395), globalisation is far from being a singular phenomenon. Rather, it is multidimensional and has created a great shift in human activities. The author adds that this shift can take different forms and follow different types of trajectory, across economic, political and other domains; it may also generate conflict between many domains, to create new tendencies.

A panel of UN reports on globalisation indicate that the phenomenon is not just limited to the marketplace and economics; it has spread globally, in terms of
political policies, cultural criteria and social specifications. Consequently, this has led to the standardisation of the world’s system and has influenced government policies, in addition to the economic and social structure. The UN report (2000: p.10) further points to a consensus amongst researchers that globalisation is neither a monolithic entity nor a single event. Globalisation is perceived as a multi-faceted and dynamic phenomenon.

Garrison (2000) views globalisation as not just limited to communications and economics. It encompasses various other issues, such as worker's rights, the environment, culture, health, ethics and development. Hall (1998: p.6) clearly views the phenomenon of globalisation as non-contradictory and recognises its aims. He perceives globalisation as ‘a single, non-contradictory phenomena, which gives rise to investable outcomes everywhere and is uncontrollable by nation states, either individually or as a collective force’.

To summarise these diminutions, Bauman (2005) states that globalisation has multi-dimensions and that the force of its effects is haphazard. Politically, it plays a major role in many issues, such as sovereignty, world order and the delivery of public services. Culturally, it intervenes significantly and directly in the reshaping of identities, self-conception, creativity and responses to aesthetic experience.

Jekot (2007) examines globalisation from two different angles (one positive and the other negative). In terms of the positives, he views that globalisation has implications for equity and that it stimulates trade and economic growth, reduces poverty levels and contributes to stability. However, it has negative connotations in that it involves an increase in the levels of inequality and vulnerability. Curiously, Jekot discusses arguments for and against localisation, supported by evidence. In general, however, authors who discuss globalisation often write about its influence
on four important fields or areas: politics, society, economics and the environment. This will thus be the subject of our discussion, the globalisation impacts in various aspects as shown in below figure:

![Globalization Index for Ranking by Region](image)

**Fig (2.2) Globalization Index for Ranking by Region, (Chen, 2007)**

### 2.3 Aspects of Globalisation
The World Forum Report states that the comprehensive effects of globalisation indicate its dramatic rise in recent years and that it now affects virtually all of the world’s six billion people. Although the economic dimension of globalisation was more visible, it also has important political and social dimensions (UN report, 2001).

This section focuses on the four main aspects of globalisation: politics, economics, society and culture and the environment. Discussing these aspects in detail shall encourage an understanding of their impact, in order to explore the role of each one in relation to the phenomenon of globalisation.
2.3.1 Political Aspect
The UN report of 2001 defines political globalisation as ‘the creation of a world government that regulates the relationships among nations and guarantees the rights arising from social and economic globalisation’.

After the fall of the Soviet Union, power in the world became uni-polar, with the United States controlling and dominating world events. The era also witnessed the rise of some regions and the fall of others. What is interesting is that, in its effort to exercise further control and dominance, the USA advocated the freedoms of belief, thinking and expression (Al-Bisher, 2008), (see Fig 2.3).

Abdulhalim (2007) states that the New World Order resulted in the open door policy, which necessitated changes in the law, in terms of equity, equality and prosperity. For example, foreign property ownership has become the norm in many countries. This has led to the intervention of the World Bank, under the pretext of regulating property ownership so that the rights of owners are protected. In turn, this has had an adverse effect on policy and decision making in some countries.
The report (UN report, 2000) also indicates that globalisation appears to have changed the strategies and organisation of public policy. It has sought to move states from regulating to investing, with a move from building up state institutions to the building up of public institutions.

The global character of major cities lies not only in their telecommunication infrastructure and global firms, but also in the many different cultural environments in which these workers exist. It is no longer appropriate to think of global cities simply in terms of the corporate towers and corporate culture at their centres. Today’s global cities contain conditions for the making of post-colonial histories (Sassen, 2007: p.277).

With regards to the political impact of globalisation, Preston (1996: p.120) indicates: ‘nation states became powerless in the face of these global relations, unable to maintain control of their own economies, at least in terms of the implementation of autonomous economic policy’. In terms of the impact of globalisation decreasing the power of states, Koslhy (2001) informs that the increase in the relationship between economic and cultural globalisation has resulted in a decrease in the power of the policies and instruments used by governments to control activities across its borders. The growth of global and international organisations crossing borders has eroded the distinctions between global and local policies. Kolshy concludes by defining the impact of globalisation on national states, saying: ‘globalisation has a profound impact on institutions and discourse, nationally and internationally. In the process of changing the nature of the state and the interstate system, a new political order is being fashioned’, (kolshy, 2001: p.1514).

The UN report (2001: p.2) states how ‘the political aspect of globalisation has led to a shift in power, from sovereign states to technologically advanced global elites and
private multinational interest’. Held (2001: p. 395) agrees with the UN report, in that the main impact of globalisation on politics is the transformation of state power and the role of the nation state, in terms of changing the relationship between the states and the markets. However, he mentions that, in many cases, the state dominates many spheres and, as an example of this, he refers to the deregulation of the capital in the 1980s and the 1990s, when the state became central in establishing new kinds of transnational collaboration, such as military alliances and the advancement of human rights regimes. Held suggests some advantageous changes, stating:

*Although governments and states remain powerful actors, they have helped create, and now share the global arena with an array of other agencies and organisations. The state is confronted by an enormous number of intergovernmental organisations, international agencies and regimes that operate across different spatial reaches and by quasi-supranational institutions, such as the European Union.*

Stammers (1999: p.982) underpins this vision when he outlines the impact of economic globalisation on the sovereignty of states, the development of the economy and commodity markets and the consolidation of global production capacity by multinational firms. He states that this is ‘supported by an extremely pervasive ideology of global neo liberalism’, which entails ignoring the conditions and rules imposed by economic aspect of a nation. Kapstein (2001: pp. 372-373) incorporates the World Bank when he states that ‘globalisation may be expected to increase constraints on governments, the choices of tax structures and the tax rate’. He further comments that, if the government is powerless to set or shape the tax, ‘it is hard to see what sorts of power they have over economic performance’.

Holton (1998, pp.109-113) considers the impact of changes on the political aspect of communications and information technology in forcing states to allow unreasonable news to cross borders, as satellite broadcasting technology has the ability to reach
anywhere at any time. Of this, he states: ‘it has contributed to simultaneity in the coverage of political events, in which events in one part of the globe can be watched on television in all other parts’. Holton further adds, in terms of the importance of satellite broadcast in broadcasting news across borders: ‘one consequence of interdependencies of this kind is captured in the much-cited observation of US President Clinton at his inauguration, on 20th January 1992, to the effect that there is no clear division today between what is foreign and what is domestic’.

Sometimes, the flow of information and news results in more harm than good. McGrew (1992: p.1) outlines this, stating: ‘when Iraq invaded Kuwait, on the 2nd August 1990, the headline in a local newspaper in the English industrial city of Coventry read Iraq Invades Kuwait- Bus Fares to Rise’. He notes that, in this case, the interdependence occurred through the connection between events: the supply of oil would decrease and thus the cost of oil would rise and, as a result, bus fares in the UK would also rise.

In his technical paper, Herman (1990: pp.2-3) incorporated the subtitle Globalisation as an Attack on Democracy. In this, he states that globalisation has negative consequences for democracy: this is due to the fact that a small number of ‘super’ businesses dominate elections through the media and they also support the election campaign. He adds:

*This undemocratic process, carried out within a democratic façade, is consistent with the distribution of the benefits and costs of globalisation and the fact that globalisation has been a tool in the serving of elite interests. Globalisation has also steadily weakened democracy, partly as a result of unplanned effects, but also because the containment of labour cost and scaling down of the welfare state has required the business minority to establish firm control of the state and remove its capacity to respond to the demands of the majority. The mix of deliberate and unplanned elements in globalisation’s antidemocratic thrust can be seen in each aspect of the attack process.*
2.3.2 Economic Aspect

According to the UN report (2001: p.2), economic globalisation is defined as ‘the realisation of a global common market, based on the freedom of the exchange of goods and capital worldwide’. The same report placed this definition in a financial context, in stating that it provides ‘better access to external financing for corporate, national and sub national borrowers’.

In terms of globalisation and the economy, Stiglitz (2002) emphasises that globalisation has integrated countries and people around the world and it has created a great reduction in the costs of goods, transportation and communication. It has also sought to break down national borders, in order to ease the flow of capital, knowledge, services and goods. In determining the tendency of economic globalisation, Pollis (2004: p.343) states that economic globalisation is ‘underpinned by the ideology of neo-liberalism, which is devoid of any normative principle of justice and humanity; it is market driven’. Many writers argue that economic globalisation is the result of neo-liberalism.

Cole (2008), quoting Martinez and Garcia (2000), identified five defining features of the global phenomenon of neo- liberalism:

1- The rule of the market is divided into five sections: free or private enterprise from any control by the state, greater openness in global trade, the reduction of wages, an end to price control and freedom in the movement of goods, capital and services.

2- Cutting public expenditure, which consists of three categories: decreasing spending on social services, such as education and healthcare, decreasing the safety net of the poor and decreasing spending on the maintenance of infrastructures?
3- Deregulation, which refers to a decrease in government regulations; i.e. decreased environmental protection and concerns for job safety.

4- Privatisation: the selling of government-owned assets to private investors (such as banks, the railway, electricity, schools and hospitals).

5- Eliminating the concept of community, which means promoting individual responsibility and pressuring the poorest people to solve their own problems, in terms of education, healthcare and housing?

According to Bates (2008), the traditional understanding of globalisation amongst nation states is economic policies that are imposed on these governments, with many conditions (a stable or lower inflation, lower wages and a flexible market), in order to prevent any competition, on equal terms, in developed countries. The author adds that the ability of these governments to prevent such affairs is useless, as the conditions were imposed by a new market place dominated by a rise in the rate of trade, Foreign Direct Investment (FDI) and Trans-National Corporations (TNCs). Being globally mobile and the lower labour wages in developing countries encourages developed countries to export their production to the developing countries (Jorden, 1998; Beresford and Holden, 2000; Sykes and Holden, 2005).

Mishra (1999) asserts that economic globalisation has occurred as the result of many factors; firstly, modern production technologies must be spread around the world, in order to ensure that products are sold, even across borders. Secondly, by opening up the export field, these new products can be reproduced anywhere, in accordance with labour costs, using the same brand name. Thirdly, trade barriers will be removed through economic globalisation, which allows capital to cross national borders. Finally, the global mobility of capital, with the globalisation of financial services, leads to a rise in the rate of transparency in most countries.
The global economy is something different: it is an economy with the capacity to work as a unit in real time, or chosen time, on a planetary scale (Castells, 2000: p.101). According to Albisher (2008), world trade in the era of globalisation depends on the flow of goods, services and capital between countries without borders. Hence, the World Trade Organisation (WTO) encourages and supports this understanding, in line with the philosophy adopted by the WTO. Such an ideology aims to raise income, improve standards of living, develop and expand production and the exchange of goods and encourages the free movement of capital. However, according to Castillo (2007: p.181), the most important change that has been introduced to the global economy is the ‘shift of the economic activities from the manufacturing sectors to service sectors, which means abandoning the main sectors in industrial tradition to new sectors, such as finance, insurance and real estate’. Shanghai is a good example of this: Chen (2007) notes that, whereas the city’s share of the manufacturing sector was 63.8 per cent of its GDP in 1990, this went down to 48.6 per cent in 2005. However, Shanghai’s share of the service sector was 31.9 per cent in 1990, yet this had increased to 50.5 per cent in 2005, see Fig 2.4.
Regarding some negative implications of economic globalisation, the world forum, (2000: p.1) indicates that, in developed countries (e.g., the U.S.), unskilled workers have become unemployed because new manufacturing is relying on technologically-advanced machinery. Also, low-skill manufacturing is being transferred to countries where labour costs are lower, with workers in such countries failing to learn high-tech skills. The report thus asserts that economic globalisation is unsustainable, stating:

*One of the most unique elements of the world’s economic status today is the increased integration of global financial markets. The market liberalisation of the 1970s and 1980s has resulted in more than just increased trade in goods and services. It has led to unprecedented private capital flows to emerging market economies, which many economists believe will result in unsustainable levels of growth.*

The report listed some rules, in terms of foreign trade in the globalisation era, which are subject to change, in order to adapt to new situations. These are the reduction or disappearance of tariffs or the building of free-trade zones, with little or no tariffs,
reduced transportation costs and capital control and, finally, the reduction or harmonisation of support for national businesses. Woods highlights the process of economic globalisation, stating that, when technology changes, the resulting products are available at a lower cost and are more widespread. Multinational enterprises employ developed means of communication, which ensures the ability to spread their products across the world (see Fig 2.5). This situation affects the domestic economic arrangement, as Woods informs: he states how globalisation has been facilitated by new financial instruments, which permit a wider range of services to be bought and sold across the world economy’ (Woods, 2000: p.3).

According to Pugh and Gould (2000), the term globalisation is divided into two components: money and technological changes. These enable the movement of goods, services and capital across borders. The authors then highlight the transnational factor, as supported by the WTO and the Organisation for Economic Co-operation and Development (OECD): them doing so is an example of the power of
these bodies. The OECD is currently seeking to approve a Multilateral Agreement on Investment, which allows companies to legalise redress, in order to prevent any opposition from anyone (including governments and organisations that oppose the companies’ activities on the grounds of environmental damage). According to Keohane and Milner (1996: p.81), there are two different ways of understanding the impact of the global economy on domestic policies. Those who concentrate on the global economy encourage an increase in trade and capital mobility and, as a result, there is a decline in the Keynesian Welfare State (KWS) and convergence of the trans-national policies. However, a focus on the domestic factor suggests that the KWS may not be eroded by economic globalisation and market integration and cross national variations in policies may endure if it does not rise. They add that there is evidence that economic globalisation decreases governmental activism, stating: ‘both increasing trade and increasing capital mobility led to reductions in budget deficits across the industrialised countries’. Fig (2.6) below showcases the rate of the exchange of various goods around the world, with a focus on the dramatic increase over the last 30 years.

2.3.3 Social and Cultural Aspect
This refers to the cultural growth of cross-cultural contacts, the advent of new categories of consciousness and identities such as globalism (which embodies cultural diffusion), the desire to consume and enjoy foreign products and ideas, the adoption of new technology and practices and participation in a ‘world culture’.
Short and Kim (1999) inform that the culture of globalisation is the cause of the increased flow of ideas, values, information and tastes across nations and communities, through symbolic tokens, electronic simulations and mobile individuals. As a result, the phenomenon of globalisation, like modernisation, has become ideological: it seeks to spread Western culture and capitalist society and has lead to global consciousness, which increases similarities between places worldwide.

Albisher (2008) asserts that globalisation encourages different communities to converge and increases interaction between civilisations. In her opinion, these developments and transformations have led to a new world order. In this, various social forces may appreciate an international world order, at the expense of family affiliation and local and tribal loyalties. Thus, Albisher argues that globalisation may encourage the development of harmful or immoral behaviour, citing processed and
fast food, violence and pornographic movies as examples of this. She also adds that the abandonment of local culture and tradition is another likely outcome of globalisation.

Katz and Altman (2007: p.97) are two distinguished scholars, who state that the impact of globalisation on America is strong. They said: ‘the American population is growing older and living longer; family structure is changing too. Women and men are delaying marriage, having fewer children, heading smaller households. Abd Alhalim (2008) further notes that globalisation affects people by belittling or ignoring their morals and traditions and by importing alien cultures, through migration, tourism, media and communication and information technology products, such as the internet and mobile phones. He adds that, in its ability to divide communities into two classes (the rich and the poor), globalisation may further divide the community into four or five classes. He argues that the wide divisions that globalisation creates between rich and poor increases the differences and the distance between people, an act that creates a sense of injustice and leads to the spread of crime and terrorism.

The impact of the changes created by globalisation, in terms of social interaction and cultural developments, is summarised by Cancilini (2007: p.189) in three points. These are the experience of the urban is unfathomable, the territorial imbalances that characterise the localised cultural offered in the city and the development of cultural industries that stimulate forms of social communication mediated by telecommunications. Cancilini adds:

*In the global city, media circuits have become more important than traditional places in the transmission of information about urban life. In some cases, they provide new modes of gathering and recognition, from communication through radio and television; i.e., participatory programmes,*
with ‘call-ins’ to meetings in commercial centres that have come to replace the old spaces of wandering and encounter.

The UN report of 2000 mentions two other aspects of the social and cultural impact of globalisation. Globalisation has created the ‘openness’ of cultures and their innovations and encourages the movement of ideas and values, yet this has caused wide disparities among countries and in communities. Moreover, it has led to many communities experiencing greater weakness and social dislocation. Finally, it was stated that, as cultures interact, some are diluted or destroyed at the expense of others (UN report, 2000). Giddens (1990) and Sengupta (2001) assert that many view globalisation as a distinct sociological theme of modernity, which strengthens the relationships between the various cultures and communities. However, this situation has a negative effect on the many communities that reject alienation.

Herman (1999) highlights statistics that demonstrate the gap in the incomes of 20% of the world’s population, from the richest and the poorest countries: this increased from 30: 1 in 1960 to 82: 1 in 1995. Half of the world’s population live on under two dollars a day and, over the last 20 years, per capita incomes have fallen in more than 70 countries, with 800 million people affected by malnutrition. Herman further adds that, in developing countries, the rates of unemployment and underemployment are increasing. More than 75 million people are seeking asylum or wish to migrate, in order to find work. According to Tomanek (2011: p.2) ‘the result of United Nations Population Division (UNPD) research shows that in 2010 over than 200 million people, or 3 per cent of the world’s population, lived outside the country of their birth for more than 365 days’, (see Table 2.8).
Table (2.1) Number of Migrants Worldwide in million During last 30 years, (Tomanek, 2011)

Waters (1995: p.3) highlights the effect of globalisation on social life when he states that it is ‘a social process in which the constraints of geography on social and cultural arrangements recede and in which people become increasingly aware that they are receding’.

Holton (1998) views the first major problem encountered by communities in the globalisation era as the failure to consider other key developments in social life that point in rather different directions. This focuses on communities and has identified major trends that arise and challenge the statement that social life is dramatically becoming global. There is much evidence for this, such as the resurgence of new trends, nationalism and ethnicity countering globalisation in many parts of the world. Holton adds that this is apparent in the Balkans, Central Africa and anywhere else where social groups have challenged a greater phenomenon and identity in the name of narrower loyalties. This has led to renewed episodes of genocide and ethnic cleansing.

Furthermore, Holton states that the social and cultural aspects of globalisation have encouraged a positive awareness of various cultures and provides different alternatives to many things, such as food, music and clothes, which could lead to a
new, modern world order devoid of clashes and conflict between cultures, based on a unified concept of human rights. Fukuyama (1992) views globalisation as worldwide free markets; however, this does not always welcome the homogenisation of markets by trans-national firms (such as the McDonaldisation of food consumption), which may be perceived as damaging to cultural and economic diversity (see Fig 2.7 below).

![Fig (2.7) The spreading of McDonald around the world, (Gulf News, 2008)](image)

Bauman (2005) argues that the main change, with regards to the social aspects of globalisation, is that it tends to contribute to cancelling old modes, allowing the elite (such as the rich) to create unique independence and separation from the poor. However, the poor are removed from the scene of the privileged classes and have become so used to their living conditions that social mobility no longer appears to be a tangible option for them. This localised trend creates a new social division and hierarchy. Habermas (1998: p.112) disagrees with Bauman on this point, stating that
‘pauperised groups are no longer able to change their social situation through their own efforts’.

Using the statement ‘intensification of the consciousness of the world as a whole’, Rebertson (1992: p.8) began to make notes on the impacts of globalisation on society and culture. Firstly, he analysed the increased awareness of communities, in terms of things like policies, events and new strategies. He then connects this awareness with actions and reactions on a much broader scale. Secondly, he highlights the use of cultural symbols and worldwide consumer products as clear evidence of the impact of the trend of globalisation on people’s cultures (Beck, 1992).

Evan and Hancock state (1998: p.20), in terms of the impact of globalisation on marginalised communities (particularly on the rural poor and subsistence farmers), how ‘globalisation suggests simultaneous processes of integration and disintegration: the integration of capital and economic relations and the disintegration of the traditional values that define society and community’. However, Hassman (2005: p.30) has a special vision for the future of globalisation, asserting: ‘whether globalisation improves or undermines human rights is not a matter that can be observed in the short term; while short-term effects may be negative, particularly for the poor and for those in predominantly rural or subsistence economies, the medium to long-term effects may well be positive’.

While globalisation sought to undermine economic security, it has, according to Hassmann, spread the concept of human rights worldwide. With regards to the relationship between globalisation and its impact on social life, Keohane and Milner (1996: p.81) emphasise that an increase in trade across nations has led to left-labour power. They state: ‘specifically, while the independent effect of increasing left-
labour power was to increase capital taxation, at higher levels of trade, this relationship was reversed’.

In terms of the impact of globalisation on human rights (specifically, the society and culture of communities), Donnelly (1998: p. 22) informs that contemporary social life poses increased threats to individuals, families and societies. Such threats arise from modern markets, the impact of globalisation and the influence of Western society and Donnelly states that these should incorporate the protection of human rights. He emphasises that a focus on human rights is important, stating:

*It is not necessary to accept the legitimacy of a teleological modernisation thesis to recognise the extent to which the globalising dynamics of political and economic power have created powerful tendencies towards universalisation and homogenisation. Thus, even if it were true that peoples of particular cultures did not need human rights before, a good case may be made that they certainly need them now.*

2.3.4. The Environmental and Architectural Aspect
The environment and the built environment is concerned with all the physical things that surround people and focuses on the relationship between humans and the environment, in order to understand the importance of the environment to human life. The Universal Declaration of Human Rights (UDHR) emphasises the many aspects of these rights; for example, Article 3 asserts that all persons have the right to ‘life, liberty and security of person’. With regards to this Article, Lonergan (2000: p.69) notes that ‘although human security was interpreted as a threat to the physical security of person’, the security of persons may be threatened by many environmental impacts (see Fig 2.8).
Indeed, the destruction of the environment and depleted resources are a potential cause of damage to a person’s security. Furthermore, the provision of clean air and water are crucial to human life and access to food is reliant on the environment. Human security is threatened when there is imposed dislocation or transfer from one place to another (Kerri, 2007). According to Martinez-Alier (2003), much of the degradation of the environment is caused by corporate multinational companies, as they do not consider the ecological costs of production. Carter (1999) adds there are many factors that create environmental threats within the era of globalisation; firstly, global warming has caused weather changes (see Fig 2.9) and, secondly, the domination of the large agricultural business enterprises undermines biodiversity and causes many diseases. Thirdly, the intensive farming methods used to achieve maximum profit are contributing to the loss of bio-productive material in soil.

Carter (1999) has established that there is a relationship between the wealth of citizens and environmental issues, which means that, when a citizen’s wealth increases, the environment improves. According to Carter, this is due to the fact that
very poor people in rural areas have viewed the devastating impact of globalisation on their environment at a local level and thus they excessively use natural resources, such as water and pasture, in order to survive. Martinez-Alier (2003: p. 201), whose work on ‘the environmentalism of the poor’ opposes this view, argues that ‘the poor often find themselves fighting for resource conservation and a clean environment, even when they do not claim to be environmentalists’. Furthermore, he cited the exploitation of minerals, oil and timber resources by large enterprises, in order to achieve maximum profit in the era of free trade.

Similarly, the research of Jacobs (1991), Conca (2002) and Speth (2003) indicated positive results, in terms of globalisation threatening the environment. For example, when the economic cost of several goods and commodities increases, the ecological costs are not counted. This is because this encourages a consumer culture and the overuse of accessories.

Many researchers have viewed the implemented Structural Adjustment Programme (SAP), which was designed by the IMF, as seeking to stimulate economic growth,
stabilise the national economy and reduce government debt. The main aims of this programme, according to Bryant and Bailey (1997: p.142), are the reduction of public spending, the deregulation of agriculture, encouraging the integration of economy and attracting foreign investment. A problem with such aims, according to Conca (2000), is that the environmentalist objection to SAPs is three-fold: firstly, the deregulation of agriculture has an effect on the environment by reducing environmental standards. Some researchers also assert that this is not deregulation; in fact, it enables and attracts foreign investment. Secondly, Shiva (2003) views the impact of cutting public spending on the environment, through the reducing of the environmental protection budget. Thirdly, agriculture is considered a key component of income resources in poor countries, which has led to the increased use of pesticides and increased pressure on irrigation sources: this has decreased the quality of the soil and has contributed to desalination. As a result, these agricultural countries have become importers of food. Emphasising this issue, Bryant and Bailey (1997: p.145) state that structural adjustment programmes ‘often simultaneously reduce the ability of states to respond to environmental problems and increase the seriousness and intensity of those problems’.

As commerce, transportation, communication and information have become globalised, the products of architectural design and urban planning are becoming more and more alike (Al Qawasmi, 2004) (see Fig 2.10).
Power (2007) observes that architecture has always played a major role in human progress and it invented what we now refer to as cities. In ancient civilisations, harmony was sought between the built structures and the social nuclei. However, in the era of globalisation, one may notice significant contradictions between the nature of man-made cities and the individual’s social environment.

Travers (2007) outlines two opposing views on the advantages and disadvantages of architecture and its impact on our lives. Some believe that buildings and infrastructure provide the welfare for modern society, as transport, trade and production services are directly or indirectly linked to buildings and materials and create job opportunities. However, Travers states that buildings and infrastructure are the main source of carbon emissions. For example, buildings in the United Kingdom are responsible for 50% per cent of carbon emissions in the country. They are the main cause of the energy consumption that harms the natural environment.

Fig (2.10) The Twin Towers of Kuala Lumpur, (Vickers, 2000)
Travers (2007) states that this form of city construction originated in part from the city’s maturity and size when the Industrial Revolution began, when private vehicles first made an appearance and when homes lay cheek-by-jowl with factories. People were accustomed to a compact and high-density lifestyle, either within the city walls or in the surrounding districts. At the beginning of the twentieth century, economic activity became more specialised, especially industry and transport, and demand for quality housing and improved living conditions in the city prompted public-health officials and modern architects to try and regenerate the city. Such regeneration, however, was often carried out with considerable respect for the existing fabric of the city and zoning redirected new economic and residential buildings towards the suburbs. Consequently, the compactness of the core was preserved. However, the city witnessed the spatial segregation of activities and, sometimes, a reduction of densities in the new growth areas (Fainstein, 2007) (see Fig 11).

![Image](image.jpg)

**Figure (2.11) The Modern Development has replaced the Traditional.**

### 2.4 Globalisation: the Main Features

Globalisation has some features that distinguish the phenomenon from any other. The main feature is the ignoring of time and place; globalisation seeks to apply similar standards and codes anywhere and at any time. The second feature is the comparing of two opposite trends: economic and social trends and modern and sustainable trends in the era of globalisation. Thirdly, the following sections will
concentrate on a number of issues, such as poverty, crime, density and migration within the era of globalisation.

2.4.1 Time and Place
The importance of time and place in the era of globalisation can be understood through many viewpoints. The role of distance, transportation and communication in the separation of communities and cultures, according to what Blaney (1986) refers to as the ‘tyranny of distance’, separates regions from one another and such geographical separation leads to cultural parochialism.

Holton (1998: p.8) argues that the era of globalisation has unified time and space and has set an example for the world, now based on the dominant, ubiquitous Western Calendar. The majority of countries have abandoned their calendars (the Chinese, Orthodox and Islamic calendars), meaning that many cultural and religious functions have also disappeared. Thus, the author states that the tyranny of distance has been ‘obliterated by a communications revolution, commencing with the telegraph, telephone, radio and television and continuing electronically via the computer and satellite broadcasting system’. In terms of this analysis, there are many examples of the ignoring of religious functions; for example, the Islamic religion features many holidays and occasions, such as the month of fasting, the period of Hajj and the two Eid festivities which relate to the lunar calendar. In Egypt, the farmers rely on the local calendar in timing the planting and harvesting of crops.

Rebertson (1992: p.8) emphasises the role of time and place in the era of globalisation when he defines the phenomenon as ‘a concept that refers both to the compression of the world and the intensification of consciousness of the world as a whole’. He adds that there are many evidences of this back in time, which he refers
to as ‘mini-globalisation’ (i.e., trans-national trade, technology and the transfer of resources across regions and cultures). The geographer Harvey (1989) states that the main feature of globalisation is the compression of time and space, while Yuen (2003: p.198) outlines the relationship between place and time in any innovation in this life. She states: ‘we would like to know not only where we are, but also when we are and how this relates to time, both past and the time to come. Together, space and time are two of the major dimensions within which we live’.

Elkadi et al. (2007) note that, in order for the urban environment to be ideal, successful interaction should take place between individual buildings and between people and the places they inhabit. When urban buildings do not interact, the city becomes much like a social gathering of humans, with no-one wishing to make any conversation, see Fig (2.12).

However, as suggested by Al Masri (2007: p. 163), ‘globalisation tends to dissolve space and time and requires buildings to be designed and erected at a digital rate’ (p.163). One outcome of the transformation of space, as a result of globalisation, is not environmental improvement; rather, it is an environmental pathology of a totally new and unexpected kind. For the first time, there is the problem of a ‘designed’ environment that does not work socially and generates social problems, in that other
circumstances may not exist (isolation problems, physical danger and community decay), as shown in Fig (2.13).

The manifest existence of this pathology has called into question all the assumptions on which the new urban transformation was based: these were that separation was good for the community, the hierarchical isolation of space was good for group relations and that space could only be important to society by virtue of being identified with a particular (preferably small) group, who would prefer to keep their domain free of strangers. (Hanson and Hillier, 2005). Hakimi and Alagheband (2007) inform that place plays a major role in shaping identity. It not only incorporates geographical features; it also emphasises the natural, social and cultural borders objectively and so aids identification. Secondly, the unchanging and static nature of place provides people with the feeling of duration over time. Finally, place invokes a feeling of attachment and belonging, which reflects belonging to a society.

In accordance with these properties of place, one can easily understand why little attention was paid to any identity crisis prior to globalisation and rapid development. If we consider identity as a system of representation, time and place are the main co-
ordinators of such a system. All identities are located in a symbolic time and place. In traditional societies, there was a very limited field of time and so time had no trouble doing its special tasks about identity, as it was largely place-based, (Hall, 1997). In these societies, the past was respected and tradition was the reference of place and time; every activity and experience was placed in the duration framework of past-present-future. However, modernity and globalisation overturned time as duration. As a result of these processes, time is so hyper-concentrated that it changes from linear time to an eternal now. In this condition, humans experience a kind of simultaneity, a world in which the passing of time is not understood (i.e., a timeless world). This derangement of time perception influences the unity of subject and creates a feeling of evanescence and change, which must not be ignored in defining future human beings (Fainstein, 2007) (see Fig 2.14).

In his work on place and production in the global economy, Sassen (2007) conceptualises global cities as production sites for today’s leading economic sectors, stating: ‘the spatial effect of globalisation is such that both time and space are
reduced, in the sense that global interconnectedness overcomes the barriers to economic and social organisation to allow these to operate on a worldwide scale’ (Milward, 2003: p.12)

According to Dicken (1986), as a result of openness, trade across nations and direct foreign trade influenced by economic globalisation became the goods and the product. Around the world, standardised global products are made by global companies, without belonging to place or community. He concludes that this situation led to the end of geography and is becoming the norm everywhere.

2.4.2. Economy and Social Interaction
The relationship between the economic and social aspects of globalisation overlap: many economic factors are influenced by social factors, and vice versa. According to Dollar and Kray (2001), trade is positive, in terms of society. Indeed, free trade and the economic liberalism system led to increase in growth and such growth created many jobs; thus, trade benefits the poor. In contrast, many researchers have identified the negative counter effects of globalisation on previously protected sectors and increased marginalisation worldwide, especially in developing countries.

The World forum report outlines how the benefits of globalisation have not reached everyone equally. While some people have benefitted from economic globalisation, in many sectors such as education, health and travel, the majority of the world’s population, especially in developing countries, have become marginalised, have migrated, or have fallen under the poverty level. The above report indicates that one feature of globalisation is the gap between rich and poor and, as an example of this, they inform that the wealth of the three richest men in the world combined is greater than that of 600 million people. It concludes with this statement:
Flows of goods and capital between rich and poor countries will not be large enough to offset the need for employment in poorer countries, the International Labour Organisation (ILO) reported. Instead, the social disruption caused by economic restructuring is likely to shake more people loose from their communities and encourage them to look abroad for work (world forum: 2000, p. 5).

According to Edwards (2001: p. 22), there are three reasons why international co-operation is the main player in administrating the relationship between economic factors and human beings, which can be referred to as sustainable development. The reasons are the integrated markets, which dictate a co-ordinated response to social and environmental questions, the current economic globalisation, which concentrates on welfare states and a large public sector, with extensive trade regulation. In order to ensure balance, there should be improved education, training and integration between the public and the private sectors. He adds ‘it is hard to have a dialogue if you are starving and difficult to innovate without a basic level of security, voice and equality of rights’.

Garrison (2000) informs that globalisation has become a powerful force in creating basic changes in all aspects of life; for example, it has enabled businesses to become global and has changed lives by transforming the political system from monarchy to democracy. However, the UN report indicates that many experts place an emphasis on broad social awareness in the era of globalisation, stating: ‘globalisation must mean the globalisation of human rights and of the struggle against deprivation and poverty. Globalisation is expected to change the human civilisation… while economics seem most pronounced in this process, it needs to tackle the broader context of the development of civil society at large’ (UN report, 2001:p.2).

With regards to the impact of the economic trans-nation on society, Fosu (2004: p.329) states: ‘on one hand, export and free trade may increase the demand and growth of employment but, on the other hand, this leads to the displacement of
previously protected companies, inducing labour redundancy and, in some sectors such as agriculture, public service, construction and non-traded services, free trade leads to a labour sink and increased unemployment’.

Globalisation undoubtedly affects the economy: it converts jobs from permanent to temporary. This leads to unstable conditions, which affects workers and their families (Burdett, 2007).

Global cities attract workers from rural areas and such workers end up in densely populated areas, where there are inevitable problems with crime, poverty and health, (see Fig 2.15). For example, one fifth of Shanghai’s 16.5 million inhabitants are made up of temporary in-migrants from predominantly rural China. The result has been crowded inner city areas, with 76,000 individuals per square kilometre; almost 10 times the average density of London (Chen, 2007). In New York, immigrants of different racial and cultural backgrounds constitute the vast majority of the population. According to the US census of 2000, the largest group (30 percent) of immigrants were from the Caribbean, the second largest group were Asian (24 per cent) and the third were Europeans (19 per cent). Although it is reported that racial hostility has diminished in recent years, racial isolation has not (Sudjic, 2007a). According to some reports, London became the most expensive city on Earth in 2007: its growing economy will create 400,000 new jobs and 500,000 new residents
by 2016 (Burdett, 2007). Mexico City, which is known for its slick business parks and boutique hotels, is losing industrial jobs to China and to the North American Free Trade Agreement (NAFTA) factories on the American border. In the 1940s, Mexico City had 1.6 million inhabitants, but this figure jumped to 5 million in the 1960s and is now close to 20 million inhabitants, who share an area of 1,400 square kilometres (Castillo, 2007). In common with other global cities, the rapid growth of Mexico City is due to the massive migration of Mexicans, who hope to reap the benefits of industrialisation. With the external liberalisation of the Mexican economy, the city is now entering a phase of deindustrialisation and the most dynamic growth sectors are expected to relate to transnational services (Chen, 2007). In the face of extremely high levels of violent crime, Johannesburg’s fences, walls, gates, private security guards, cameras and other sophisticated security technologies have transformed the city into bristling electromagnetic fields (Bremner, 2007).
Globalisation is viewed by some as a new form of colonialism and occupation, promoting cultural and social superiority and domination. Economic superiority has resulted in two-thirds of the world’s wealth belonging to only one-third of the world’s population, while one-third of the world’s wealth belongs to two-thirds of the world’s population, increasing the gap between rich and poor countries. Wood (2000) and Dandekar (1998) indicate that FDI requires low-skilled labour in developing countries and, as a result of this, such countries face an increase in low-skilled labour and a subsequent decrease in wages.

Najman (1999) expresses concern with the impact of globalisation on cultural identity in various communities, due to the flow of migrants and tourists from many multicultural countries. The author cites Amsterdam, the economic capital of the Netherlands, as an example of where tourism has created an artificial identity and the city is well-known for its sex and drug industries. According to Najman, although Tokyo ranks higher than Amsterdam, in terms of the economy, Amsterdam has been more affected by globalisation than Tokyo, thus greatly influencing its cultural identity.

According to Edwards (2001), with regards to the economic aspect of the era of globalisation, the main importances of this are the markets and companies. The human aspect comes later, as everything has a price except the social and environmental aspects (which reflect human needs). Edwards believes that, at present, the air, considered to be the source of life, is not priced at all, yet oil is priced without a thought for its scarcity. Labour rights are very important but are omitted from the price mechanisms, especially when markets are promoted by power relations of various kinds.
With regards to the interaction between social and economic globalisation, many researchers have expressed various opinions.

Stiglitz (2002: p.22) states that there are many advantages of applying economic globalisation within communities and people live for two reasons. Firstly, ‘globalisation makes available a greater variety of goods and services, at cheaper prices, to consumers all around of the globe, in every season’. Secondly, Doyle (1999: p. 773) asserts that the spreading of economic globalisation throughout the market brings global prosperity, which is ever-increasing. Doyle refers to this as the ‘trickle-down effect, which can be explained by Adam Smith’s idea that a rising tide lifts all boats’. On the contrary, numerous researchers, such as Jacobs (1991), Conca (2000) and Speth (2003) state that concentrating on economic globalisation has led to a decline in goods and prices; it has also increased the risks, in terms of environment and wages. It has been stated that, while total global wealth has been increasing in recent decades, the gap between rich and poor has also been increasing, both between North and South, and within countries (Woods, 2000; Shiva, 2003; Pollis 2004) (see Fig 2.16).

It is important that global organisations implement some rules in order to promote the social aspect of globalisation, as well as to ensure the economic aspects (Kapstein, 2001: p. 380). This focuses on three fields: social welfare, healthcare and education. Kapstein informs that the WB or Industrial Development Funds (IDF), in providing loans to countries, should place more emphasis on the needs of those that benefit the least and should ensure that there is adequate spending on education and social welfare programmes. He opposes the U.S Deputy Secretary of the Treasury Lawrence Summer’s statement, when he said ‘reducing the size of government took precedence over improving its quality, then it is fair to say that education and other
basic social investments were especially ill-served by these biases’. With regards to healthcare, he considers that this is a basic requirement of any successful development. This was made clear by the Director General of the World Health Organisation (WHO), he adds the ‘increasingly clear that ill-health leads to poverty, in individuals, populations and nations’ (Kapstein, 2001).

![Figure (2.16) Increases in the Percentage of the Poverty, (Chen, 2007)](image)

### 2.4.3 Modernity and Sustainability

Globalisation and technological innovation are reshaping and restructuring the economy, altering what people do and where they do it. These forces have accelerated the shift of the economy, from the manufacture of goods to the conception, design, marketing and delivery of goods, services and ideas.
Furthermore, they are changing the ways in which businesses manage their disparate operations, enabling large firms to locate headquarters in one city, conduct their research and design somewhere else, have production facilities elsewhere and back office functions within or outside the firm, in yet another place (Katz & Altman, 2007).

According to Edwards (2001: p.338), in the era of globalisation and capitalism, rising incomes do not lead to sustainable development; they simply reinforce competition, exclusion and pollution (see Fig 2.17). Edwards refers to these circumstances, which require a changing the way to encourage three things, as ‘a better distribution of what they deliver, which is a less costly way of producing it, and more co-operative attitudes, which encourage people to set some limits to their self-interests’.

Many researchers have highlighted historically unprecedented tendencies towards raising interaction between people, governments and businesses worldwide, by employing new means of communication. They add that the 20th century has witnessed a revolution in communication technology, which has led to a dramatic change in many aspects of life, such as politics, economics and society. The speed of the flow of information through the internet and satellite broadcast ‘has increased fluctuations in stock markets around the world and has influenced opinions of global issues in real time’ (World Forum, 2000: p.1-2). The same report highlights the rising percentage of people that use new modes of communication, such as the telephone, internet and television, and the increasing emergence of infectious diseases. Thus, the report focuses on this issue, stating:

*One of the main dangers that globalisation has brought is the drug resistant strains rapidly spreading across the globe as the result of the misuse and overuse of the few remaining drugs available. Drug-resistant tuberculosis,*
for example, has become increasingly common worldwide over the last 25 years, despite the fact that its incidence had been reduced significantly in the years leading up to that point.

Shanghai teaches us something about the power of individual choice, or lack of choice, in a state-directed but increasingly independent market-driven residential housing market. As the blocks surrounding Xintiandi are ‘torn down’ to make way for luxury flats and a proposed theatre district that aspires to rival New York’s Broadway or London’s West End, the existing low-income residents, who are largely without any choice, may have to purchase low-cost housing away from the city centre or beyond, whether their relocation compensation from the government would make the move economically feasible or not. At the same time, the new rich live downtown in luxury flats or detached villas, in suburban gated compounds, as elite members of a new and privileged community.(Sudjic, 2007b).

In China, a Ministry of Construction survey found that the average size of new flats in 16 major cities in the first half of 2006 was more than 120 square metres; much larger than an ordinary household could afford. Another survey found that 70 per
cent of China’s urban residents could not afford to buy a new apartment, based on average house prices in East China. Despite the continued demand for new housing, due to the projected population growth in China’s cities, market-driven and profit-driven property developers will continue to build more luxury homes and will avoid having to erect low-cost housing, thus reinforcing the disparity based on the discrepancy between supply and demand and affordability (Chen, 2007). The British urban theorist, Peter Hall, called Mexico City ‘the ultimate world city: ultimate in size, ultimate in population, ultimate in the threat of paralysis and disintegration and ultimate in the problems it presents’ (Burdett, 2007: p. 120).

A growing number of suburbs increasingly resemble cities in their form. For example, places like Montgomery Country in Maryland feature downtown areas, such as Bethesda and Silver, which rival traditional, central cities in their cultural amenities, their access to transit and their eclectic mix (offices, retail stores and residential homes are often on the same site). Developers and financial institutions spend billions of dollars building or rebuilding malls (so-called ‘lifestyle centres’), which resemble nothing more than a traditional main street, evidence of the market value, the acceptance of and demand for urban places. Across suburbia and even exurbia, there are pockets of urbanity appearing as homebuilders and master developers, banks and real-estate agents embrace ‘new urbanism’ and smart growth movements, such as the wave of innovation, (Katz and Altman, 2007), (see figure below).
Shanghai has become the great ‘miracle’ of global city building, as it depends on new policies to attract foreign investors. This strategy allows the owning of coastal land by developers and investors through a leasing system. Such a system allowed developments to be achieved within 10 years (between 1990 and 2000): without this system, the developments would have taken 100 years to establish (Chen, 2007). Since the early nineties, Shanghai has experienced the fastest economic growth of any mega city in the world, averaging about 15 percent a year, and it has attracted US$120 billion in direct foreign investment since 1992. Thus, a build on a major scale, needed to house newcomers to the city, turned a former agricultural region of rice paddies and farmhouses into a booming district filled with modern skyscrapers and factories (Sudjic, 2007a). Other global cities in China are also distinguished by rapid economic growth, huge wealth creation, increased mobility and choices and improvements in housing. However, growing unemployment, traffic congestion, high property prices and, above all, socio-economic and spatial inequalities are negative consequences of such growth. According to a new report released by the United Nations Educational Scientific and Cultural Organisation (UNESCO), migrant workers from rural areas have contributed 16 percent of China’s GDP growth over the past 20 years, especially in industries such as construction, manufacturing, commerce, catering and environmental cleaning. However, it has
been reported that such workers face discrimination and harsh treatment by some local authorities and employers. In 2004, unpaid wages for migrant workers totalled an estimated US$2.5 billion and, over the last few years, total unpaid wages have amounted to around US$12.5 Billion (Chen, 2007).

In an article published in *Time* magazine in 1984, Mexico City was portrayed as a disaster in progress. Overcrowding, poverty, pollution and corruption seemed to be the four horsemen of the apocalyptic megacity of the 1980s. As catastrophic and exaggerated as this may sound today, a number of events that affected Mexico City in that decade were instrumental in shaping such negative attitudes. Some of these were economic in nature, while others were political; there were also natural disasters (Castillo, 2007).

The growth of globalisation can be seen as a key cause of the rapid industrial change that has triggered some of the problems faced by older cities, such as a growing mismatch between the skills demanded by new industries and those available within the workforce, changes in attitudes towards government, middle-class flight from cities and environmental degradation, particularly in older, urban areas, (Travers, 2007).

The duality of the global city and the insecure, local city of the margins may ultimately prevent Mexico City from being perceived as an attractive location by those that bind global networks and attain a more balanced and sustainable internal development. One of the strategic tasks for cultural policy in this megalopolis is articulating the historical heritage and local traditions of Mexico alongside modern developments, in order to improve the competitiveness of this mega city in the global economy. Mexico City also requires a strategy for the redistributing of cultural resources in urban space, in order to facilitate intercultural communication.
through media policies that consider the diverse socio-cultural needs of the population, rather than being limited to the expansion of media clienteles (Castillo, 2007).

Although some researchers, such as Anderson and Lindroth (2001: p. 113), have suggested the main benefit of globalisation, through the state ‘whereby environmental damage starts to decrease as a country becomes rich enough’, other researchers emphasise, with regards to the state environmental changes, that the ‘ecological footprints suggest that richer communities displace their environmental costs onto poorer ones’ . They add that the damage to the environment does not decrease, but simply disappears from the sight of wealthy consumers.

2.4.4. Migration and Density
The World Forum 2000 report indicated that the number of migrants around the world had increased and had became higher than ever before. Many workers in the era of globalisation have sought employment outside of their countries and the International Labour Organisation (ILO) indicates that the number of migrants worldwide has reached 120 million and continues to grow, while the number did not exceed 75 million in 1965. DeFreitas (1998: p.337) proposes many reasons for the dramatic rise in migration since the 1990s, such as the opening of Eastern Europe’s borders. He asserts that, from 1989 to 1990, over 2.1 million people applied for asylum in the West, (see Fig 2.19).

According to Kapstein (2001: p. 150), the most significant issue in the era of globalisation is migration policy; although the WB myriad globalisation agreements seek to promote FDI and global free trade, the international migration of people in search of work is ignored in this aspect. The role of labour migration is the major issue in the global economy and so should ensure that working people have the
greatest possible opportunities. Kapstein emphasises that ‘there is little point for an individual to invest in education, training and self-improvement if no jobs are available’.

Global cities have a number of distinctive features and, possibly, the most important factor that shapes the form of a city and creates new requirements is the density and growth of the population. Here, global cities are featured from different parts of the world and focus on these features and the impact on social and economic life.

<table>
<thead>
<tr>
<th>City</th>
<th>Berlin</th>
<th>Johannesburg</th>
<th>Mexico City</th>
<th>London</th>
<th>Shanghai</th>
<th>New York</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>3,400,000</td>
<td>3,230,000</td>
<td>18,900,000</td>
<td>7,540,000</td>
<td>16,610,000</td>
<td>7,960,000</td>
</tr>
<tr>
<td>Density Person/KM</td>
<td>3810</td>
<td>1960</td>
<td>3700</td>
<td>4800</td>
<td>2590</td>
<td>9610</td>
</tr>
</tbody>
</table>

Table (2.2) The Population and Density of Six Cities Worldwide, (Burdett and Sudjic, 2007)
As seen in the table above, the population of Shanghai has exceeded 16.5 million people. Almost one-fifth of the population is made up of temporary in-migrants from predominantly rural China, so the country is working to reduce population densities in the inner city, where there are still particularly crowded areas (such as the Old West Gate, where population density stands at 76,000 per square kilometre: almost 10 times the average density of London). Since 1990, living space per person has doubled to 15 square metres per person and, during the same period, the city’s road network has increased by 40 percent (there are nearly 2 million cars). The underground system has reached a daily capacity of 1.4 million people and is expected to reach 5 times that figure in the foreseeable future (Sudjic, 2007a: pp.112-115). Population density in some places in Shanghai has reached 126,500 people per square kilometre: this means that each person is allocated less than 8 square metres. In addition, the average house price in central Shanghai is 4 times higher than that in areas away from the city centre (Chen, 2007). Another city, London, is facing an unprecedented period of growth and change in the twenty-first century. Covering over 1,500 square kilometres, its population of 7.5 million is relatively thinly spread, with a gross population density of 4795 people per kilometre (Burdett, 2007).

2.4.5. Poverty and Crime
According to Kaplinsky (2005: pp.27-28), the concept of poverty has two central meanings: firstly, the ‘absolute standard of living, reflected in satisfying the minimum basic needs required for survival’ and, secondly, it is dependent on the comparison between rich and poor. Poverty is ‘the gap in incomes between the rich and the poor’. Furthermore, he adds that there are different ways of measuring the poverty rate, as the standard requirements for survival cannot be easily differentiated from general basic needs. Also, the measure of absolute poverty is not easily
identified through comparing income with purchasing power and economists have generated an artificial form of currency called ‘purchasing power parity dollars’ (see Fig 2.20).

![Percent of people in the world at different poverty levels, 2005](image)

**Fig (2.20) The World Population According to Poverty Line, (World Bank, 2008)**

Human development is about much more than the rise or fall of national incomes: it is concerned with creating an environment in which people can develop their full potential and lead productive, creative lives, in accordance with their needs and interests. People are the real wealth of nations and development is thus about expanding the choices people have, in order to lead enriched lives. In addition, it is about much more than economic growth, which is only a means (albeit a very important one) of enlarging people’s choices (Human Development Report, UN Report, 2009). Globalisation has contributed to the worldwide spread of cross-
border problems, such as drug and human trafficking and terrorism. This has had some impact on states, particularly in developing countries, where such problems undermine the power of governments and the process of democratisation. They also increase the rate of international crime and poverty; thus, the eradication of these becomes more difficult (UN, 2001).

‘Empowering the Poor’ (Edwards, 2001: pp. 385-386) refers to a focus on enabling the poor within the era of globalisation and capitalism, through changing the methods of the gaining of power, in terms of power and the economy. Edwards emphasises the importance of transforming the methods of reproducing alternative power relations, in terms of human needs, through many factors, such as ‘protection of the environment, commitment to an equal share of paid and household work and a willingness to defend the rights of strangers as fiercely as their own’. The author adds that this is a particular challenge in ‘societies which have yet to reach a minimum level of economic security’.

According to the World Bank Report, Poverty Estimates Revised, (2008: pp.1-4), the poverty line has been changed and ‘the previous $1 a day estimate for the international poverty line world would have been $1.45 a day at 2005 prices, if only inflation was accounted for’. It adds that, when the poverty line is 1.25, ‘1.4 billion people live at this poverty line or below; this is more than the previous estimate of 984 million, with the older measure of a $1 a day in 2004’. The World Bank report concludes by stating: ‘the incidence of poverty in the world is higher than past estimates have suggested. The main reason for this is that previous data had implicitly underestimated the cost of living in most developing countries’ (see Fig 2.21).
To reduce poverty and inequality, Edwards (2001: p. 386) proposes a balance between economic growth and the fulfilling of peace and social cohesion, which requires the redistribution and balance of wealth and making the ownership of assets and opportunities a priority for the population. He adds that this should be the minimum requirement in ensuring that the economy guarantees equal access to any opportunities it provides.

![Poverty levels over time](source: World Bank Development Indicators 2008)

**Fig (2.21) Levels of Poverty over the Last Three Decades, (World Bank, 2008)**

Furthermore, Edwards adds that it is difficult to enable people to do so, when the majority of them lack the basic wherewithal to share. In focusing on developing countries, Edwards said that there is much evidence of inequalities, in terms of disruption of land, works and other assets and, without a reform of the land and other assets, it is difficult to undermine poverty and promote the sustainability of
resources. He concludes by emphasising the importance of assets, stating that ‘little fewer than one billion absolutely poor people live in areas of the developing world and poverty of assets is the prime reason for their condition’. Emphasising this view, the Millennium Development Goals Report (2007: p.23) asserts that ‘approximately half of the world’s population now live in cities and towns. In 2005, one out of three urban dwellers (approximately 1 billion people) were living in slum conditions’.

Mexico City presents a unique case; here, a new range of issues and conditions have surfaced and impacted heavily upon urban life, of which fear is probably the most important. While it could be argued that lack of security was experienced the most during the mid 1990s, the recurrent talk of fear and the persistence of distinct forms of organised crime and violence have had an immeasurable impact upon attitudes towards the city. During the 1980s, the focus was on the abuse of authority by the police and politicians; insecurity was a tool and an effect of an authoritarian regime, with crime deeply rooted amongst those in power (Castillo, 2007). In London, the picture of poverty is inherently clear in the decaying buildings, litter-strewn streets and the abandoned housing estates. Some facts are really shocking: 43 per cent of children in inner London live in poverty, with its population suffering from the second-highest unemployment rate in England. 13-20 per cent of joblessness and deprivation are experienced in this city (Burdett, 2007).

The final example, Johannesburg, considers the product of assets, in circumstances that are highly specific to Africa. This city is facing almost the same problems as its peers in the United States and Europe (Sudjic, 2007b). For example, extremely high levels of violent crime are very common in Johannesburg. As noted by Bermner (2007), new development is accelerating, in terms of gated and walled compounds, which makes the emergence of a coherent city a distant possibility. To clarify the
relationship between poverty and globalisation, Kaplinsky (2005: p.48) indicates that poverty in the era of globalisation is residual, stating:

*The poor is made up of those who have held back from participating in the global economy. As they change their attitudes and as globalisation deepens, so the poor will be mopped up. And, far from income inequality being caused by globalisation, the expansion of labour-intensive exports leads to greater equality. A contrasting view is one which sees poverty as being relational to globalisation. It is in the very nature of globalisation that poverty is sustained and distribution worsened. (see Fig 2.22)*
Chapter Three: Globalisation and Architecture

3.1 Introduction

This chapter investigates the relationship between globalisation and architecture, focusing on the phenomenon of ‘globalised architecture’. This is comprised of two components: globalisation, which can be defined as ‘the internationalisation of everything related to different countries’ and architecture, which is the outcome of people’s actions and behaviour (businesslord.com, 2011).

The main problem in accomplishing this mission is the differences in the aims of each component. Globalisation seeks to apply a global agenda, at the cost of local considerations and regional cultures. It adopts international criteria and applies specific principles in many aspects, including politics, economics and the environment. Architecture is a real reflection of an actual situation and incorporates the weather and culture of the people. Thus, in order to gain an understanding of the relationship between globalisation and architecture, a balance should be created by considering the supporters of globalisation (who believe it is a good method of development and progress) and the non-supporters of globalisation (who perceive the phenomenon as the main cause of loss of privacy and identity).

Is architecture globalised? This question may not require an answer, as the evidence indicates that the major changes in architecture occurred within the era of globalisation. Many experts argue about this phenomenon and thus this chapter is divided into three parts: traditional and modern architecture, globalised architecture and globalised urban architecture. The first part focuses on the aim of traditional and modern architecture and whether these have integrated or not. The second part of the chapter focuses on three areas: the impact of globalisation on architecture, in terms of building materials, methods of construction and building designs, multi-storey
buildings as a new phenomenon in the era of globalisation and the advantages and disadvantages of this and the iconic building, particularly the high-rise building, which is distinguished by a striking design or materials, in order to attract people. The final part of the chapter focuses on the globalisation of urban areas, reinforcing the fact that the city has become more globalised. This part also discusses issues such as global cities, the transportation network and density in cities. Furthermore, it discusses whether the phenomenon of the global city is an opportunity or a dilemma.

3.2 Traditional and Modern Architecture

Many studies have been conducted over the years, in order to determine the relationship between traditional and modern architecture, old and new building materials and the past and the present. Other important issues that have captured the attention of researchers are the built environment; culture and identity of the habitat (see Fig 3.1).

![Fig (3.1) Traditional Style Meets the Modern One in Dubai.](image)
Traditional or vernacular architecture, according to Wikipedia, (2010:1) reflects the meaning of the built environment and urban planning, stating: ‘vernacular architecture is a term used to categorise methods of construction, utilising the available resources and traditions in order to address local needs. Vernacular architecture tends to evolve over time, in order to reflect the environmental, cultural and historical context in which it exists’.

The same source defines modern architecture as characterised by simplification of form and the creation of ornament, in terms of the structure and theme of buildings. Based on these definitions, it is apparent that there is a significant difference between traditional and modern architecture: traditional architecture reflects the environmental, cultural and historical contexts of a building, while modern architecture seeks to present power through new technology and materials. According to its advocates, such architecture may be implemented anywhere and at anytime.

3.2.1 Architectural Aims.
Lewis (2002: p.20) argues that traditional architecture was used to express civilisation and promote state appearance and the power of a leader or community. Pro-global architecture sought to symbolise the state, embodying the brand and identity of some companies, and some architects sought to apply their own theories. However, in the age of globalisation, European and American architects adopted this trend before anyone else. Lewis informs: ‘in the early 20th century, many European and American architects rebelled against classicism and neoclassicism. They argued stridently that the modern age demanded new architecture, in response to new industry, technologies, mobility and social and political orders. Thus, the international style was born’.
According to Bozdogan (2001) and Xue (2006), architecture is a major vehicle used by rulers, presidents and territorial elites to negotiate national identity and reflect national ambitions. There is a focus on leading buildings in cities and countries, such as parliaments, museums and governmental bodies, in order to express the identity of a community. However, in the past, architects attempted to explore local elements relating to a community’s identity and employed these elements in the concept and design of buildings, as shown Fig (3.2).

Sklair (2005) denotes the significance of the bodies presiding over architecture and building design. Political and religious factors were the main components of architecture, reflecting the power of such factors. Today, however, the corporate sector presides over architecture, presenting the importance of this or other brands.
According to Xuefel (2008: p. 176), over the past 40 years, the production aspect of cities has been transformed; sites of production have become sites of consumption, with a strong trend for services and entertainment. Hence, states and governments have sought to create iconic buildings and unique architecture, in order to attract residents, tourists and investors. In the process of transformation, signature designs from internationally prominent architects were especially sought after by local, private and public clients, in order to put their cities on the map’.

He adds that, over the last two decades, much globalised architecture has been established worldwide, especially in global cities.

3.2.2 Integration or Contradiction?
Al-Naim (2005) observes that globalisation has had a direct impact on many countries and societies. With particular reference to the Arabian Gulf states, he notes that these states have been transformed from isolated entities, consisting of small towns and villages, to modern countries with large urban centres and huge social and economic networks. In Al-Naim’s opinion (2006a), this transformation has influenced the traditional, political, economic and social order and has widened the gap between what he calls the traditional order and the new order. Indeed, it is often argued that society cannot be both modern and traditional at the same time (Wilson, 1988). Al-Naim (2006b) rejects this view and claims that, at least as far as the UAE is concerned, the situation reflects these strands of tradition and modern trends, which continue to live side-by-side. In his opinion, although it may well be true that traditional society may have disappeared, many aspects of tradition are too strong to simply disappear. According to El-Sheshtawy et al. (2000), cities in developing countries have witnessed rapid and dramatic changes in architecture and urban development. The impact of globalisation has created confusion between the traditional and the modern, although a lot of experts and architects sought co-
existence, due to the modern style reflecting new ideas, materials and designs. The traditional style promotes values and identity.

Lewis (2002: p.20) highlights two opposing forces that affect architectural globalisation. One seeks to safeguard and promulgate established indigenous architectural traditions, forms, decorative motifs and technologies: it advocates historical continuity, cultural diversity and the preservation of geographic identity. The other force promotes invention and the dissemination of new forms, using new technologies and materials in response to changing functional needs and sensibilities, systematisation, flexibility and interchange ability, (see figure below).

Fig (3.3) New Technology and Materials, Birmingham. UK

In terms of the blending of the traditional and the modern, Rogers and Power (2000: p.204) highlight the importance of both historic cities and vibrant capitals; both old and new landmarks provide us with comfort and stability. Thus, the blending of traditional and modern architecture has been successful in instilling feelings of
security and variety of life. New developments are housed in attractive old buildings and small, compact cities are beautiful, as are the centre of villages. The most important part of this operation is that the cities and villages have become more vibrant and are full of vitality (see Fig 3.4).

![Modern Hotel with Traditional Style, UAE](image)

**Fig (3.4) Modern Hotel with Traditional Style, UAE**

Barrow (2004b: p.135) views modern architecture as a natural extension of vernacular architecture, with both serving the same aims. He states: ‘vernacular design, which used simplicity in form, efficiency of materials and limited material pallets has, at times resulted, by formal analysis of modern architecture, in a thing of simple, functional, efficient beauty. This is to say that design and artistic expression are not isolated to the formally trained architect or the elite’.
3.3 Globalised Buildings
Globalisation has made it difficult to differentiate cultures, in terms of environment. Building is the main focus of this phenomenon, as building materials and the building systems are the same. Opposite are images of various communities, cultures, environments and socio-economic needs. Are the natures of life and lifestyle the same in these? (see Fig 3.5).

According to Lewis (2002), globalisation is based on standardisation, functional logic, economic scale and aesthetic composition, but ignores ornament and sentiment. The outcome of this situation is the erection of similar buildings worldwide; for example, buildings in Asia may be similar to those in Europe or...
America because, for several decades after the Second World War, global thinking affected the design of architecture and urban planning.

According to Xuefei (2008: p.176), two factors are concerned with the worldwide spread of globalised architecture; for example, China, first with nationalism and then the cultural ideology of consumerism, drives the production of flagship architectural projects in globalising Chinese cities. The second factor, based on the West, in terms of design style and concepts, uses global architecture as a place-marketing strategy and this can have unexpected and mixed consequences, depending on the specific power configurations of local political, economic and cultural establishments.

3.3.1 Materials, Methods and Designs.
Khattab (2001: p.57) denotes the role of materials in spreading the impact of globalisation worldwide and the abandoning of traditional architecture. He states how ‘the use of traditional local materials was abandoned, in favour of modern imported materials and construction techniques’. An example of this is reinforced concrete, which has replaced traditional mud brick and sea stone, in terms of building materials.

Oncu and Weland (1997: pp.1-2) state that there are two sources that promote worldwide globalised architecture; firstly, the culture of commerce, which refers to economic globalisation that is driven by changing consumer expectations, and the agenda of markets. They assert how ‘architectural manifestations include iconic, skyscraping banking towers, often built where they do not belong, to chains of standardised hotels and franchise restaurants and shopping malls full of all-too-familiar brand-name stores’. Secondly, the culture of design, which is supported by architects, refers to those who are led to study what others are creating, no matter where. With fabulous photographs in slick magazines and professional journals,
trend-conscious designers can scan and span the globe, sharing the high-style concepts rendered in stylish materials, (see Figure 3.6 below).

Madison (1998) states that the impact of globalisation on architecture is clear, in many aspects. New means of telecommunication and information has created a need for a new type of technological infrastructure, building type and design requirements. Electronic technology has produced new systems of sophisticated and smart building, while the new systems of transportation have affected urban planning and urban design and have created a special need for infrastructure in the cities. Building technology produced new methods of construction and materials, which required new methods of expression. Many researchers, such as Tombesi (2001), emphasise the role of technology, including computers, with regards to the dramatic change in architectural style. Computer programmes such as (CAD) have unified the design process and the internet, which means that concepts and designs can transcend borders (see Fig 3.7)
Within the era of globalisation, decision makers have usually adapted to global architecture and have promoted modern concepts, in order to rebrand the cities and communities in developed countries. However, many architects seek to study place through a consideration of the environment, weather, culture and local identity. The market demands a concentration on international style, in order to achieve global recognition and investment (Rowe and Kuan, 2002). King (2004) emphasises this argument, in his focus on global culture and role of architects in the creation of transnational social spaces, such as global shopping malls, theme parks and

Fig (3.7) Construction Becomes Easier.
waterfront developments: these could be implemented anywhere, with no consideration for the sense of space or for those who use them. He adds that new forms of architecture are difficult to underpin anywhere, but architects play a pivotal role in the promotion of such architecture, see Fig (3.8).

![Building Materials Affect the Architectural Style. Dubai](image)

According to McNeill (1999: pp. 144-145), globalisation may be considered as a threat to the city, perhaps through metaphors of cultural invasion. He offers an example in citing that Europe’s urban modernity has been highly differentiated between nation-states and the fact that collective consciousness is manipulated by
elites is worthy of attention. McNeill focused on the status of urban architecture in Europe, stating:

*There are some grounds to suggest that the urban periphery is becoming standardised. The global star system of architects, such as Norman Foster, Richard Meier, Zaha Hadid, Santiago Calatrava, Frank Gehry and Richard Rogers, means that new office and public buildings are often designed from the same office.*

As shown in the figure below:

![Fig (3.9) International Architects Distributed the Globalised Buildings Worldwide.](image)

Cody (2003) believes that global architects, such as Foster and Koolhaas, were influenced by Le Corbusier; hence, the ideas and concepts are the same. Cody also adds that global firms in the latter half of the 20th century played a central role in the spread of the concepts of global architecture and linked the continents of America, Europe and Asia. According to the author, the strong relationship between these firms and architects has arisen through the worldwide implementation of high rise
buildings and skyscrapers. Winch and Schneider (1993) reinforce this view when they advocate ‘strong service’ for global firms that specialise in architectural services and studying the needs and demands of corporate clients around the world: such companies offer global concepts, in terms of architecture and built environment designs. According to researchers, there are major consequences as a result of this, due to the impact of globalisation on architectural products in cities that are referred to as ‘global cities’ across the world.

### 3.3.2 Multi-Storey Buildings

According to John and Hall (2005: p.2), there are many definitions of the high rise building. Many researchers have asserted that the term high rise refers to buildings with seven storeys or more. Others state that high-rise buildings have fifteen or more storeys, while some measure buildings in terms of linear height (metres or feet), rather than storeys.

Sklair (2006) believes that the brand of the twentieth century tended towards high-rise buildings (especially in terms of commercial buildings, referred to as High Rise Office Buildings (HROBs)) in order to attract foreign investment and create a comfortable environment in which to increase FDI. Competition between the various sectors, such as banking, manufacturing, services and insurance encouraged companies to demonstrate their power and domination through the HROB. As a result, the high rise building has emerged as an iconic architecture of capitalist globalisation.

Hassan (2002), in his book *The Multi-storey Building and Human ills*, indicates that, initially, the multi-storey building was acceptable, as they were limited and offer a solution of extensive space in built-up areas. However, the high-rise building has
become a terrible phenomenon, which is spreading like a cancer through the body of cites. Such buildings often damage a city’s infrastructure, placing increasing pressure on electricity, water and sewerage services. Hassan catalogues others problems associated with multi-storey buildings, such as:

- Causing difficulties for the elderly and the disabled, in the event of the electricity being disconnected or the elevator system breaking down.
- There is increased isolation between the residents and their natural surroundings outside their homes.
- Damage to the skyline of cities (see Fig 3.9).
- Natural wind and light are prevented from reaching lower buildings.
- Some children suffer with physiological disease, due to the fact that they cannot play outside.

3.3.3 Iconic Buildings

Sklair (2006) informs that the main feature of global architecture is the notion of ‘iconic’; this dominates the majority of global cities. There are two definitions of iconicity, according to Sklair: famous and symbolic or aesthetic. The author states: ‘the architectural icon is imbued with a special meaning that is symbolic for a culture and/or time and this special meaning has an aesthetic component’ (p.22).
He further concludes that the iconic that it reached as a historical baggage and the main aim of this is to establish the idea of global theory.

Hardy (2008: p.144) discusses the city of Dubai, which is considered an important symbol of the global city as it accelerates the main global cities in the world to dominate a high ranking between them. Thus, Dubai has many global buildings that are considered iconic architecture, such as Burj Khalifa, the tallest building in the world and Burj Al Arab, which is shaped as a giant sail and is already the internationally-recognised symbol of the city, as shown in Figure (3.11).

Etheridge (2007: p.2) discusses what is required of Kuwait city: the capital of the state of Kuwait in the Arabian Gulf. The city has several architecturally iconic buildings, in common with many global cities around the world, apparent in the approval of the Kuwait Towers, which is the country's current recognisable icon. However, Etheridge states: ‘while it might be recognised by people who live in the
region, it does not enjoy the global status of the Eiffel Tower or the Sydney Opera House’ (see Fig 3.12).

Fig (3.11) Search for the Iconic Building in Dubai, (Hardy, 2008)

Fig (3.12) The Kuwait Tower an Iconic Architectural Product, (Etheridge, 2007)
Francisco Vizeu Pinheiro, Vice President of the Macau Architects Association (AAM), outlined the phenomenon of high rise buildings in his city. He informed: ‘little by little, the city has been surrounded by towers. These towers around the city have created the Great Wall’, (see Fig 3.13). He then listed some of the impacts of high rise buildings on urban cities, stating: ‘these high-rise buildings were resulting in an increase in temperature and the intensification of air-pollution, as they blocked the wind from the sea’.

He concluded in his interview: ‘before setting up an urban planning guideline, the government should first introduce environmental impact assessment guidelines for future development projects, in order to avoid environmental deterioration’ (The Macau Post Daily, 2009: p.2)
3.4 Globalised Urban Architecture
Globalised urban architecture is associated with three factors. Firstly, there are some characteristics of the global city that distinguish them from other cities. Secondly, there are many comparable advantages and disadvantages of this phenomenon and, finally, there are issues with transportation and density within global cities.

3.4.1 Global Cities
According to Short and Kim (1999: p.240), ‘Globalisation takes place in cities and cities embody and reflect globalisation. Global processes lead to changes in the city and cities rework and situate globalisation’. There are also indications that globalisation has had a direct impact on architecture and urban planning, especially in metropolitan cities, due to the fact that there are many modern projects established in cities, such as companies, factories, banking headquarters and governmental bodies. Thus, any differences in the impact of globalisation, in terms of the built environment, between city centres and the countryside or suburbs are readily apparent (Short and Kim, 1999). According to Gavron (2007: pp.372-373), the Metropolitan city or mega city refers to a city where the population has exceeded ten million inhabitants. There were five cities with a population in excess of ten million in 1975 and, by 1985, this had increased to nine cities; furthermore, in 2005, more than 20 cities had a population of more than ten million. By 2015, the number of such cities is expected to rise to 27, with 22 of these in the developing world. As Gavron states: ‘by 2050, 75 percent of the world’s population is likely to live in cities and half already do’. The author then discusses the reasons why people prefer the city, stating: ‘the growth of these megacities is taking place in a period of
major economic and technological change, dominated by the emerging global economy and revolution in information technologies’.

Burdett and Sudjic (2007), in their book *The Endless City*, researched six global cities, asserting that there are four major trends associated with the global city. The first is increasing density, which is the main feature of the global city. Secondly, according to the research, it creates a concept of cities, allowing for far greater variations in what constitutes urbanity. Thirdly, the informal economy is divided into two groups, while some global cities, such as New York and London, have ‘allowed us to see the emergence of a new type of informal economic’ (p. 276). In Shanghai and Berlin, however, informality has been expanded to incorporate ‘highly creative professional activities in a highly visible way’ (p. 277). Finally, the relationship between the underlying economic, dynamic and physical typologies has been divided into two opinions: one is that there is a strong relationship between the economic, dynamic and spatial forms (i.e. the type of built environment leads to a specific type of economic activity). However, Sassen states: ‘we found that similar spatial forms and built environments can house different economic activities, when

<table>
<thead>
<tr>
<th>2005</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tokyo</td>
<td>Japan</td>
<td>35,327,000</td>
</tr>
<tr>
<td>2</td>
<td>Mexico City</td>
<td>Mexico</td>
<td>19,013,000</td>
</tr>
<tr>
<td>3</td>
<td>New York-Newark</td>
<td>United States of America</td>
<td>18,498,000</td>
</tr>
<tr>
<td>4</td>
<td>Mumbai (Bombay)</td>
<td>India</td>
<td>16,336,000</td>
</tr>
<tr>
<td>5</td>
<td>São Paulo</td>
<td>Brazil</td>
<td>16,333,000</td>
</tr>
<tr>
<td>6</td>
<td>Delhi</td>
<td>India</td>
<td>15,324,000</td>
</tr>
<tr>
<td>7</td>
<td>Kolkata (Calcutta)</td>
<td>India</td>
<td>14,299,000</td>
</tr>
<tr>
<td>8</td>
<td>Buenos Aires</td>
<td>Argentina</td>
<td>13,349,000</td>
</tr>
<tr>
<td>9</td>
<td>Jakarta</td>
<td>Indonesia</td>
<td>13,194,000</td>
</tr>
<tr>
<td>10</td>
<td>Shanghai</td>
<td>China</td>
<td>12,666,000</td>
</tr>
<tr>
<td>11</td>
<td>Dhaka</td>
<td>Bangladesh</td>
<td>12,550,000</td>
</tr>
<tr>
<td>12</td>
<td>Los Angeles</td>
<td>United States of America</td>
<td>12,146,000</td>
</tr>
<tr>
<td>13</td>
<td>Karachi</td>
<td>Pakistan</td>
<td>11,819,000</td>
</tr>
<tr>
<td>14</td>
<td>Rio de Janeiro</td>
<td>Brazil</td>
<td>11,498,000</td>
</tr>
<tr>
<td>15</td>
<td>Osaka-Kobe</td>
<td>Japan</td>
<td>11,298,000</td>
</tr>
<tr>
<td>16</td>
<td>Cairo</td>
<td>Egypt</td>
<td>11,146,000</td>
</tr>
<tr>
<td>17</td>
<td>Lagos</td>
<td>Nigeria</td>
<td>11,135,000</td>
</tr>
<tr>
<td>18</td>
<td>Beijing</td>
<td>China</td>
<td>10,840,000</td>
</tr>
<tr>
<td>19</td>
<td>Metro Manila</td>
<td>Philippines</td>
<td>10,877,000</td>
</tr>
<tr>
<td>20</td>
<td>Moscow</td>
<td>Russian Federation</td>
<td>10,872,000</td>
</tr>
</tbody>
</table>

Table (3.1) A List of Biggest Global Cities in the World, 2005, (Burdett and Sudjic, 2007)
such activities are viewed as a way of capturing specialisation and differences’.

According to Soja and Kanai (2007: p. 350), the term *world city* emerged in the early 1960s and referred to the fact that a city featured many global influences on urban life. However, the notion of the global city in the early 1990s reflected the impact of economic globalisation on the urban system. Thus, the concept was extended and referred to as a ‘global city region’ which was defined by a ‘new metropolitan form characterised by sprawling polycentric networks of urban centres clustered around one or more historic urban cores’.

In terms of the differences between the traditional and the global city, Sudjic (2007b: p.200) describes the city as ‘a complex interaction of issues and ambitions that shape the everyday choices of its citizens as much as their political leaders or their officials’. The global city is shaped by further factors, such as the movement of markets and the oil companies; it also features law and investment systems. Shanghai is an example of such a city: it is guided by both the national and municipal forces and has become China’s pre-eminent global city (‘The Paris of the East’). It also appears to be quickly becoming the ‘New York of China’ in the near future. Indeed, the future appears not too distant for a city that is already home to the Asian headquarters of more than 150 global corporations (Chen, 2007). In London, rows of tall buildings signify the city’s old and new financial centres, clustering around the City of London and Canary Wharf, marked by an ever-growing series of undistinguished corporate boxes. London may be growing slowly, compared to Shanghai, but the skyline of traditional London is changing, especially along the River Thames, as developers make the most of the sustained economy boom and legislative laissez-faire (Burdett, 2007).
Anderson et al (1996) state that there are two factors associated with global cities; firstly, the return of the city-state, which refers to the power of the city to make decisions. Second is the homogenisation thesis, created by Unified Urban Planning Worldwide. Borja and Castells (1997) state that the spread of neo-liberalism in American cities, such as the privatisation of the public sector, the decreasing of public transport and increase in the use of cars and commercial buildings emphasised role of the global cities.

3.4.2 Dilemma or Opportunity?

In his paper, Barrow (2004: p.143-144) discusses the change in architecture and whether this is a dilemma or an opportunity, especially in terms of Information Technology (IT), He indicates: ‘the current disruptive state of architecture will continue to challenge traditional thinking about design and the professional architect’. However, an advantage of this situation is that it offers architects the opportunity of a new career. Barrow focuses on various other dilemmas and opportunities, asking the question: ‘what is the relationship between global architecture and a society or a community?’ The answer to this question comes from two sources: a dilemma is ‘modern architecture’s adoption of manufacturing technology often resulted in insensitive, international non-regional buildings and environments’. Opportunities for resolving many problems in the cities include: provide housing for millions of homeless people, decreasing energy consumption, addressing issues of sanitation and housing structures for the acceleration of growth in the world and developing rural areas and communities (see Fig 3.15).

According to Ritzer (1996), global cities are becoming more and more similar, standardised, regulated and predictable. Mc Neil (1999: p.145) refers to this as the homogenisation thesis, which occurs through global products directly penetrating
the local markets, through the huge shopping malls that dominate the cities or through the densification in the centre of historical cities: as McNeil states, ‘there are grounds for believing that there is an urban corollary to McDonaldisation’. He cites an example of this as Gehry’s design for the new Guggenheim gallery in Bilbao, commenting that the building:

*Demonstrates that the site specificity and juxtaposing of new building in existing cityscapes, layer upon layer, provides yet more differentiation between cities. And seeing the landscape in static terms, as academics tend to do, is to ignore the fact that landscapes are made and remade by their users, depending on mood, physical ability, whether traversed alone or in company, in contemplation or abstraction, at speed or at a snail’s pace.*

![Fig (3.15) The Multi-story Buildings, Dubai](image)

Thrift (1997: p.141) argues that the range of openness in our cities is rising. During the 20th century, there was an obvious abundance of local consumptions and lifestyle cultures, especially in terms of vernacular architecture and the technological media, which encourages interaction with new goods and commodities, a developing night-
time culture, the formation of a skyline through the erection of skyscrapers and new materials, such as glass, dominating the facades of buildings. Thus, Thrift states: ‘perhaps our experience of place has thickened, not thinned’. According to Sassen (2007: p.280), the placing and centre of a city is very important for economic globalisation, due to the fact that global markets and global firms need ‘central places to conduct the most complex work of globalisation’. Sennett (2007 p.290) indicates that, at present, such cities are ineligible, in terms of serving inhabitants, because the population prefers to live in the city for other reasons, such as cleanliness, safety and efficient public services. According to Sennett, ‘currently, cities fail on all these counts, due to government policy, irreparable social ills and economic forces beyond local control. The city is not its own master’.

In terms of the urban planning of global cities, Burdett (2007: p.145-147) states that, in metropolitan cities, the compactness of the urban space offers many benefits. Firstly, it provides sustainable global urban growth, because fewer sprawls leads to the consumption of less energy, which leads to an increase in public transport and a decrease in spending on the infrastructure. As Burdett asserts, ‘the positive impacts of globalisation on local economic development are palpable, but so are their negative physical effects on income disparity and social exclusion’.

Two metropolitan global cities, New York and London, according to Sudjic (2007a: p.114), share many characteristics: both have a high system and a comparable population, size and economic base. Both attract immigrants and both have suffered as a result of the loss of traditional industries. Furthermore, ‘the two cities have considered similar remedies for their problems, from new financial instruments to funding public transport and through various forms of tax incentives for housing and job creation’. To conclude, the political systems of the two cities are very different:
New York is driven by market forces, while London supposedly has a more socialised system.

### 3.4.3 Transportation Network and Density

Penalosa (2007) adopted a straight-forward approach to the use of cars in a city, asking why the governments of global cities, such as New York, Paris, London and Tokyo, do not build more roads or increase the size of existing roads. The answer given by officials was that there is a correlation between an increase in roads and an increase in the car use in the heart of cities. Their aim was to decrease the rate of cars through a reduction in the development of roads and concentrate on public transport. He adds that such a plan is inadequate, as decreasing the number of cars is a city is reliant on many factors, such as parking limitation, road fees and number plate-based user restrictions.

According to Rogers and Power (2000: p.97) in their book *Cities for a Small Country*, there is a correlation between cars and danger, (see Fig 3.16). The authors listed various risks associated with cars, such as negatively affecting health, the environment and the streets. Cars are also dangerous than any other mode of transport; for example., in Britain, 3,421 people were killed in 1998 as a result of car accidents and more than 40 thousand people were seriously injured; of these, more than six thousand were children. The authors focused on speed, considered the main factor in the seriousness of car accidents, and it was ascertained that 85 percent of pedestrians hit by cars travelling at 40 mph are killed. At 20 mph, the death rate drops to 5 per cent.
According to Knoflacher (2008: pp.133-134), the situation of cities dramatically changed when the car was introduced. Space for movement in the cities is ten per cent of the total area for cities, as this leads to the gathering of people, without spacious roads. Now, the speed of transport means that this size has been affected, leading to an increase in speed (considered the main cause of accidents). As a result, there has been an increase in the risk of accidents. Furthermore, an increase in transportation space has meant that the space of pedestrian has become more limited. Although historical or traditional city centres prevent the movement of cars, due to the narrow spaces and roads, car drivers have simply found other places to
live, outside the traditional centre. The authors state: ‘the free movement of cars was given priority over the quality of urban life’ and, in comparing the space used by cars and trams, they inform: ‘cars take up about 170 square metres per passenger, at 50 kilometres per hour, as opposed to a tram, which requires 2 square metres per passenger’.

According to Anderson et al. (1996), an understanding of the relationship between land-use and transportation can be a clear indication of densities and spatial design, in terms of understanding the trends that should be followed. The authors incorporate the private car as an example of this: the density decreased when separation was made between the city centre and peripheral suburbs, through public transportation, see figure below:

Fig (3.17) Increasing the Density in the Global city, Mexico City, (Burdett and Rode, 2007)
In this domain, researchers established a correlation between density and the land-use in cities and the means of transport. Altshuler (1979) states that the correlations between land-use and transportation are different: in the short term, land-use affected by the transportation system but, in the long-run, such a system has reshaped urban cities. Bourne (1982) has divided the relationship between transportation and land-use into three components: the urban form, human interaction and organising principles. Mindali et al (2004: p.145) state: ‘the urban spatial structure of a city seems to have a significant influence on the transportation flows within its area’. Thus, there is a direct connection between globalisation and the city. A global city is conceived as a strategic site, not only for global capital, but also for the trans-nationalisation of labour and the formation of translocal communities and identities. In this regard, global cities are the site of new types of political operations and a whole range of new cultural and subjective operations (Sassen, 2007). As a consequence of globalisation and the development of global cities and networks, the level of international immigration has grown in recent decades. Furthermore, the growing number of world immigrants has increased the plurality of different cultures in global cities (as well as in the global city of Toronto), referred to as ‘multiculturalism’ (Hawkins, 2006).
Chapter Four: Human Needs and Architecture

4.1 Introduction
The balance between human needs and the requirements of the built environment are important in the success of any architectural work. People are the essence of any development and thus focusing on human needs is ‘good architecture’, according to Salamati (2001: p.33), Maslow’s hierarchical order defines a good or healthy society as ‘one that permits people’s highest purposes to emerge by satisfying all their basic needs’. Moreover, he divided such needs into five levels; physiological needs are at the base of the pyramid, while aesthetic needs are at the top. Hence, this chapter looks at Maslow’s pyramid of human needs in detail and outlines the differences in the views of experts and researchers, in terms of such human needs. The chapter also concentrates on the relationship between human needs and the built environment, describing the effects one has on the other. The second part focuses on architectural behaviour, which is divided into two subjects: culture and identity. The impact of culture in shaping architecture is investigated, as is the role of the contents of culture, such as religion and habits. For example, the level of privacy in the design of a house is in accordance with the nature of a community. The second subject in this domain, identity, is the clearest factor in reflecting the nature of a community and its culture within a built environment. Thus, it is essential to outline the relationship between architecture and identity, especially within the era of globalisation, which seeks to unify designs and materials and ignores local identity.

4.2 Basic Human Needs
There are many approaches to the explanation of human needs and there are many theories within this field. An essential part of this theory is Maslow’s pyramid of human needs. According to Maslow (1943: pp.3-12), there are five human needs,
which he refers to as basic needs. These are: physiological needs, safety, belonging, esteem and self-actualisation. Of physiological needs, he said:

The needs that are usually taken as the starting point for motivation theory are the so-called physiological drives. Two recent lines of research make it necessary to revise our customary notions about these needs; firstly, the development of the concept of homeostasis and, secondly, the finding that appetites (preferential choices among foods) are a fairly efficient indication of actual needs or lacks in the body.

Physiological needs are the basis of all needs, as other needs may be ignored if one of the physiological needs is not fulfilled; for instance, if a person were hungry, then he would not look for anything until he eats.

In terms of safety needs, Maslow states: ‘if physiological needs are relatively well gratified, there then emerges a new set of needs, which might be roughly categorised
as ‘safety needs’. He then outlined progression to the third level in his pyramid, stating that this is dependent on the accomplishment of the first two levels. Thus, he states: ‘The love needs - if both the physiological and the safety needs are fairly well gratified, then the love and affection and belonging needs will emerge’. The fourth level of Maslow’s pyramid refers to esteem needs and Maslow indicates that it is natural for people to seek self-esteem and respect from others. He divided this part of the pyramid into two domains; ‘firstly, the desire for strength, achievement, adequacy, confidence in the face of the world, independence and freedom’. Secondly, how do we identify the desirable aspects that occur as a result of gaining respect from others? The answer is that the satisfaction of the need for self-esteem leads to ‘feelings of self-confidence, worth, strength, capability and an adequacy in being useful and necessary in the world’ (Maslow, 1953: p. 12). Maslow concludes human needs in the last level of his pyramid (self-actualization). He states:

*The need for self-actualisation: even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for. A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. What a man can be, he must be. This need we may call self-actualisation.*

Max-Neef (1991: pp.12-35) informs how, since the 1970s, human needs have been measured using the rate of Gross National Product (GNP) and through other indicators, such as indication of development or people’s income per day (which measures the poverty level). Max-Neef informs: ‘the basic needs approach has a very limited understanding of what people’s needs are’.

Thus, he created a new theory of need, incorporating many principles, in order to better understand basic human need approaches. The first principle of his theory is development, which is based on people rather than objects. Explaining this principle, Max-Neef says: ‘in the traditional paradigm, we have indicators such as the GNP,
which is, in a way, an indicator of the quantitative growth of objects. We now need an indicator of the qualitative growth of people’.

According to Max-Neef, there are two questions that help us to fulfil the first principle and he discusses these questions by asking: what should that be? He answers that the best development process will be that which allows the greatest improvement in people’s quality of life. The second question is: what determine people’s quality of life? Quality of life depends on the possibilities people have in adequately satisfying their fundamental human needs. Max-Neef concludes his theory through the incorporation of two tools to assess the general quality of life: the first is the person themselves and the second is the environment that surrounds them; for example, the quality and design of their housing.
Rothblatt (1971: p.140) argues: ‘in any view of human nature, the concepts of quality of life and human needs are of key importance’. As an example of this, he says that, if a house is built without any human consideration, it becomes a shelter rather than a home.

According to Murray et al. (2005), Max-Neef’s needs are not only based on deprivation, but also on potential (e.g., the need for creativity refers to motivation). This is why Max-Neef needs use both deprivation and potential as terms to actualise, rather than satisfaction. His typology of needs refers to ten values: subsistence; protection; affection; understanding; participation; creation; idleness; identity; freedom and transcendence. Details of each value are given in the table below:

<table>
<thead>
<tr>
<th>Needs</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsistence</td>
<td>Intactness, arrangement, waste movement, temperature, receptivity, adaptability, growth, will to live.</td>
</tr>
<tr>
<td>Protection</td>
<td>Maintaining physical subsistence and mental &amp; emotional wellbeing.</td>
</tr>
<tr>
<td>Affection</td>
<td>Pleasure, trust, loyalty, respect, beauty, meaning</td>
</tr>
<tr>
<td>Understanding</td>
<td>Perception, cognition, emotion, reflexes.</td>
</tr>
<tr>
<td>Participation</td>
<td>Receiving, giving.</td>
</tr>
<tr>
<td>Creation</td>
<td>Transforming matter, transforming symbols and procreation.</td>
</tr>
<tr>
<td>Idleness</td>
<td>Catharsis, revitalisation.</td>
</tr>
<tr>
<td>Identity</td>
<td>Physical disposition and appearance, personality, procreate.</td>
</tr>
<tr>
<td>Freedom</td>
<td>Choice, value.</td>
</tr>
<tr>
<td>Transcendence</td>
<td>Affirmation of life, overcome meaninglessness.</td>
</tr>
</tbody>
</table>

Table (4.1) The Subsistence of Human Needs in Architecture, (Moore, 1979)
Murray states: ‘his (Max-Neef’s) typology of satisfiers is based on an existential categorisation’ (2005: p. 138). A satisfier is a way of being and having a sense of social institutions or being situated in the time and space that people use to actualise their needs.

Deasy and Lasswell (1990) indicate that human needs arise from the factor of motivation; thus, he divides such motivations into eight factors: friendship formation; group membership; personal space; personal status; territoriality; communications; cue searching and personal safety. They then focus on each factor and the ability of the factor to fulfil human needs; for example, the formation of friendships relies on the place and the distance between offices, in terms of employment, and the location of houses, the size of plots and the placing of entrances, in terms of neighbours. Personal space is diverse, in terms of the numerous communities and cultures, so the sociologist scholar Edward T. Hall divided personal space in the USA into four distances: personal distance, intimate distance, public distance and social distance.

4.3 Human Needs in Architecture
The last section addressed human needs in general and this section will focus on the relationship between human needs and architecture. In this domain, many studies and researchers have discussed this relationship and whether people shape their environment or if it is the other way around. Rothblatt (1971), in his book Housing and Human Needs, argues that human needs have played a basic role in creating the built environment and how ignoring human needs ensures that the built environment has no spirit or sense.

According to Deasy and Lasswell (1990), in terms of the relationship between architecture and human needs, the motivating factors should be understood. The authors listed eight such factors, which were friendship formation; group
membership; personal space; personal status; territoriality; communications; cue searching and personal safety. Although the designer cannot force the people to make friends or become group members, there could be many elements that support these factors in a design. Finally, they divided such factors into two groups: some needs are innate in the human physiology, while others are related to cultural background.

Carly (1981) highlights the concept of human need in urban architecture, referred to as architectural behaviour, which arose in the mid-1960s. This concept is concerned with quality of life and how to achieve satisfaction, in terms of buildings and urban cities, and is achieved by the study of the movement of social indicators in the built environment by architects, designers and decision makers. A few years later, this was extreme, in order to encompass the many factors that affect the built environment, such as indicators of socio-economic factors. Then, as a result of researches, the concepts of quality housing and quality of life arose. Continuing the theme of human need, Moller (2003) argues this is part of the sociologic domain and that it is spreading. This is why democratic and human rights achievements require an understanding of social and cultural needs; it aids decision makers in their decisions regarding the built environment.

Murry et al. (2005) focus on the methodology of the specification of human need in the built environment and there are two aspects of this; objective indicators are dependent on counting events and activities and measure income level and living standards and conditions. Subjective indicators are based on inhabitants’ description of their feelings about themselves and hopes and the environment surrounding them: this approach measures satisfaction and happiness in life.
According to Chowdhury (1985: p.79-80), the design of buildings, especially houses, is one of the most difficult tasks, as it is based on human needs, of which there are many facets. He states that ‘a proper understanding of the nature of human needs is of crucial importance in the formulation of housing and space standards’. Furthermore, the system of life varies from society to society, in terms of social and economic functions. Chowdhury cites the range of temperature as an example of this; although there is a range of ‘temperatures at which office workers in different countries said they felt comfortable, ranging from 18 to 38 C, the response was affected by local climatic conditions, dress and expectations’. As a result, even in the fulfilling of physical matters, needs are affected by social and local factors.

Deasy and Lasswell, (1990) in terms of the theory of human needs in architecture, concentrates on personal status, which explicitly reflects people’s wishes to exhibit their existence and status. In several civilisations, architecture is used to reflect the tendency of culture and human ideas and, according to them, there is a relationship between personal status and architecture. Architecture has the ability to reflect the situation of a habitat, such as cultural values and prestige. They also discuss territoriality, which is divided into several kinds, such as private territoriality, common territoriality and temporary territoriality. The effect of territoriality on architecture is very important, as elements of architecture, such as location of a building and a private garden, verify the privacy of the owner.

According to Moore (1979: p.18-21), the purpose of architecture is to provide a place where people feel more human, alive and fulfilled, stating: ‘how often do we really pay serious attention to the needs of the user, to the behavioural, social and cultural determinants of design and the role of good design in the needs of human beings?’ In answering this question, Moore employs two examples: the first
concerns an elderly person and, here, the role of the designer is to provide a place that suits the individual’s situation. Of this, Moore states that the role of the designer is to ‘make the environment easier for the old person to get around, which may encourage the elderly to become more dependent and less self-assured. The second example refers to children and the approaches or ways in which to create a suitable environment that will encourage and stimulate the development of children. Thus, Moore outlines three components that encourage the development of children, which are physical, social and intellectual growth. He concludes his argument by concentrating on the importance of the study of human needs, stating:

*Environment-behaviour studies in architecture are a contemporary approach to the traditional humanistic purposes of architecture. It is a view of design and of the environment, which places the values, needs and preference of users at the forefront of the design process. It is a philosophy of design that has, as its goal, the satisfaction of human needs and the elimination of environmentally induced stress. And it is founded on the belief that good design and great buildings are always ultimately judged by how conductive they are to a human existence which is alive, more human and more capable and free.*

According to the Town and Country Planning Association (TCPA), the main principles of social and environmental design are:

- **Natural resources:** this increases biological diversity and supports wildlife in many ways, such as the increasing of green spaces, replacing groundwater rather than depleting it and the use of renewable materials.
- **Land use and transport:** this concentrates on creating healthy spaces by encouraging individuals to use public transport, rather than use their cars. It also advocates minimal fuel consumption.
- **Energy** refers to ‘greatly reducing the consumption of fossil fuels and increasing production from renewable sources, such as the sun, wind, tides and waves’.
Population and waste: the ‘reduced emission of pollutants, especially from industry, power stations and transport and comprehensive measures to improve the quality of air’ (TCPA response, 2007: 80).

Rothblatt (1971: p.133) indicates that there are two opposing opinions, in terms of the relationship between the physical environment and social life. Many researchers, such as Festinger, Fried and Rainwater, suggest there is a significant relationship between architecture and urban features such as ‘streets, courtyards, play areas, building arrangements and interior space and social-psychological factors, such as self-esteem, intra-family relations, friendship patterns and group participation’. However, researchers such as Gans, Rosow and Wilner indicate that there is little or no relationship between the physical environment and social life. According to Murray et al. (2005: p.45), there are six categories and 25 elements of human needs in the household. Table 4.2 below highlights these elements:

<table>
<thead>
<tr>
<th>Categories</th>
<th>Household elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic necessities</td>
<td>Water, food, waste removal, clothes</td>
</tr>
<tr>
<td>Localisation</td>
<td>Land, air, house, light, sound</td>
</tr>
<tr>
<td>Basic activities</td>
<td>Car, work, rest</td>
</tr>
<tr>
<td>Relationships</td>
<td>Self, intimate partner, household members, non-household members.</td>
</tr>
<tr>
<td>Consciousness</td>
<td>Faith, values, motivation, thought, learning, communication, beauty.</td>
</tr>
<tr>
<td>Body structure</td>
<td>Gender, development phase</td>
</tr>
</tbody>
</table>

Table (4.2) The Elements of Human Needs in Household, (Murray et al, 2005)

The authors used this database to develop two instruments, as informed below:

*The sub-systems of the household manifest themselves in concrete usage patterns. A usage pattern is observed as people being motivated by certain values, using artefacts for a specific purpose in a particular environment. It*
is thus an integrated pattern of thinking and doing that is part of the household culture. A usage pattern can be determined through observation by the researcher or through self-evaluation by users. This pattern is observable and, to some extent, understandable independently of a particular model of human needs. It is thus important that usage patterns form the basis of research on the way in which people satisfy their needs by living in a house.

Upon highlighting these household elements, Murray et al. focused on the process of applying the elements to the ten needs mentioned in the last section and they put forward the idea of thermal comfort as a human need, in terms of housing, see the table below:

| Make invisible | Those things which are supposed to work only in the background, with little or no human intervention |
| Make usable    | Things needing regular attention and/or interaction. Importantly, this is linked to management culture and occupier convenience |
| Make habitual  | Formal and informal rules that aid the safe, comfortable and smooth running of life. This is more a matter for individuals. |
| Make acceptable| Things which are not prescribed and covered by the rules, but allow scope for individuality, innovation and change. |

Table (4.3) The Components of Human Needs, (Moore, 1979)

According to Leaman (2002: pp.85-104), the methodology of applying the needs of users is complex, as it must incorporate many considerations at the same time. Furthermore ‘habits, needs and preferences are, to some extent, culturally dependent. They are affected by attitudes to health, safety, risk and fashion, as well as regulations and organisational and social norms’. Thus, in recent years, he states that the notion of human needs in architecture has been increased and conditions that were tolerated in the past are rarely accepted today. Leaman informs: ‘whatever the
prevailing norms, most building users have to accept what they find as ‘givens’. This is why their behaviour, with the occasional exception, is coping or satisfying’.

In discussing user’s needs, he argues ‘the main point is that the context for users is rarely linked to the physical building variables; it is dominated by what might be called behavioural variables’.

Our evidence shows that the best buildings tend to perform well in all four quadrants. For example, buildings which can be said to be flexible and adaptable will have considered all four strategies, in terms of the briefing, design and operations thinking. This includes issues such as usability, innovation, habit, safety and security, risk, value and uncertainty (Hess, 2004).

4.4 Culture and Architectural Behaviour
Dicken et al. (2001) focus on the relationship between global architecture, the placing of such buildings and the impact of this relationship on society. This has produced a situation where inhabitants’ buildings are influenced by their settings.

Sharing this argument, Faulconbridge (2009: p.4) argues that:

*the complex interweaving of design and consumption side regulation means that whilst from the exterior a building might, for example, look like just another (Skidmore, Owings and Merrill) SOM tower, and whilst the global firm or architect might actually consider themselves to be designing a ‘global’ rather than a local building, the work of global architects and global firms actually leads to buildings that have a more distinctive ‘local’ identity than might be first realised.*

Pollack (2006) indicates in his article, entitled *A Modern More or Less Human*, that there is a difference between modern and traditional, in terms of human needs and a sense of security: he reached such a conclusion by comparing traditional and modern student accommodation. The traditional accommodation was called ‘Baker House’, (see Fig 4.3), while the modern building was entitled ‘Simmons Hall’, (see Fig 4.4). Students were asked which building they preferred and many answered that they
preferred the traditional building, as it provided more privacy and security than the modern building. James adds that, although many researchers agree that Simmons Hall is fantastic, in terms of great architecture, a creative concept, progressive design and a dynamic finish. However, for students, the accommodation is cold and sterile and is undesirable, in terms of living space.

Fig (4.3): Baker House, MI, (Pollack, 2006)

Fig (4.4) Simmons Hall, MIT, (Pollack, 2006)
In Istanbul, the largest city in the Turkey, (which is located between Asia and Europe and between the East and West) Unlu et al. (2008: p.2) conducted a survey of six buildings: three traditional and three modern, high rise buildings, see Figure (4.5). They distributed questionnaires to 300 inhabitants of Istanbul and the main questions of the survey are shown in table 4.3 below.

<table>
<thead>
<tr>
<th>Questions</th>
<th>High Rise Building</th>
<th>Historical Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which building represents uniqueness, cultural representation?</td>
<td>6%</td>
<td>80%</td>
</tr>
<tr>
<td>Density of the recently emerging high rise?</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>Would you like to live in these high rise buildings?</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>Is the high rise building a good idea?</td>
<td>5%</td>
<td>70% of them thought that the increasing of high rise buildings was excessive</td>
</tr>
</tbody>
</table>

Table (4.3) The Findings about Traditional and Modern Buildings

Source: Unlu et al., 2008

According to Chapin and Kaiser (1979), the built environment, whether buildings or urban, is an outcome of people’s behaviour; thus, it reflects their culture and the
many requirements of life, such as transportation, social needs, economics and the system of the man-made environment. This is why environmental features have an effect on the activities of inhabitants: the built environment is based on habitants’ needs, in order to reflect their activities and ambitions. As a result of this, the arrangement of such activities is referred to as ‘behaviour settings’. Behaviour setting is defined by Baker (1986) as a group of standing patterns that shape a place in accordance with the behaviour of inhabitants. It incorporates standing patterns, such as the regimes of eating, sleeping, playing and other activities. It also focuses on physical design and attempts to match this to human behaviour, whether it already exists or is required. Consequently, behaviour setting partly reflects inhabitant’s motivations and attitudes, which are specific to their incomes and culture.

Benjamin (2003) indicates that culture is the main thing that drives both human activity and architecture. Indeed, architecture is more than just simply materials and shapes: it reflects human culture, a culture that has been fostered by both manmade assets and by human sense. He further adds that the construction of architecture opens up the world and thus this is the main way to instil a nexus between architecture and culture.

4.5 Architectural Identity
This section will begin with a definition of the terminology of architectural and urban identity, which consists of many definitions, such as place identity. Proshansky (1979: p.150) informs that place identity includes both urban and architecture, ‘a substructure of self-identity that consists of cognitions about the physical world in which the individual lives’. However, Korpela (1989) views place identity from an individual perspective, which fosters a strong relationship between the human and the place; i.e., creating a sense of belonging in people, with regards
to every element of a place, such as buildings, space and lifestyle. According to Korpela, this belonging is referred to as rootness or placeness.

According to Donnelly (1998: p.12), a respect for cultural diversity is the main principle of a treaty and they cite the treaty of the European Union (Article 128) as an example of this. The article states: ‘the community shall contribute to the flowering of the cultures of member states, while respecting their national and regional diversity and, at the same time, bringing common cultural heritage to the fore’. It then discusses the aspect of identity, focusing on some incentives that deal with the built heritage and material assets, saying:

Building samples from Australia and New Zealand tend to show that Australasian buildings are healthier, but this may be the result of a healthier lifestyle, along with more opportunities for occupants to get away from their desks and go outside during the day, rather than being the result of intrinsic physical differences in the buildings themselves.

Lewis (2002: p.2) indicates that traditional architecture is filled with movements that reflect cultural identity. Thus, it strives to express human culture through architecture. However, modern architecture reflects the situation of a state and the identity of a company. Of this, Lewis asserts: ‘pro-global design sponsors include governments using architecture to symbolise the state and companies employing architecture for corporate identification’. He concludes by asserting that self-righteous architects often try to promote their own theories.

In many ways, discussions about identity appear to be overheated; hence, identifying and distinguishing such discussion from other types of discussion is important, in terms of globalising society. In general, the identity of a city could be described as a collection of overarching elements, such as the physical environment, socio-cultural and economic contexts, the natural landscape, the urban structure, aesthetic appearance and political power, which creates a rather electric and eclectic mixture,
giving the city a more or less specific character (Hempel and Urban, 2007). In a world of the global flow of wealth, power and images, the search for identity, whether collective or individual or ascribed or constructed, becomes the fundamental source of social meaning. They emphasised the importance of culture, religion and national identity as sources of meaning for people and the implications of these identities for social movement.

Castells (1997) states how the globalised economic forces necessarily lead to a loss of local identity and there are two strands to this argument: the first is that, in the pursuit of economic prosperity and investment, cities necessarily adopt neo-liberal forms of governance, such as sanitising streets and ridding them of people and groups deemed to be unruly or anti-social (these people may deter multi-national corporations away from cities). The second strand of the argument refers to the increasing similarity of physical forms. The facades of global operators dominate retail environments and service functions are housed in buildings whose operations could take place anywhere, globally connected by methods of telecommunication. As the requirements of global occupiers of space are the same, so are the buildings that accommodate them, (Ogden and Parsons, 2007).

In a world of the global flows of wealth, power, and images, the search for identity (collective or individual, ascribed or constructed) becomes the fundamental source of social meaning. Castells emphasises the importance of cultural, religious and national identity as a source of meaning for people and the implication of these identities for social movement. Furthermore, he fears the loss of identity and privacy; in general, a fear of the unknown. Among such fears, especially in the South, is that the impact of globalisation on the culture of the developing post-colonial countries is pervasive and endemic. Dandekar (1998), Twigger-Ross (1994)
and Uzzel (1995) highlight the harmonious symbolic and physical qualities which connect with the values of a community; thus, the esteem of individuals is promoted through positive messages from visitors. Also, the link between the physical environment and individual identity is based on many factors, such as identification of place.

The World Forum (2000) focused on the role architecture plays in the identity of a community, as culture played a main role in this in different reigns. However, as a result of the impact of globalisation, the role of culture is declining, with telecommunication at the forefront of globalisation.
Chapter Five: Housing in the United Arab Emirates

5.1 Introduction
In the UAE, in the 1950s, the country lacked the basic infrastructure of roads, electricity and water networks and even the most basic services of health and education were not available. Years later, a welfare Development Office (DO) was established, under the authority of the British political agent in the Gulf, with the aim of establishing such basic infrastructures (roads, electricity and running water) for the seven emirates. The DO also had the goal of providing social services, such as health, education and housing (Fenelon, 1973; Bin-Abood, 1992). The development and welfare programmes initiated by the DO were accelerated by the discovery of oil in the early 1960s and the sharp increase in oil prices in the early 1970s brought the country a level of welfare unparalleled throughout its history. This produced an economic boom and dramatically changed the landscape of the country; small villages that previously lacked a basic infrastructure and amenities were transformed into large cities (Ministry of PW&H, 1995). Indeed, as the rulers of the emirates were quick to expand welfare and development programmes, the effects of the new wealth were soon felt in all parts of the country. With regards to the programmes themselves, these were not the result of social pressures or class conflict, but an outcome of large oil revenues. The new funds were used to establish development projects in the UAE, as was the case in other Arab Gulf states (Abdulla, 1993).

When the UAE federation was established in 1971 (see Fig 5.1), the pace of development and welfare programmes accelerated even faster; the newly-born federal state established ministries and government institutions that aimed to improve the living conditions of UAE citizens and overcome the traditional poverty that had previously characterised the country. The main priority of government
institutions was to establish the necessary infrastructure in the country and provide the basic social services of education, health and adequate housing (Taryam, 1987). The remainder of this chapter will provide background information on housing efforts in the country, in both the pre and post oil eras. In understanding housing conditions in the pre-oil era, we should be able to ascertain the root cause of the current housing conditions and problems (by the pre-oil era, which mean the period before 1971). It may be true that oil was discovered in the 1960s, but its revenue only began to affect the country after the formation of the union four years later.

Fig (5.1) The Political Map for the UAE, (Emirates Centre, 2009)

5.2 The Country: General Background
The UAE is strategically located in the south-eastern corner of the Arabian Peninsula, north of the Arabian Gulf. The country has an area of nearly 83,600 square kilometres and a total population of six million (Gulf news, 2009). It consists of seven sovereign emirates, which vary in size and wealth. Abu Dhabi is the largest, richest and most densely populated Emirate, followed by Dubai, which is Arabia’s most renowned trade and commerce centre. Sharjah takes the third place and Ras Al Khaima, the most northerly emirate, is next, followed by Fujairah, the
emirate with a long coast on the Gulf of Oman. Ajman and Umm Al-Qaiwain are the country’s smallest emirates, in terms of size and population (Feneolon, 1973). The following is a brief account of the country’s history, political structure, economy and population.

5.2.1. Historical Background
Historical records of the first century A.D. present us with evidence that active overland caravan traffic existed between the urban dwellings of Mesopotamia and what we now refer to as the UAE. These records also make reference to seaborne trade between the northern regions and India, through Omana (Umm Al-Qaiwain in the present day). However, the turning point in the country’s history began during the second quarter of the seventh century A.D., when tribes scattered along the coast converted to Islam. Indeed, it is often stated that Julfar (Ras Al-Khaima today) was an important post in staging successful Moslem wars against Persia. It is also noted that Ibn Majid, a navigator, cartographer and citizen of Julfar, assisted Vasco da Gama. In the sixteenth century, soon after the arrival of the Portuguese, they battled with the Ottomans, who had control over large parts of the area. As a result, the maritime Arab tribes were driven inside the country and the newcomers dominated the Gulf waters for decades to come. With the end of the Portuguese ascendancy, during the early years of the seventeenth century, the tribes began to return to the coast and set up small settlements, which became the nucleus of future sheikhdoms (Kelly, 1963). However, up to the Nineteenth century, raiding pirates continued to disrupt sea trade with India, which explains why British records of the period refer to the coastal region as the ‘Pirate Coast’. To protect trade, the British established a military presence in Ras Al-Khaimah and, the following year, they signed a peace treaty with the local sheikhs. Nevertheless, raids on trade ships continued and, in 1853, another treaty was signed between the two parties. Under this treaty, the
sheikhs of what came to be known as the ‘Trucial Sheikhdoms’ agreed to a perpetual maritime truce and also agreed to refer any disputes to the British government for settlement. In 1971, the British decided to terminate the treaty with the seven sheikhdoms. That same year, Sheikh Zayed, the ruler of Abu Dhabi, called for the unification of sheikhdoms: this was accepted and an independent federal state was created (Maitra and Al Hajji, 2001).

5.2.2. The Political Structure
Not long before the UAE was created, each of the seven separate emirates began to establish its own local municipalities, land ownership, public works and water and electricity departments. Supervising these departments was the responsibility of the local emir, who also retained the ultimate power to make decisions regarding any developments in his emirate (MEED, 1996). In their discussion of the sheikh-style government, (Maitra and Al Hajji, 2001) state that this style did not differ from one sheikhdom to another. According to these authors, the power exercised by the ruler was of a somewhat despotic nature. Also, when it came to resolving local disputes and matters connected with the general interests of the tribe, the opinion of the tribal chief had a large bearing Almansoori (1997) adds that the rulers of the sheikhdoms usually came from the most powerful tribes and they relied on these tribes for local political support. What is interesting to note here is that even after the federal state had been established, tribal loyalties to individual rulers still played an important role in the country’s politics. Furthermore, the federal authority did not abolish local government institutions. Rather, according to the constitution, each emirate had the right to establish its own local departments under the control of the emirate ruler. Referring to this constitutional right, Al Shaheen (1995) notes that it has weakened federal institutions and given local governments more support, thus cementing their own sovereignty.
As stated in Article 45 of the country’s institution, the federal government consists of five main authorities, of which the most important are the Supreme Council of Rulers (SCR) and the Federal National Council (FNC), (see Fig 5.2). The SCR is the highest authority in the country and consists of the rulers of the seven emirates; it has both legislative and executive powers and is responsible for planning the country’s policies, electing the president and appointing or dismissing the prime minister. The FNC consists of forty members who are appointed by the rulers of the seven emirates; however, in 1997, it was decreed that half of those members should be elected. Although the FNC is not given any legislative powers, it can still question federal ministers and make recommendations to both the SCR and the Council of Ministers (Al Abed and Vine, 1996). Commenting on the political structure of the federation, Searight (1990: p.3) observes that it ‘remains embedded in the tribal past, with the ruling sheikh as the sole decision maker and his decisions are seldom openly disputed’. He states that this is a system that does not adapt easily to a modern state, with its need for strategic thinking.

Fig (5.2) The Federal National Council (FNC) In UAE, (Emirates Centre, 2010)
5.2.3. The Economy

Until recently, the UAE economy was still based on pearl fishing, agriculture, the fishing industry and trade. However, following the discovery of oil in the early 1960s, the country’s economic and social patterns began to change and the huge oil revenues became the main source of income. Despite this, fluctuations in oil prices during the last two decades of the past century have resulted in budget deficits and have had an adverse effect on the federal government’s public spending and development projects, especially in the housing sector. The problem has also led to calls for a more diversified economy. However, despite attempts to diversify income through industrialisation, agriculture and fishing, (see Fig 5.3) oil and gas remain the mainstay of the economy (MEED, 1996). In terms of this, it is worth mentioning that the UAE possesses the world’s sixth largest oil reserves (C.I.A. Fact Book, 2008). Also, according to the C.I.A reports, the UAE has one of the most developed economies in the Middle East and is one of the richest countries in the world, with GDP per capita reaching nearly $55,000. What makes the country so distinguished is that it has spent and continues to spend billions of dollars on the infrastructure. Currently, it has an expanding manufacturing base and a thriving services sector and this in itself is now making the UAE less reliant on its natural resources of oil and gas. It is also important to mention that huge investments have been poured into real estate. According to the Emirates News Agency (24th May, 1997), there was $350 billion worth of construction projects at the time. Nevertheless, levels of economic prosperity vary between the seven emirates that constitute the federation. Whereas the oil emirates of Abu Dhabi, Dubai and Sharjah are economically and socially developed, relatively lower levels of development can be witnessed in the northern, non-oil emirates of Ajman, Umm Al Qaiwain and Ras Al Khaimah. Indeed, the non-oil emirates depend almost totally on their oil-rich counterparts for support, in terms
of financing social services, education, health, social security and water, electricity and housing services (Al-Musfer, 1985).

![Non Oil Exports](image)

**Fig (5.3) Non Oil Exports in UAE, (Emirates Centre, 2010)**

### 5.2.4. Population

According to early reports, the population of the UAE did not exceed 200,000 in 1968. However, over the past forty years, the population has steadily increased and has now reached six million. This dramatic increase is not due to a high birth rate; rather, it is the result of foreign expatriates who have flooded the country to invest or to take up the jobs required for speedy social and economic development. As a result of this rapid and large-scale immigration, the indigenous people have become a small minority in their own country. Although no official figures are available on the number of UAE nationals, some statistics indicate that they constitute only 14 per cent of the entire population. With regards to foreigners, these have arrived from almost every corner of the earth. However, the majority come from Iran and the Indian subcontinent. Aptly put, within only a few decades, the influx of foreign labourers has turned the small traditional villages on the Gulf coast into huge towns and cities (Gulf News, 2009)
5.3 Housing in United Arab Emirates
Housing in the United Arab Emirates is divided into two phases: housing from the pre-oil era and housing from the post oil era.

5.3.1. Housing During the Pre-Oil Era
Until the 1950s, formal housing programmes did not exist in the UAE and housing provision was entirely due to the efforts of the individual. The scarcity of resources at that time made it difficult for local rulers to be involved in housing projects and the majority of citizens lived in houses built from date-palm products, which were known as barasti, arish or khaimah, (Fig 5.4) shows some of these houses depending on the district in which they were built. According to Kay and Zandi (1991), this type of housing dates as far back as the seventeenth century and characterises the majority of homes in many villages and towns in the area.

Fig (5.4) Dubai Houses in 50s (The Image from the Archive), (Dubai Municipality, 2000).

One major characteristic of the date-palm house is that it usually consists of one or more rooms, surrounded by a fence, in order to provide privacy. The walls of the
dwelling are constructed from date-palm branches tied carefully together, supported with branch mats. In addition to these building materials, people also used stone and mud in the construction of their homes (Kay and Zandi, 1991). However, rich people, such as members of the ruling families and merchants, built their houses with coral stone, mud bricks and imported mangrove wood, as shown in Figure (5.5). The timber for joists and other wood used for doors and windows was imported from Iran, South East Africa and India. With regards to the houses of those rich individuals, Kanoo (1971) notes that the load bearing wall was the most common construction technique: walls were built of coral stone and mud bricks. The mangrove pole was the most common wood used in roofing: date-palm branches were put into position and then a mixture of lime-mud and small stone was laid, 20 centimetres deep, above the matting.

Towards the end of the 1950s, housing in the seven emirates began to witness what we may refer to as a transitional period of change. At the time, although oil revenues were small, they still affected local governments and people alike and opened the
doors for change, in terms of building regulations and materials. Thus, local governments began to establish institutions to regulate town planning and building development; they also established local housing institutions and appointed foreign consultants to escalate planning and building regulations and standards and ran the newly established departments, as the locals lacked the necessary qualifications and skills. Architects and engineers recruited from Europe, Egypt, Sudan and Jordan were responsible for planning and constructing towns and local municipalities (Hawlay, 1970) and improvements in economic conditions also enabled the introduction of new building materials and new building techniques. Building materials such as cement, steel bars, glass, paint and wood began to enter the building market and these novel materials began to replace the traditional building materials in industry (Abdul Jallel, 1987).

Foreign consultants and experts simply transferred many of the building regulations and standards that prevailed in their countries of origin to the newly established departments. The influx of foreign engineers and architects also helped to introduce new construction methods, such as the use of reinforced concrete, and new types of residential building, such as villas and multi-storey apartments, began to appear in the country (Al Mansoory, 1997).

As the economy expanded and with the availability of the new building materials and foreign experience, wealthy people began to build new, western-style villas, which replaced the traditional coral and mud houses. Furthermore, private investors began to build multi-storey apartments, in order to accommodate the foreign labourers who arrived in the country from different parts of the world, and this new wealth made it possible for the majority of the country’s nationals to improve their
living and housing conditions. Eventually, citizens were able to replace all the old date-palm branch rooms with rooms built of cement-sand blocks, see Fig (5.6).

Fig (5.6) Architecture is developed During the UAE’s Union Era.
5.3.2. Housing in the Post Oil Era

In the 70s, the tremendous growth in oil revenue and the establishment of the UAE meant that the housing sector began to witness quantitative and qualitative developments. For many years after, the government continued to expand its housing programmes, in order to accommodate both UAE and foreign nationals. In the following section, there will be a focus on government housing for Emirati nationals and housing for foreign expatriates.

- The 70s
  During this decade, immediately after the declaration of the union in December 1971, the government began to expand its housing programmes, see Figure (5.7). At a local level, each emirate established its own housing programmes to serve the needs of the locals and departments were assigned the duty of financing and designing houses for people on low or limited incomes. Private construction firms began to build houses, under the supervision of the government department or private consultants’ office, and

Fig (5.7) Housing of the 70s , Ajman.
electricity, water and road services were also provided free of charge, by local governments, to those houses (Al-Mansoori, 1997).

The 80s and the 90s

During this period, local authorities in the two emirates of Dubai and Abu Dhabi established housing programmes to serve income groups other than those on low or limited incomes, with regards to UAE nationals. By the early eighties, the Dubai local government had already established National Housing Programmes, which provided free funds of AED 200,000, together with serviced land. Furthermore, the governments of the two emirates introduced interest-free housing loan programmes for UAE nationals in 1990 and 1993. They also provided local people who could afford to build their own homes with free serviced land, together with electricity, water, road and sewerage services free of charge or for a symbolic fee (Al Sayid, 1988; Dubai municipality, 2008; Ministry of PW&H, 1995). With regards to the non-oil Emirates of the north, the provision of housing, electricity and water remained totally dependent on the federal institutions, as these emirates lacked the financial resources to provide such services for their nationals. The Federal Ministry of Public Works and Housing (PW&H) took full responsibility for building low-cost housing in these emirates. Electricity and water services were provided by the Federal Ministry of Electricity and Water and local authorities began providing land for those who were able to build their own houses. In general, land was provided free for any UAE subject (Ministry of PW&H, 1995) (see Fig 5.8).
5.3.3 Housing for Foreign Expatriates
As stated above, the numbers of foreign expatriates required to carry out
development projects have increased over the years, to the extent that Emirati
citizens have become a small minority. This situation forced the government to
intervene and implement policies and regulations to accommodate those foreigners
and thus it came up with a diverse set of plans and programmes. It should be noted
that government institutions introduced furnished accommodation or housing
allowances for non-citizen employees and highly paid non-citizens are usually
presented with villas or luxury flats (the occupancy rate for such employees stand at
1.7 person per room).
However, some low-paid and manual labourers occupy old Arab houses in the old districts of the main cities; while some live in labour camps built by their employers and others live in squatter settlements built by themselves on government land, as many employers do not provide workers with housing (Wasfi, 1981) (see Fig 5.9).

Generally speaking, UAE housing institutions have not addressed housing for the lower paid non-citizen. Part of the problem is that the government bodies lacked essential data, in terms of the non-citizen. According to government reports, it is difficult for the government to set up clear housing policies for the non-citizen population without knowing their number, nationality, whether they are coming with their families, their income, how long they intend to stay and who will replace them when they leave (Al-Mansoori, 1997).

Fig (5.9) Residential Buildings of Expatriates Workers, Dubai.
5.3.4 Building Materials and Labour
The traditional free enterprise environment in the UAE and the economic expansion, combined with large scale government investment in building the country’s infrastructure and social services, have encouraged both the private sector and individuals to become involved in the construction industry, in various ways. In general, the government’s investment in the industry aims to provide the basic needs for new development and to establish local industries that can participate, along with the oil industry, in the national economy (Al-Feal, 1978).

During the early years of the housing development programmes, the majority of building materials had to be imported, as the country lacked the materials required for modern building (BRE, 1977). Thus, along with the establishment of government housing programmes, both local and federal governments also set up policies and regulations that encouraged the establishment of local building material industries. In 1974, the Federal Government established the Emirates Industrial Bank, which aimed to provide loans to the private sector and thus encourage the establishment of local industry (Al-Feal, 1978) (see Fig 5.10).

![Fig (5.10) Building Materials in the Post Oil Era, Ajman.](image-url)
In addition to financial support, local governments also provided free land or charged a nominal fee for private sector investment in the building industry. All imported machines, spare parts and raw materials for local factories are exempt from customs duty and local products are given priority in government purchasing (Al-Ghorfa Magazine, 1996). According to reports published by the building industry, the country does not suffer from any shortage in building materials, as there are more than 8 cement factories providing ceramic tiles and sanitary products, 18 paint factories and one large aluminium factory.

5.4. Housing Programmes in the UAE

The housing strategy in the UAE is based on the principle of securing suitable and decent accommodation for citizens and guest residents alike. In addition to the housing units, the housing strategy also ensures that the necessary infrastructure and basic social services, such as transport, communication and health and education facilities, are also provided. The discussion below will focus on the various housing programmes in the country and the types of services offered. These can be divided into three broad categories: the free, ready-made housing units for groups of low-income citizens, the financial grants offered to citizens with plots of land suitable for building private accommodation for themselves and their families (such grants are also available for nationals who wish to expand their existing living area) and, finally, the long term (up to 25 years), almost interest-free loans offered to citizens with the financial capability to repay them.

Although there are seven different governments for the seven emirates, they all agree on a unified housing policy financed and supported by the federal government and oil emirates. Below is a brief discussion of the various housing programmes that have been implemented in the country since it was declared an independent state in 1971. Such programmes fall into two types: federal housing programmes in non-oil
emirates (Ajman, Ras Al Khaymah, Al Fujairah and Umm Al Qaiwain) and local housing initiatives in the oil-rich emirates (Abu Dhabi, Dubai and Sharjah).

5.4.1. Federal Housing Programmes
The federal government is constitutionally responsible for housing in all the emirates that constitute the union. Translated at the simplest level, this means that the major beneficiaries of federal housing are the four non-oil emirates mentioned above. This is because such emirates are too poor to initiate housing programmes of their own. Compared to citizens in other parts of the country, locals in these emirates are relatively poorer and they are either offered already completed housing units or financial grants. With regards to grants, it is worth noting that construction material costs vary considerably from one emirate to another. For example, whereas a square foot may cost up to AED 350 in Abu Dhabi, costs stand at only AED 180 in Ajman. Hence, citizens in Abu Dhabi are entitled to an AED 2,000,000 loan, those in Dubai are entitled to an AED 750,000 loan and residents in the non-oil emirates are entitled to loans or grants of AED 500,000. According to statistics published by the Ministry of Public Works and Housing (2000), the government distributed only 200 housing units in Dubai and Abu Dhabi for the period between 1973 and 1998, compared to 2,223 units in Fujairah and 2,475 units in Ras Al Khaima.

5.4.1.1 Governmental Housing Units
These are hastily constructed housing units that are provided with basic facilities and are allocated to nomads or dwellers of mud or palm tree houses free of charge. The housing unit is usually constructed of bricks and concrete and consists of one or two storeys.

In designing the free housing units provided by the government, certain guidelines must be followed. First, in the realisation of cultural norms, the unit should consist of three separate areas: one for the family, where high levels of privacy are
maintained, one area for guests and another area for services. Units also feature a garage, a storage area and a room for the housemaid (usually close to the kitchen).

The prospect of future expansion should also be taken into consideration.

Between 1973 and 1998, the Ministry of Public Works (which is responsible for housing) distributed nearly 8,000 houses (mainly in the northern non-oil emirates) (see figure below).

![Numbers of Houses in Each Emirate](image)

**Fig (5.11)** Number of Housing Units in each emirate, 1973–1998, (Ministry of Public Work, 2000).

5.4.1.2. Financial Grants Programmes

The federal government has always sought to meet housing needs throughout the country and assistance provided by the authorities includes maintenance, the
construction of an annexe, if needed, improving citizens’ quality of life and preserving a healthy environment. On average, financial grants are between AED 80,000 and AED 160,000 and, between 1976-1998, the total number of grants awarded was 9,319 (see fig below).

5.4.1.3 Sheikh Zayed Housing Programme (SZHP)

Since it was established in 1999, the programme has become the major provider of public housing assistance through the federal government. According to its regulatory rules, the programme offers non-refundable AED 500,000 grants to citizens on low incomes (less than AED 10,000 a month) and long-term and easy-repayable loans of up to AED 500,000 to those with a monthly income exceeding 10,000. In the eight-year period between 2000 and 2008, the programme provided over 18,000 homes (see fig below).
Fig (5.13) The Statistics of SZHP, (Escan, 2008).

### 5.4.2. Local Governments

Local governments strive to solve housing problems through: a) providing local families with free plots of land, intended for constructing residential houses and b) offering land, grants or loans to citizens who intend to build independent houses. Below are some of the local housing programmes in Abu Dhabi, Dubai and Sharjah.

- **Abu Dhabi**

  Housing services provided by the local governments cover a wide geographical area, encompassing the capital, Abu Dhabi, Al Ain and the adjacent western area. In 1990, the government established the ‘Private Housing Loans Association’, which aims to provide loans to build houses on plots of land owned by applicants or to maintain or improve an existing house. The association also offers loans of up to one million Dirham to citizens who intend to build their own houses (recently due to the rising cost of building materials, the loan was adjusted to AED 2,000,000).
Here, the ‘Private Housing Fund’ offers loans to citizens to build a private house (500,000 AED), to buy a house (also AED 500,000) or to improve and maintain an already existing home (up to AED 300,000). Between 1993 and 2006, over 3,000 houses were financed by the fund; see Figure (5.14) and (5.15).

<table>
<thead>
<tr>
<th>Presidential Private Department</th>
<th>1602</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abu Dhabi Municipality</td>
<td>5098</td>
</tr>
<tr>
<td>Al Ain Municipality</td>
<td>15601</td>
</tr>
<tr>
<td>Department of Public Work</td>
<td>2194</td>
</tr>
<tr>
<td>Total</td>
<td>24496</td>
</tr>
</tbody>
</table>

Table (5.1) The Government all Housing Units in Abu Dhabi, (Ministry of Public Work, 2000).

Fig (5.14) Governmental Housing Project in Dubai, (MRHE, 2009).
Sharjah

The Sharjah government provides the following housing assistance services: a) free plots of land equipped with utilities and public services and b) a AED 200,000 housing grant to every citizen (2,000 citizens have already benefited from this service). So far, the local government has built over 8,200 housing units (see figure below).

![Model of Residential Unit in Dubai](image)

**Fig (5.15) Model of Residential Unit in Dubai, (MRHE, 2009).**

<table>
<thead>
<tr>
<th>Number of houses in various regions of Sharjah</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shrijah city</td>
</tr>
<tr>
<td>Number of houses</td>
</tr>
</tbody>
</table>

**Fig (5.16) Statistics of Housing Units in Sharjah, (MPW, 2000)**
Chapter Six: Methodology Considerations

6.1 Introduction
Chapter six attempts to build up a picture of UAE’s government sponsored public housing, initiatives and policies. The aim is to establish the direction architecture has taken over the years and infer the connection between globalisation and the changing physical conditions. In Chapter three, insights gained from leading theorists on the two-way relationship between architecture and globalisation has, undoubtedly, enabled us to start asking the right questions and view the case under investigation from a new angle. However, on its own, the information obtained so far is less than sufficient in enabling us to draw a clear picture of the issues under consideration. More than anything, factual information is required, from real stakeholders (i.e., decision makers, designers and ordinary citizens). This chapter is concerned with those individuals and the means of obtaining the information they hold.

6.2 Data Collection Instruments
In social sciences in particular, a distinction is often made between the two major types of research: quantitative and qualitative. According to Punch (2004), this distinction covers approaches to conceptualising social reality and the design methods of data collection. Furthermore, Punch states that, whereas quantitative research is relatively homogeneous, in its way of thinking, qualitative research is relatively heterogeneous. Also, whereas sample size in the former is large, it is small is the latter and, although quantitative research tends to employ the analysis of statistical data, there are usually no grounds for this form of analysis in qualitative research (Goodwin and Goodwin, 1999). However, the marked differences between the two types do not necessarily mean that they operate in isolation. Rather, it is
often argued that, by employing both types of research, researchers can gain more reliable outcomes (Myers and Haase, 1999).

Evidently, the various data collection methods (questionnaires and interviews) are consistent with the qualitative approach. As this study employs both these types of data collection, we will consider the views of leading theorists, with regards to the data collection methods, in order to ensure that sound research principles are implemented in our investigation.

### 6.2.1 Questionnaires

The questionnaire is often regarded as a powerful tool in the collection of information about the characteristics, attitudes and behaviour of the study population (Cohen and Minion, 1994). Oppenheim (1992) identifies three types of questionnaire: postal, which are usually delivered by mail, self-administrated, which are usually presented by the researcher or by someone in an official position, and group-administrated, which are given to groups of individuals assembled together (for example, school children). One further type of questionnaire is often mentioned in the literature and this is the Internet survey. Generally speaking, self-administered and postal questionnaires are the most reliable questionnaires (McLafferty, 2003).

Questionnaires are usually difficult to design and they take a considerable amount of time to create. However, there are general guidelines for developing reliable and effective questionnaires and these must be strictly observed. Although questionnaires should not be too simplistic, the researcher must make sure that the questions are clear and of relevance to the respondent and the issue under investigation. Certain types of questions should be avoided, including ‘double barrelled’ (whereby two questions are asked in one) and ‘leading’ questions (which require the respondent to agree or disagree with a statement made by the researcher).

In order to ensure an acceptable response rate, questionnaires should be
accompanied by a covering letter, explaining the aims and importance of the research. Confidentiality should be also maintained. Questionnaires should be piloted (tested on a small group of people) beforehand, and, finally, if questionnaires are required to be translated from one language to another, this should be done by professionals, as extra care has to be taken (Bell, 1999; Oppenheim, 1999; Simmens, 1992; Verma and Malliek, 1999).

6.2.2. Interviews
As stated above, interviews are considered an important tool in the collection of data. Bell (1999) observes that, as interviews require face-to-face interaction, it is possible for the researcher to pick up and respond to changes in the interviewee’s facial expressions, tone of voice and body language. As such, interviews are a useful source of information about a respondent’s motive and feelings. However, interviews are time-consuming and wording questions and analysing the subsequent data can be demanding. Also, because interviews are subjective, bias becomes a possibility. Borg (1981) identifies two main factors that may contribute to bias: the eagerness of respondents to please the interviewer and the tendency of the interviewer to seek answers that support their preconceived notions. To reduce bias, Bell (1999) suggests that, if the interviewer holds strong views about the topic to be investigated, they should be very careful with the way questions are worded.

Oppenheim (1999) distinguishes between two broad types of interview, with quite different purposes: ‘exploratory’ interviews and ‘depth or free-style’ interviews. The former is designed to gather facts, while the latter is conducted to develop ideas and research hypotheses. Other writers prefer to use ‘structured’ or ‘standardised’ interviews or ‘unstructured’ interviews. A third type of interview, the ‘semi-structured/standardised’ interview is also common. The three types of interview
present differences, in terms of the manner and extent to which interviewees and the interviewer are involved in the process of interaction.

Structured interviews operate in a structured or formal way: this type of interview requires that specific aims are prepared in advance, so that a set of well-structured questions are formulated. The wording of such questions and the order in which they are presented is the same from one interviewer to the other (Fielding and Thomas, 2003). The advantage of this type of interview is that it allows the interviewer control over the type of information considered valuable. Unlike structured interviews, unstructured interviews are usually based on a less formal relationship between the interviewer and the respondent. The interviewer has no strict rules to follow or fixed questions to ask; they simply have a list of topics that must be considered, in terms of respondents. Although the data obtained through this type of interview is difficult to analyse, it still remains a valuable tool for the gathering of rich information. With regards to semi-structured interviews, these give the researcher the freedom to alter the sequence of questions and to obtain richer data than that obtained through structured interviews (Fielding and Thomas, 2003).

When preparing interviews, it is important that certain guidelines are observed. As a starting point, the researcher must explore the existing literature and any previous studies carried out on the subject: this provides a framework for developing the research instrument and questions. The next step is to determine the shape of the document that will guide questioning (Simmons, 2003). Once the type of questions and interview are determined, the next step is to conduct a pilot study on a small group of people. After piloting and making the necessary changes to the original document, people selected for the interview are contacted and interviews are arranged, at a time and place to suit respondents.
Furthermore, an official letter explaining the purpose of the research should be included and interviewees are shown protocol documents. Before conducting interviews, the researcher must introduce himself, state how long the interview will take and, if necessary, ensure that the interviewees’ responses are recorded (with permission) or transcribed.

### 6.2.3 Sampling

Questionnaire surveys in particular are concerned with large populations; as Oppenheim states: ‘this is the category of concern’ (1992: p.38). However, due to considerations of time and cost, it becomes very difficult and unrealistic to involve the entire population in any research and, consequently, a subset of the population under investigation should be selected. Cohen and Minion (1994) urge researchers to make every effort to ensure that the selected sample is a true representation of the study population. In their opinion, the sample should contain subjects with characteristics similar to the population as a whole (for example, in terms of age, culture, and social and educational background). With regards to the sample size, it is often suggested that large samples yield more reliable data and generate able results Oppenheim (1999). It is generally accepted that the size of a sample depends on the nature of the study and its purpose and timing, in addition to the nature of the target population. For instance, there is no point in a sample if the size of the target population is too small (say, two individuals) and the entire population is surveyed. However, the larger the population size, the smaller the percentage of the population required for the sample will be (Leedy, 1997).

In drawing samples, researchers choose from a variety of sampling methods and these falls into two broad categories: probability sampling methods and non-probability sampling methods. With probability sampling, every individual element in the population is chosen at random and, in using this technique, the findings may
be generalised (Arber, 2003). In contrast, with regards to non-probability sampling, the chances of the selection of each member in the population is unknown and thus findings cannot be generalised (Bell, 1999).

6.2.4 Validity and Reliability
No matter what procedure a researcher employs in the collection of data, it should be assessed, in order to ensure that it is valid and reliable. Validity refers to the ability of the instrument to measure what it is designed to measure and it is noted that both internal validity and external validity should be maintained. The first is reflected in the ability of a research to sustain the advertised causal relationship and the second modules content and constructs validity. The former refers to the measurement of items in the instruments (which, in our study, are the questionnaire and the interview) and the latter is the approximate truth of the conclusion that the perception of the instrument can be translated into reality (Bell, 1999; Verma and Mallick, 1999; Arber, 2003).

Reliability refers to the repeatability or consistency of what is measured by the research instrument and what it has been designed to measure. In other words, a reliable instrument is one that gives the same results when used on different occasions. Bell (1999) notes that researchers should ensure the reliability and validity of their research instrument and procedures in the early stages of their research. Having established the methodological principles that guide sound research, we now turn to our study to examine (in brief) how our research was designed and conducted.

6.3 The Design and Conduct of the Present Study
What has been stated above leads us to one simple fact: the purpose of research determines the shape and design of the investigation. In realisation of this principle, the present study begins by identifying the research problem (see Chapter One). It is
fair to say that globalisation has influenced architecture and urban design policies, in terms of size, materials, design and construction, and, in many parts of the world, the impact of globalisation has been uncertainty. This led to our first question, which is: ‘what is the extent of the positive or negative impact of globalisation in general and, particularly, in terms of architecture?’ To answer this question, the relevant literature was consulted (see Chapter Two) and the views of leading theorists have been explored. In terms of this, it is worth mentioning the landmark work *The Endless City* (edited by Burdett and Sudjic, 2007): this has been of great value in the present research because there is not much material in Arabic that discusses globalisation. However, in his capacity as the executive manager of the Sheikh Zayed Housing Programme, the researcher has sufficient information about public sector housing in the country, in terms of design and users. He also has access to policy and decision making. Guided by insights gained from western researchers, the present writer should, in no doubt, be able to build a general picture as to how, when, where and why globalisation has negatively impacted on the culture of housing. However, to establish a true picture, more information is required from all residential stakeholders and this is where the study population come in.

### 6.3.1 Study Population

The population of this study are occupants housing programmes of public sector within the UAE since the year 2000; also included are housing unit applicants. Both groups will be referred to as ‘end users’ or ‘customers’. All directors of Housing Programmes, as well as the planners and designers are also included and these will be referred to as ‘service providers’ or ‘decision makers’. All members of the target population are UAE Nationals (with the exception of some designers).
6.3.2 Data Collection Instruments
A sample that truly represents the study population is undoubtedly a prerequisite of effective research. However, this does not necessarily mean that a research will achieve its objectives. Rather, as stated above, the validity and reliability of any research depends almost entirely on the way information is gathered and the ability of the instrument to measure what the research intends to measure. This brings us back to the aim of our study, which is polarised around the impact of globalisation on the design and construction of housing units provided by the government. Obviously, the impact of globalisation on the environment, local culture and way of life will be also investigated. It follows that different stakeholders hold different information, in terms of the quality and quantity of homes; for example, we expect the group of service providers to give in-depth information about a wide range of issues, including housing policies, construction design, customers’ needs, suitability of housing units, in terms of the local environment and culture and any obstacles decision and policy makers face. Given the quality of information these individuals hold and the positions they occupy, unstructured and semi-structured interviews will be conducted with them. Meanwhile, the customer group will be presented with questionnaires, in order to obtain information pertaining to customers’ needs and aspirations, respondent’s views on the impact of globalisation and the suitability of houses, in terms of their culture and needs. When constructing and administering the questionnaires and interviews, the guidelines outlined above will be applied.
Chapter Seven: Field Work

7.1 Introduction
This chapter aims to investigate the relationship between globalisation and architectural behaviour, in order to gain an understanding of human needs in architecture. This empirical study focuses on the residents of different types of houses. It studies the traditional house, implanted before the impact of globalisation, and the modern house, which was influenced by the phenomenon of globalisation. Furthermore, this research will be investigated through the focus groups.

7.2 Case Study- Housing and Landlords
Housing was chosen as a case study, in terms of the aspects of the built environment, which incorporates industrial, commercial, entertainment and governmental buildings. This aspect was chosen of the built environment for several reasons:

Firstly, residential buildings accounted for the majority of buildings in the region (UAE) 30 years ago. Other aspects were limited in some buildings, such as government complexes or commercial complexes (i.e., the traditional mall). Thus, in terms of residential buildings, a comparison and the study of specification, both past and present, is easily achieved.

Secondly, the relationship between people and residential buildings is stronger than any other type of building. As government, industrial and commercial buildings are based on opening times, there is limited use of such buildings; however, the residential building offers unlimited use and, as a result, human needs are readily apparent.
Thirdly, residential buildings are used by local residents and thus reflect their culture. However, the majority of such residents do not use the other types of buildings; thus, these reflect multicultural facets.

The beginning of this study will specify the groups to be investigated and which aspects of their life will be focused upon; i.e., houses and urban planning. Thus, the samples contain users of two types of house: the globalised house and the non-globalised house. The research is further divided into three fields:

1- Social relationships and human needs
2- Infrastructure and facilities
3- Architecture and urbanisation

7.2.1 The Pilot Studies
In this study, the questionnaire and interview samples are divided into four categories, which are users, designers, decision makers and experts. The pilot studies took place in the Sheikh Zayed Housing Programme (SZHP); this is the main source of data, as the researcher is a working manager in this authority (considered the largest federal housing programme in the country). The differences between two eras (globalised and non-globalised) became clearer with the discovery of files for each era: these files contained much information, such as the dates when buildings were erected, the type of design and other essential information.

The pilot survey reflected many diverse views. Many households considered the transition from traditional to modern as an obligation and essential development, although they preferred many elements of traditional housing, such as the strong relationship between neighbours.
7.2.2 Case Study
This case study (landlords) features an example of the impact of globalisation on architecture in the UAE; the relationship between globalisation and architecture is based on many aspects of the built environment, such as commercial, industrial and governmental factors. Thus, this focus group reflects the impact of globalisation on the many factors of architecture, as mentioned in the focus group section. This section focuses on the selection criteria, as follows:
The participants in this study consist of users, designers, decision makers and experts and the connection between all these groups is the case study (landlords), due to the fact that the survey questions and the interviews are based on houses and urban planning. However, this study aims to differentiate between the samples of the two eras (globalised and non-globalised), in order to highlight the features and specifications of each era and measure the impact of architecture and urban planning on the relationships between householder in the same neighbourhood.

7.3 Classification of Case Study
There are many factors in distinguishing between the two periods (the period before the appearance of globalisation in the United Arab Emirates and the period after the appearance of globalisation). Although we cannot locate any specific factors, in terms of differentiating between traditional and modern architecture, localisation and globalisation, there are some factors that give us indication of this, thus allowing us to create a picture in differentiating between the two groups.

7.3.1 Building Materials
During the era of globalisation, places became closer than ever before, and thus there was a worldwide unification of building materials (although the needs in each community differed). Building materials were an integral part of the new situation of globalisation and, as a result, the same buildings can be seen throughout global cities
and are not distinguishable, despite the fact that there are big differences between communities and cultures.

As a result, we may differentiate between the two eras through the type of building materials used. In terms of non-globalised buildings, the main building materials were reinforced concrete, cement and paint. Globalised buildings were constructed from metal, cast aluminium, marble and tiles.

7.3.2 Design of Houses
There is a big difference between the design of houses before and after the impact of globalisation, so we divided this empirical study into two categories: globalised and non-globalised houses. While the modern design dominates the new built environment of the era of globalisation, the majority of houses erected before the globalisation era were of a traditional design.

As a result, the main issue is the relationship between design and culture and human needs; i.e., if the design of a house is competent, human needs are met through many factors, such as function, privacy and weather requirements. Modern buildings are tailored to their environment; for example, the use of glass in facades is suited to cold environments, as it helps the building to become warmer when the sun shines. However, in hot zones, the use of glass in facades would increase the temperature in buildings and air conditioning would be required, to make the building cooler.

7.3.3 Urban Planning and Design
This is the main factor, in terms of the two eras, because the form of neighbourhoods and cities changed dramatically during this period. While traditional urban planning was based on local needs, such as culture and the weather, the modern urban design is based on global standards and codes, such as the size of vehicles.
Economic globalisation sought to unify the shape of cities and neighbourhoods for economic purposes, such as the marketing of goods (because there are standards and all communities use the same goods). Meanwhile, this type of urban planning, in terms of economic considerations, has led to an increase in vehicle space and a decrease in human space, such as playgrounds and pedestrian walkways.

7.4 Considerations for Samples
There are many considerations that specify and clarify the case study, as the previous factors were inadequate for the gathering of realistic data. These considerations are divided into four sectors: age of building, location and use of land, the type of residents and the type of unit.

7.4.1 The Age of Buildings
As the phenomenon of globalisation is largely based on time and period; for example, the Arabian Peninsula was unaware of the global flows up until the second Gulf war. As a result, global goods, materials, ideas and lifestyles were implemented in the UAE from the 1990s. Thus, the main guidelines in this sector are:

A. Houses that were built before 1990 were not globalised

B. Many houses built during this period (1990-2000) were not globalised

C. Usually, houses built after 2000 are globalised

As a result of this division, this case study focuses on two periods: before 1990 and after 2000. The study did not select the years between these periods, as the character of this period is unclear.
7.4.2 Location of the Case Study:
This consideration is important in distinguishing between the impact of globalisation and other impacts. As already ascertained, the land is divided into four uses: industrial, commercial, governmental and residential, for many reasons, such as pollution, security and crime. For example, industrial land houses many labourers, so it is unwise to situate such land near a school or other residential areas.

As a result, this case study focuses on residential land. However, many units are mixed, with commercial and residential units sharing the same land.

A. The case study for the non-globalised sample was taken from a residential complex, see figure below.

Fig (7.1) Layout for the non-globalised complex.
B. The case study for the globalised sample is comprised of residential areas and residential buildings only.

With regards to this, we note the following:

1- The size of plot or land is different for both samples. The size of a plot in the sample of non-globalised houses did not exceed more than 600 m$^2$, while the minimum plot in the sample of globalised areas (the one difference is the type of built) was 1000 m$^2$ (and reached up to 10,000 m$^2$ in some plots).

![Fig (7.2) The Differences between Size of Plot in Globalised and Non-Globalised Areas.](image)
2- The size of built area has increased from a maximum of 250 m² in terms of the non-globalised group, to a minimum of 500 m² in the globalised group. However, family members were lower in this group, according to the last statistic.

7.4.3 Type of the Users
The UAE has more than two hundred nationalities and the majority of the population are expatriates. Thus, this guideline, in terms of the case study, is applied to Emiratis only, for many reasons. The main reason for this is culture, as discussed in the questionnaire and interviews. As the UAE has many inhabitants from multicultural communities, the case study focuses on those citizens who have one culture and religion. Also, the human needs of citizens are different to those of immigrants, as the majority of foreigners do not have a permanent immigration status. Thus, their housing needs are very different from those citizens who have always lived in the UAE.

7.4.4 Type of the Unit
The residential units are divided into two types: detached houses and apartment buildings. As this study contains two groups (globalised and non-globalised units), the apartments have been specified as globalised units. The detached house, however, existed in both eras and many citizens prefer such houses to apartments.

7.5 Globalised and Non-Globalised Groups
These previous factors represent two groups: those households that live in globalised houses and those who live in non-globalised houses.

7.5.1 Globalised Group
This group features the type of built environment that has specific features, in terms of the level of the impact of globalisation, and is divided into two categories: the detached house and the multi-storey apartment building. The criterion that is used to
distinguish this group begins with the materials used in the erection of buildings, which was considered the landmark of this era. For example, building materials have developed more over the last three decades more than they have over the last three centuries. This group is thus distinguished by many of the new modern building materials and methods, such as the curtain wall, the precast slab, glass buildings and metal buildings. Secondly, the type of design distinguishes the group, as the modern style dominates the various styles of building, anywhere and at anytime. Modern design has ignored social and environmental considerations; indeed, it has sought to apply the global and international concepts of modern architecture in various communities. For example, weather considerations have been ignored, meaning the same building designs are applied in cold and hot climates, without any differences. Also, the privacy of each culture does not apply to modern buildings; thus, buildings in Europe (which do not require a high level of privacy) and in the UAE (which do require a high level of privacy) are the same, in terms of design and function. Finally, urban design has changed the face of cities, as it plays a large role in the supporting of modern facilities, such as cars, buses and other methods of transportation. As a result, modern urban design has approved the transportation system as a base of planning instead of the people.

7.5.2 Non-Globalised Group
This group is dedicated to the non-globalised built environment, using the same criteria as in the previous group (building materials, type of design and urban design). In focusing on building materials, there was a need to locate modest materials, including imported materials, such as glass and aluminium, and local materials, such as cement and bricks. Some of these materials may not be locally sourced, but they are still suitable, in terms of the weather and environment. The
UAE region was very poor, in terms of building materials; up to a century ago, the country imported various building materials, such as wood, from India and Africa.

The design of non-globalised houses means the vernacular house (i.e., in the Arabic design) mixes traditional design and some new building materials. However, the type of design in this group reflects human needs, such as cultural considerations (separate entrances for men and women) and environmental considerations: this design did not feature the extensive use of glass and aluminium, in order to ensure that the indoor temperature is maintained at a comfortable level. Also, the design of this house is built around a courtyard, which has two benefits: increased privacy and keeping cool the house in the hot climate.

The last factor is urban design, which is considered the main factor, in terms of the era of globalisation. The traditional urban area was based on people, with regards to the design, so the human scale dominated such an area. The movement of cars was limited, while the movement of pedestrians and children was unlimited. The last feature in this type of urban design is the narrow alleys that prevented cars from driving down them, making it easier for pedestrians to get around. This is due to two factors: a public place is more secure in the absence of cars and, secondly, the shadow on the narrow alley is offered.

7.6 The Questionnaire
This is the main research method employed and some categories cover a number of respondents, such as landlords and designers. Thus, the questionnaire was approved as the main research method, along with interviews with decision makers and experts. The questionnaire should include lists, categories, rankings, quantity, grid and scale.
While Oppenheim (1992) identifies three types of questionnaires (Mail, self-administrated and group-administrated), this survey didn’t use the first type (Mail and E-mail), for many reasons, such as the level of education for the landlords and any weaknesses in connectivity, in terms of mail or E-mail questionnaires. However, this study approved the self-administration questionnaire for the globalised houses sample, as these are located in various places and feature a mix of detached houses and apartments. The non-globalised houses, which are located in two residential complexes, completed group-administrated questionnaires, as these houses were in a specific place and thus it was easy for residents to get together (at their children’s school).

In terms of the last questionnaire sample, distributed to designers, the self-administrated method was employed. In the research office at SZHP, there is a constant stream of designers and architects throughout the year. Thus, the best survey method was the self-administrated questionnaire.

7.6.1 Questionnaire Design and Structure
In this phase, there are guidelines in designing the perfect questionnaire; in order to ensure that surveys do not need to be returned to respondents and in terms of understanding and specifying the main response. The main aim is that the questions should be closed, in order to prevent repetition in responses.

As a result, in designing our questionnaire, we divided it into two parts: the first concerned landlords, while the second was for house designers. The first questionnaire for households (users) was divided into three main components:

- General information, such as age, gender, etc.
- Relationships between neighbours.
- Human needs, in terms of accommodation and neighbourhood
The second questionnaire, which focuses on the designers and consultant offices, is divided into three main components:

- The resource of the design.
- The type and style of design
- The size of house and plot.

Both questionnaires were distributed on the first of August 2010 and the numbers of respondents are outlined in the table below:

<table>
<thead>
<tr>
<th>Part of questionnaire</th>
<th>Distributed</th>
<th>No. of responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users (Globalised houses)</td>
<td>55</td>
<td>43</td>
<td>78.1%</td>
</tr>
<tr>
<td>Non globalised houses</td>
<td>55</td>
<td>40</td>
<td>72.7%</td>
</tr>
<tr>
<td>Designers</td>
<td>20</td>
<td>10</td>
<td>50%</td>
</tr>
</tbody>
</table>

Table (7.1) Number of Distributed Questionnaires and Respondents

When the questionnaires were completed, the feedback reflected a high level of participation in all types of questionnaire; however, users were more responsive than the designers. Overall, the questionnaire, which was distributed in the second half of 2010, produced results that were clear and beneficial. These responses are presented in the following chapter.

### 7.7 Interviews

While the interview is the same as the questionnaire, in terms of preparing questions, the main difference between the two is that interviews focus on qualitative data. Thus, in this study, we chose to conduct interviews for the leading categories that reflected formal and informal opinions. The first category involves decision makers in various authorities, such as housing programmes and
municipalities, while informal opinion refers to experts in various disciplines, such as infrastructure and planning, in terms of social and political aspects.

In terms of this work, the survey incorporated some of the main decision makers in the UAE, such as:

- The Sheikh Zayed Housing Programme
- The Mohammed Bin Rashed Housing Establishment
- The Municipality of Ajman
- The Municipality of Dubai
- The Ministry of Public Work.

In terms of experts, we have incorporated a number of experts in various disciplines, such as:

- Infrastructure
- Politics
- Society
- Engineering and urban planning
- Traditional architecture

**7.7.1 The Interviews Design and Structure**

Although the design of questionnaires and interviews are similar in many aspects, there are marked differences, in terms of conduct and type of questions (the latter is based on qualitative data). Because interviews require the researcher to sit face-to-face with the respondent (whether a decision maker or expert), this requires more
work prior to the actual interviews. Many of the respondents hold responsible positions, such as General Manager, in terms of decision making, and Head of School (with regards to the experts), so the interviews with these individuals require increased time and effort. For example, one expert cancelled his interview twice and changed the meeting places three times; meaning that the interview took place one month after it was first arranged.

The main questions in the interview, in terms of the decision makers, were based around the following ideas:

- The impact of globalisation on standards, codes and conditions.
- The impact of globalisation on the built environment
- The relationship between pollution and globalisation
- The impact of globalisation on various services, such as electricity, water supply and infrastructure.

The main questions for the experts’ interview were based on the following ideas:

- The relationship between globalisation and social life.
- The impact of globalisation on the economy.
- The role of globalisation, in terms of the gap between rich and poor.
- The relationship between crime and low-cost labour.

7.8 Summary of the Fieldwork
This chapter presented the methods that were used to collect the data from the stakeholders, who were divided into four categories for the purpose of the study (users, designers, decision makers and experts). Then the focus was on the methods
of conducting research in each group, which differed in accordance with their position. This was beneficial to the research findings, which are presented and analysed in the next chapter.
Chapter Eight: Results, Analysis and Discussion

8.1 Introduction
This chapter consists of three main parts: results, analysis and discussion. The findings were considered in conjunction with a comparison of the theoretical and empirical studies and the first part of the chapter outlines the research findings, with two methods employed in the collection of data (i.e. questionnaires and interviews). The results are then presented and compared, with special attention paid to any factors with a strong connection between them. The second part of the chapter outlines the analysis of the results and is divided into three parts: general information, householders’ human needs and the relationships between people in the same neighbourhood. The concluding part of the chapter discusses the results and the findings, in terms of comparison and the relationship between the theoretical and empirical studies. Hence, this chapter summarises the empirical study and prepares for the general conclusions and recommendations in the next chapter.

8.2 Questionnaire
This investigated the impact of globalisation on UAE residents and the focus group was divided into two categories: the first is users; these reflect the main human needs, in accordance with their experiences. As they are living in the houses under consideration, users are well-placed to explain their needs and requirements and what is good and bad, in terms of globalisation. The second group features the designers who are responsible for planning and designing the current houses. This group is important for many reasons; i.e., some of the designers have brought ideas from their countries of origin and have attempted to apply these in the UAE (the majority of designers were not natives of the UAE). A second importance of this group is that a lot of these consultants do not submit or offer any advice to their
customers, as they wish to gain clients through design only and ignore the suitability of such designs to the culture and weather.

The next section will present the questions included in the questionnaire and shall discuss these through the findings of the survey. This is followed by a comparison of the results and a review of the literature that supports the findings.

**8.2.1 General Information in the User’s Questionnaire**

These questions focused on general information, in terms of households and the data was divided into two types: personal data, such as age, gender, occupation and level of education and other important data, such as the number of family members.

**The range of landlords’ ages**

Based on the results, there is a difference in the range of ages between the two samples: householders in the non-globalised sample are older than householders in

![The Range of Landlords' Ages](image)

**Fig (8.1) The Range of Landlord’s Ages**
the globalised sample. In the first sample, those in the age group 41-60 dominate more than half the sample (52%), while the same category in the second sample totalled only 23% of total respondents. However, the youth category (those aged between 20-40) dominated the globalised sample, with 72% of householders falling into this age group. In this same category, the percentage of householders reduced to 35% in the second sample. The differences between the two samples in the age group of more than 60 years old is as follows: 13% of respondents in the first sample fell into this category, as did 5% of the globalised sample.

The main indication of these findings is the relationship between the age of households and the phenomenon of globalisation; in this, we may refer to Chapter one, which stated that the phenomenon of globalisation has begun. There are many statements, but the closest statement to this was voiced by Robertson (1992: p.8), who stated: ‘the term globalisation was taken up in academia during the mid-1980s and its usage increased dramatically after that time’.

In terms of the research findings, it is noted that the proportion of households between the ages of 21-40 was 35% in the non-globalised homes sample, yet this percentage more than doubled, around 72%, in the globalised houses sample. Hence, there is a relationship between the age of people and their adoption of the phenomenon of globalisation, in terms of the design of houses.

As a result, the comparison between the two samples was similar to the quoted references:

- 72% of households who were born during the period of globalisation (between 1970 and 1990) lived in globalised houses. However, only 28% of respondents born before 1970 lived in globalised houses.
• 65% of households who were born before 1970 lived in non-globalised houses, while only 35% of respondents who lived in non-globalised houses were born during 1970 and 1990.

**Level of Landlords’ Education**

When comparing the level of education between the two samples (globalised and non-globalised), we noted many indications; firstly, the level of education in globalised households was, overall, higher than that of non-globalised householders. Secondly, the main level of education in the sample was secondary education (33% of the total sample), while graduates dominated the majority of the globalised sample (66% of the total sample). The percentage of householders possessing only a primary education was 28% in the non-globalised sample, but this drastically dropped to 5%, in terms of globalised householders. The latest indications, however, suggest that the percentage of householders at postgraduate level is greater in non-globalised householders.

![Level of Landlords' Education](image)

**Fig (8.2) Level of Landlord’s Education**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Non-Globalised</th>
<th>Globalised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>28</td>
<td>2</td>
</tr>
<tr>
<td>Secondary</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td>Graduate</td>
<td>22</td>
<td>68</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>
To summarise these results, there is a relationship between the level of education and the level of acceptance of globalisation. Thus, we can outline some indications:

- The majority of the globalised householders (68%) possessed a graduate degree, while the same level of education in the non-globalised sample applied to only 22% of total respondents. Thus, there is an obvious relationship between level of education and type of house.

- The design of houses is influenced by the experience of householders; for example, some respondents had studied in eastern or western countries and had applied their experiences in their homes.

- Although the non-globalised sample held a low level of education (28% for primary and 33% for secondary), it was strange that the proportion of respondents holding a postgraduate degree was higher in the non-globalised sample, rather than the globalised sample. The higher level of awareness leads to an understanding of needs, rather than simply following the new and modern trends.

Overall, degree holders (graduate and post graduate) are low in both samples; 50% of total respondents did not possess a degree and we can relate this finding to other research findings.

**Number of Family Members**

This is an important domain to study, as it highlights the size of families and the relation of this to the size of houses. According to our results, the size of families was bigger in the non-globalised sample, rather than the globalised sample. This is despite the fact that globalised houses are larger than non-globalised houses (with the exception of apartments). In terms of family members, 52 per cent of the non-
globalised sample comprised of families that featured six-ten people, while 43% of total respondents in the globalised sample had a family size of six-ten. Similarly, respondents will a family of more than ten constituted 13% of the non-globalised sample, while the percentage dropped to only 5% in the globalised homes sample. However, the category of three-five family members constituted 35% of the non-globalised sample and 42% of the globalised sample. The percentage of two or less family members was zero in the non-globalised sample, but this rose to 10% in the globalised sample. These indications emphasise that the number of family members in non-globalised houses is greater than that in globalised houses, as displayed in the table below.

![The No of Family Members](image)

**Fig (8.3) The Number of Family Members**

In this table, we can view the number of family members and thus calculate the average of each family, which is different between the two samples: in the non-
globalised group, there are 7.1 family members per home, while, in the globalised sample, the figure is 5.7 family members per home.

<table>
<thead>
<tr>
<th>Sample</th>
<th>&lt;=2</th>
<th>3-5</th>
<th>6-10</th>
<th>&gt;10+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-globalised</td>
<td>0</td>
<td>56</td>
<td>166</td>
<td>62</td>
<td>284</td>
</tr>
<tr>
<td>Globalised</td>
<td>4</td>
<td>67</td>
<td>136</td>
<td>24</td>
<td>231</td>
</tr>
</tbody>
</table>

Table (8.1) Number of Family Members

8.2.2 The Householder’s Needs

The second aspect of the users’ questionnaire focused on human needs within the home, neighbourhood and city; for example, security and sense of belonging, privacy, facilities and rate of satisfaction, in terms of issues such as pollution, noise, traffic and car accidents. Other factors were investigated, such as services that respondents considered important; i.e., shopping malls, the telecommunication system and public transportation. This was largely to differentiate between the two samples in our questionnaire (globalised and non-globalised samples).

This section is interesting, as it reflects actual needs and specifies the requirements of householders; it also clarifies the most important changes to lifestyle and the main problems faced by residents. A number of questions outlined the important things in life, such as cars and other methods of transportation. The following present the factors considered important and the main problems associated with such factors:

The necessities of life for householders

This section generally reflects the sensitivity and response of residents, with regards to everyday life, specifying which facilities are deemed important and which are not.
The graph above depicts some services that were considered important and the aim of the graph is to showcase the importance of these services. For example, the car dominates, in terms of importance to respondents. These necessities of life will be discussed here and the research findings will be compared to the literature review and empirical study, to conclude the background for each service.

**Cars**

The aim of a global city is to gather people in a specific place, in order to decrease the cost of the infrastructure and increase the cost of land. However, cars still dominate as the ‘most important’ facility in the global city, both in the region included in the study and worldwide. There are several reasons for this and the primary reason is that majority of people wish to live in detached houses and oppose multi-storey buildings: this leads to cars becoming important. The other factor is weaknesses in public transport, which is inefficient in residential districts. This
highlights the relationship between the importance of cars and the preference for detached houses.

The findings show that a quarter of respondents in the globalised sample have more than five cars in each house. Moreover, the majority of respondents have more than one car: only 5% had a single vehicle. These findings are in accordance with the theoretical study, which indicated that the number of cars per household has increased during the last three decades and ‘the free movement of cars’ was given priority over the quality of urban life’ (Knoflacher et al., 2008: p.340).

**Number of cars in each household**

The findings showed that a quarter of respondents in the globalised sample have more than five cars in each house. Moreover, the majority of respondents have more than one car: only 5% had a single vehicle. These findings are in accordance with the theoretical study, which indicated that the number of cars per household has increased during the last three decades and ‘the free movement of cars’ was given priority over the quality of urban life’ (Knoflacher et al., 2008: p.340).

**Relationship between the number of cars and family members**

We compared the two groups (globalised and non-globalised), in terms of the above, as below:
This led to the discovery of a gap between two groups, which exists in spite of the groups living in the same country at the same time. The main difference is in the type of association and the design of neighbourhoods, which reflects the level of wealth. Thus, the number of cars in the globalised group was greater than in the non-globalised groups, at one car per 2.1 persons.

### Cars and traffic

The main problem that residents in the same region reported concerned traffic, as seen in the flowing analysis below:

#### Wealth

Cars have gained increased importance, in terms of the region featured in the study, as a result of the high standard of living and the low cost of petrol, compared with Europe and America. In this aspect, we can undertake a simple comparison of the monthly income of any citizen working in the UAE and the price of cars. The salary range for new citizens in the UAE is between AED 120,000 per year and AED 420,000 per year, while the price of cars, based on type, starts from AED 40,000.

#### Weaknesses of public transport

Public transport in the UAE is weak, as it does not encompass the whole country and is not commonly used by citizens. Indeed, widespread public transport is only

<table>
<thead>
<tr>
<th>The Number</th>
<th>Non Globalised</th>
<th>Globalised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family members</td>
<td>304</td>
<td>242</td>
</tr>
<tr>
<td>Number of cars</td>
<td>75</td>
<td>119</td>
</tr>
<tr>
<td>Ratio</td>
<td>4.05</td>
<td>2.03</td>
</tr>
</tbody>
</table>

*Table (8.2) Comparison between Number of Cars and Family Members*
available in certain emirates and in the city centre of all emirates. Also, the Metro is only established in Dubai, where it was launched fairly recently in 2009. Respondents regarded the importance of public transportation as very low, with only 8% stating this factor as important. This partly explains the increase in car use throughout the country.

**Children commuting to school**

In terms of the modes of transport used to commute children to school, there were differences between the two groups. In the first group (the non-globalised group), only 13% of total respondents commuted to school by car. However, this percentage dramatically increased to 54% in the globalised sample. Thus, we can see a correlation between the impact of globalisation and the mode of transport employed. The impact of globalised architecture and urban planning and design has changed parents’ views and they either encourage or prevent their children from relying on the car to commute to school.

**Fig (8.6) Children’s Commute to School.**
Also, there is a significant indication, in comparing the two samples, that children commute to school using other modes of transport, such as cycling or walking. However, in the globalised sample, there was no indication of this: none of the respondents’ children cycled or walked to school.

**Impact of urban planning**

To discuss this situation, one needs to understand the differences between urban planning and design in non-globalised and globalised neighbourhoods.

Firstly, non-globalised urban planning and designing is complex. Around the houses are mosques, grocery stores and small shops. The area also features playgrounds for the youth and these services are connected to houses without any streets or roads.
Secondly, globalised urban planning and design is divided into two types: one concerns the detached house, which is built on a large plot of at least 1000m$^2$ and is surrounded by streets and main roads and is within the proximity of the motorway. The other sector refers to apartments in multi-storey buildings and such a building has particular drawbacks, such as limited play space for children. 

In comparing the two groups, it is noted that, in the first group, there is increased security for children, in terms of when they play outside their homes. However, there are few places for children to play in high-rise apartment building, which seems unfair; as such buildings are in isolation from the housing complexes. As a result, both children and their parents in the first group are happy to use the bus; indeed, parents have no fear in allowing their children to wait for buses. However, in
the globalised group, parents preferred to commute their children to school by car, as they were afraid of leaving their children alone outside the house.

**Servants in each house**

This question reflects the role of globalisation in underpinning worldwide migration, through the encouraging of low-cost labour. As seen in Chapter one, the International Labour Organisation (ILO) indicates that the number of migrants worldwide has risen to 120 million and continues to grow, while the global number of migrants did not exceed 75 million in 1965.

![Fig (8.9) Number of Servants in Each House](image)

Here, a comparison of the two groups (globalised and non-globalised) illustrates how globalisation has supported the increase in the rate of migration. In the non-globalised sample, around 20% of total respondents did not employ any servants in their homes, whereas, in the globalised community sample, around 12% of total respondents employed more than four Servants. A total of 53 servants were employed in the non-globalised group, while this number soared in the globalised sample (to 98 servants). This means that the number of servants is almost doubled.
between the groups, although all conditions in the groups are similar, such as period environment. As a result, the comparison of changes in the built environment has yielded a gap in the utility of house assistants.

**Comparison of family members and assistants**

In comparing family members and the number of assistants in the two groups, the following was noted:

<table>
<thead>
<tr>
<th>The Number</th>
<th>Non-Globalised group</th>
<th>Globalised group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Members</td>
<td>304</td>
<td>242</td>
</tr>
<tr>
<td>Servants</td>
<td>53</td>
<td>98</td>
</tr>
</tbody>
</table>

Table (8.3) A Comparison Between Number of Servants and Family Members.

The average number of servants in each house to the number of family members is outlined below:

<table>
<thead>
<tr>
<th></th>
<th>Non-Globalised group</th>
<th>Globalised group</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Globalised group</td>
<td>5.7 members / 1 assistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Globalised group</td>
<td>2.5 members / 1 servant</td>
<td>5.7-2.5= 3.2</td>
<td></td>
</tr>
</tbody>
</table>

Table (8.4) Number of Servants per Person

The difference in the number of family members per assistant was markedly different between the two groups, with an increase of 3.2 family members per assistant in the non-globalised group.
Telecommunication and TV

In terms of utility services (telephone, Internet, broadcasting, television and satellite), both the groups were similar, with regards to the available services. These services did not contribute to changes in physical and social life. However, many researchers indicate that these services underpin many morals and principles, such as social contact and charity, which brings people closer within a city.

![The Percentage of Utility Services](image)

**Fig (8.10) Percentage of Utility Services**

Such contact devices, however, have no impact on architectural design and the nature of cities. They do encourage development, through an increase in the control and observation of the improvement of utility.

**The main problems that householders face:**

The bar chart below highlights the main problems faced by residents in the samples and these issues are discussed in the same sequence as in the bar chart below:
Traffic

Traffic was one of the main problems for respondents in this study, as demonstrated in the bar chart above. In terms of the two samples, cars drivers experienced problems with traffic. However, the proportion of non-globalised respondents encountering such problems was higher, as the infrastructure in this group is very weak. Also, the plots of the non-globalised group are smaller than in the other group. Hence, in the globalised group, people keep their cars in garages inside their houses, while those in the non-globalised group leave their cars outside their homes.

In residential buildings, the situation is different, as finding a parking space around such buildings becomes very difficult at times. Furthermore, one car space per apartment causes problems for those residents who have more than one car.

The problem of traffic has become a significant matter of concern in modern life, due to the exceptional increase in the number of cars in the urban environment. Inefficient public transport and pedestrian crossing issues have worsened this problem.

Fig (8.11) The Important Problems Faced by Residents
**Passengers per car**

This area emphasises the research on traffic, as it reflects the role of cars in people’s lives. The results were as expected: cars dominated the lives of respondents in the study.

This question focused on the situation in the city, in terms of commuting, regardless of the neighbourhood or housing system. The results were as follows: 64 out of 80 respondents commuted alone, constituting 80% of the total sample. Six respondents travelled with one or two people, while another six travelled with three or four people. Finally, only three respondents travelled with more than four people, when commuting to work.

![Fig (8.12) Passengers per Car](image)

**Identity**

This is the second issue that people in the UAE are facing. The majority of citizens live in the suburbs or the countryside, which could be a matter of concern to them, as the UAE accommodates more than 200 nationalities. This situation probably
appears strange to the rest of the world, as the total proportion of indigenous citizens constitutes only 15% of the total population, while the number of one type of foreign national (for example, Indians) is greater than the number of UAE citizens.

The difference between the two groups is clear, in terms of the number of respondents experiencing problems with their identity. However, this problem was not confined to the globalised group and the gap between two groups is small.

This finding emphasises the research of Lewis (2002: p.2) who indicated that traditional architecture reflects cultural identity. Modern architecture, however, reflects a state’s situation and the identity of firms, and, in this, we can better understand the gap between the two groups, in terms of identity.

![Fig (8.13) The Problem of Identity](image-url)
1- Privacy

In discussing houses in conservative regions, such as the UAE, factors affecting privacy should be addressed, as these are important in the consideration of culture. The results of the research did not reflect the depth of this problem, for two reasons:

Firstly, respondents in the non-globalised group met their privacy requirements through personal efforts, such as erecting a fence or building borders or blocks without permission. In terms of the globalised group, the sizes of plots were large and thus the residents gained privacy by planting and building fences, with permission. The level of privacy in the non-globalised group was less than in the other group; however, in terms of high-rise apartments, visual privacy is good, yet sound privacy is weak. Thus, privacy in the non-globalised group is higher than in the globalised group because the proportion of householders living in apartments was low in this sample (only 12% of total respondents).
Pollution

Although we will discuss this phenomenon and the rate of pollution extensively in the following pages, the problem is summarised in the following points:

- The level of pollution in the globalised group was double the level of pollution in the first group (non-globalised).
- Logically, residents in the non-globalised group should experience more pollution than the globalised group, due to the fact that the former lacks a good infrastructure and services.

![Fig (8.15) Level of Pollution](image)

- The gap between two groups, despite them living in the same region at the same time, emphasises the fact that globalisation *does* have an impact on the environment. This issue is one of the most discussed, in terms of the globalisation era. Many conferences, summits, forums and meetings have taken place in an attempt to decrease the level of pollution in warm climates around the world.

Fourth: the main site of pollution in the globalised group and newly-developed regions was project sites, which featured building materials and tools.
• The source of pollution in high-density regions is usually down to the sewerage system. Overcrowding places pressure on the system and thus pollution occurs.

Although the non-globalised sample did not benefit from an efficient infrastructure and services, it did not experience pollution to the extent of the other sample, which benefitted from many services and a quality infrastructure. Perhaps this was attributed to their relationship with their neighbours, which was better in the non-globalised sample. This has led to greater co-operation in the neighbourhood and thus prevents any anti-social behaviour in such neighbourhoods. Travers (2007), in discussing the impact of architecture on the environment, emphasised the findings from his empirical study, stating that buildings and the infrastructure are the main source of carbon emissions. For instance, buildings in the United Kingdom are responsible for 50% per cent of carbon emissions in the country.

Other problems

Based on these results, there are big differences between the two samples. While no-one indicated any other problems in the non-globalised sample, around 13% of the globalised sample voiced other problems. The most obvious problems in the globalised sample was the broadening of services, foreign labourers in the heart of neighbourhoods and the growing employment of assistants in houses. These factors lead to an increase in other problems, such as crime committed by assistants and organised crime, etc.

Another problem that arose as a result of the size of building plots and the large size of the houses was an increasing number of assistants becoming the norm. Thus, the normal responsibilities of housewives, such as housework, were designated to
assistants, such as servants, drivers and farmers. As a result, we can relate this problem and the size of houses, in terms of two factors: the need for assistants and weak bonds between neighbours, due to houses being widely spaced in neighbourhoods.

Castillo (2008) endorses these findings through his research on organised crime in global cities (for example, Mexico City). The author states that the most significant of these other problems is fear, despite the fact that it could be argued that lack of security was more common during the mid-1990s. However, recurrent talk of fear and the actual persistence of distinct forms of organised crime and violence have had an immeasurable impact, in terms of attitudes towards the city.

**The preferred methods of shopping**

This discusses the more important activities, which influences the form of the architectural design of the city. Shopping activity reflects respondents’ preferences, in terms of the type of building that they prefer to shop in. The impact of globalisation has been very strong in the UAE and thus the shopping mall, introduced at the beginning of the 1990s, dominates the majority of shopping activity. Although other modes of shopping activity, such as grocery shopping and local shopping, existed before globalisation, the preference for the new methods of shopping is double that of traditional shopping means, as outlined in the table below:

<table>
<thead>
<tr>
<th>Shopping means</th>
<th>Non-Globalised sample</th>
<th>Globalised sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>The modern means</td>
<td>70%</td>
<td>83%</td>
</tr>
<tr>
<td>The tradition means</td>
<td>53%</td>
<td>44%</td>
</tr>
</tbody>
</table>

*Table (8.5) Shopping Preferences*
- In the non-globalised sample, 70% of respondents preferred the new means of shopping, while only 53% of the respondents preferred traditional shopping means.
- In the globalised sample, over 80% of respondents preferred the modern shopping facilities, with only 44% of respondents expressing a preference for the traditional means of shopping.

Thus, the percentage of respondents expressing a preference for the new means of shopping was higher in the globalised group. The tendency for shopping preferences was similar in both groups: there was a gap between the two groups, but this was doubled within the globalised group. While the difference in the non-globalised sample was only 18%, this rose to 37% in the globalised sample. As a result, certain social forces might appreciate an international world order at the expense of family affiliation and local and tribal loyalties. Furthermore, Al Bisher (2008) argues that globalisation may encourage the development of harmful or immoral behaviour. The author cites the demand for fast food, processed food and violent and pornographic movies as examples of this. She also adds that the abandoning of local culture and tradition is another likely outcome of globalisation.

8.2.2 Human needs, both in the home and in the neighbourhood.
This aspect is important, as it discusses the human needs of residents, in terms of their homes and neighbourhoods. Hence, it is divided into many aspects, such as problems associated with noise, privacy, security and pollution.

The shape and form of urban designing is greatly influenced by the factor of human needs. Firstly, the infrastructure of the non-globalised sample was distinguished by the closed house system and through the establishing of houses on limited land. Ultimately, this encourages the provision of more security, as houses are closely guarded by neighbours. Secondly, residential buildings, known as apartments, house
many cultures. Thirdly, houses are erected on spacious plots, reaching up to 4000 m$^2$.

**Shape 1: The Apartments in Globalised Multi-story.**

- Multi-storey buildings
- There are official guards.
- Globalised architecture

![Fig (8.16) Multi-Storey Buildings](image)

- Small area for each unit (apartment).
- Multi culture residents

**Shape 2: Detached House In globalised style.**

- Detached houses
- Large built area
- Large plot area.
- Citizen residents.
- Globalised design
Shape 3: the Detached Houses in Non-Globalised Style.
- Detached houses
- Medium built area
- Small plot area
- Citizen residents
- Non-globalised design
The rate of noise

This part focuses on the difference between the two groups (globalised and non-globalised), with regards to the intensity of noise in residential units and neighbourhoods. The increased intensity of noise in the globalised sample was noted, yet, in the non-globalised sample, not much difference was observed between the groups, for the following reasons:

- The situation of the city, in terms of high-rise buildings and the preference of cars to public transports (in both groups).

![Noise Intensity Chart]

**Fig (8.19) Noise Intensity in the Two Samples**

- The new construction also involves the two groups because, in the non-globalised sample, the destruction of traditional buildings and the building of new ones led to the same issues.
The extent of belonging

Although buildings in the globalised sample are new, the infrastructure is better and the roads are more efficient, the results indicated the respondents in the non-globalised sample felt that they belonged in their neighbourhood more than their counterparts in the globalised sample. The results are outlined below:

<table>
<thead>
<tr>
<th></th>
<th>non-globalised</th>
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Fig (8.20) Extent of Belonging to the Place

- The number of respondents that felt a strong connection to their neighbourhood in the non-globalised sample was 26 (i.e., more than 60% of respondents). This number decreased drastically to 19 respondents, or less than 50%, in the globalised sample.

- None of the respondents in the non-globalised sample had a weak sense of belonging to their neighbourhood. This number increased in the second sample (globalised) to 5 respondents, who stated that they had a very weak sense of belonging, in terms of their neighbourhood.

Thus, this question is very important, in clarifying the relationship between residents and the built environment and the results above reflect the difference between the
two samples. The globalised sample felt a weaker sense of belonging, with 20% of respondents stating the extent of their belonging as neither strong nor weak. However, none of the respondents in the non-globalised indicated a poor sense of belonging.

**Relationship between the sense of belonging to a place and friendship with neighbours**

A sense of belonging, in terms of place, is based on the relationship between neighbours and the above graph indicates a correlation between these two factors. There are many aspects of this, as outlined below:

18 per cent of residents in the globalised sample had not visited their neighbours in the last year. However, the proportion of residents that demonstrated a sense of belonging, in terms of place, was poor (only 12%). None of the respondents in the other sample indicated a poor sense of belonging.

**Fig (8.21) The Correlation between Belonging and Friendship in a Neighbourhood.**
There are differences between the two groups, in terms of the rate of belonging and neighbour relationships, accounts for the physical form of the built environment. In non–globalised areas, the size of plots does not exceed 500 m$^2$, while the size of plots in globalised areas is no less than 1300 m$^2$. Therefore, the differences in plot size affect neighbour relationships.

Here, it will be described how the size of plots may weaken relationships between neighbours. Consequently, the first case leads to a higher number of neighbours (ten, for example), whereas, in the second case, a lower number of neighbours are accommodated (i.e., four).

In the first case, if the percentage of relationships only concerns 50% of the total neighbours, each householder is friendly with at least four households. In the other case, if we apply the same percentage to the number of households in the sample, each person would only be in touch with one neighbour. These relationships reflect the range of belonging, in terms of place, and indicate whether people may feel comfortable abandoning their home.

**Correlation between number of cars and sense of belonging**

There is another factor that affects the relationship between the extent of belonging to a place and the rate of cars in a neighbourhood: this relationship is important, for many reasons:

- The overuse of cars has affected relationships in neighbourhoods. For example, if children commuted to school by bus instead of car, this would encourage parents to engage with other parents, while waiting at the bus stop.
- Increasing numbers of cars on the roads has reduced security and increased the rate of accidents in neighbourhoods. Hence, such factors have weakened security for children and have thus reduced the sense of belonging in certain places.

![Correlation between belonging and usage of car](image)

**Fig (8.22) Correlation between Usage of Cars and Sense of Belonging**

### Quality of services in the neighbourhood

This question evaluates the level of services in residential areas, in terms of both the globalised and non-globalised groups. Though there were many differences between the two groups, such as urban design and the quality of services, the results of the research did not yield any marked differences between the two samples in this respect, as shown in the figure above. Thus, here, we will focus on the advantages and disadvantages of each group; for example, in the non-globalised sample, the level of satisfaction, in terms of services, was high (50%). Twenty five percent of
respondents indicated that neighbourhood services were good, 12.5% stated they were acceptable and a further 12.5% asserted that the services in their neighbourhood were poor. The non-globalised site researched here indicated simple services, such as a local grocery store and a small playground for the youth.

The globalised location is extremely developed, in many aspects; it is organised, features high quality materials and benefits from urban planning. However, the research results indicated that residents’ levels of satisfaction were not high, in terms of such services, compared to the results for the simple neighbourhoods in the non-globalised sample. Forty percent of total respondents stated that the quality of services was high, compared to 50% of respondents in the non-globalised group. Furthermore, 15% of respondents indicated that services were poor, which was higher than in the non-globalised sample (12.5% of total respondents).
Pros and Cons

There are advantages and disadvantages, in terms of both globalised and non-globalised areas. The main advantages voiced by the globalised sample were a modern lifestyle and the infrastructure of urban planning and design, in accordance with international standards. However, these standards sometimes failed to consider the weather and other social considerations that apply to the global agenda. Hence, many residents do not advocate these standards, as emphasised by the research results. Residents from the non-globalised sample live in simple urban locations and are familiar with non-global standards. As a result, the residents are more comfortable in such a neighbourhood and do not participate in the progress of the modern lifestyle.

In these aspects, the situations are not much different. However, there are some differences between the two samples. Firstly, the size of plot and house has a bearing on the distance between services, such as shops, mosques, other houses, etc. Secondly, the main roads that surround services, isolated homes and the location of services, in terms of the globalised sample, affected the views of respondents.

Security

The UAE contributes global cities in the region and security is strongly linked to globalisation. According to the respondents’ answers in this research, the UAE does not have any major security-related issues. Thus, there were hardly any differences between the two groups in this, as the design of houses or neighbourhoods is irrelevant, in terms of security in the cities and the country. As a result, the proportion of security was similar in the two groups, with only 10% of total
respondents stating that they had experienced problems with security. Moreover, there is another aspect to focus on, with regards to the extent of security.

**Which Level of security in the city?**

The level of security among the samples was high, according to the results of the questionnaires. The percentage of respondents who were happy with the level of security reached 52.5% of the non-globalised sample and 47.5% of the globalised sample. Only 7.5% of respondents in the globalised sample indicated that security in their city was poor, as did 5% of the non-globalised sample.

Meanwhile, the respondents in the non-globalised group benefitted from a better quality of urban design and building materials. In this, the non-globalised houses and neighbourhoods achieved greater security, which was reflected in the research results.

![Level of Security in the City](chart.jpg)

**Fig (8.24) Level of Security in the City**
Level of security in the city for children

This aspect of security, in terms of urban design and the city, is important, as it is related to children and focuses on the neighbourhoods suitable for children. There were differences between the two samples, in terms of style of houses, urban design and neighbourhoods.

Fig (8.25) Level of Security for Children

In the globalised sample, 32.5% of respondents felt that their children benefitted from a high level of security, as did 35% of respondents in the non-globalised sample. However, there was a sizeable gap between respondents, in terms of the poor provision of security for children. In the non-globalised sample, only 10% of respondents asserted that security was poor, while 30% of respondents in the
globalised sample agreed with this. Through the research, we have identified some factors that affect the security of children:

The main difference between the two groups, in terms of security, is the connection between homes and main services, such as mosques and playgrounds. In the non-globalised sample, mosques were attached to houses, without any streets or roads. However, in terms of globalised houses, the mosques are located in isolated areas and are surrounded by streets, in all directions. Furthermore, in non-globalised areas, the location of playgrounds and local services, such as grocery stores and other small shops, are in the middle of the neighbourhood, without any borders or streets. Globalised areas provide better security, as they are surrounded by streets. Hence, there is a large gap in security, in terms of globalised and non-globalised neighbourhoods.

**The risks faced by children in different neighbourhoods**

In this detailed question, the risks faced by children in their neighbourhoods were examined. The major concern for parents, in terms of their neighbourhood and their children, was car accidents, followed by antisocial behaviour and security. The occurrence of car accidents reached 60% in the non-globalised sample and 65% in the globalised sample, while the percentage of unsocial behaviour was 50% in the non-globalised sample and 45% in the globalised sample. There was a gap between the two groups, in terms of security risks: in the non-globalised sample, 22.5% of respondents felt that their children faced security risks, as did 37% of the globalised respondents.
From these results, the following points are noted:

- Car accidents were the main worry for parents, with regards to their children. Thus, there is a relationship between the range of car usage and car accidents.

- Road works, which are commonplace in both new and old areas in the UAE, have contributed to the increase in this type of anxiety, due to risks associated with the transportation system.

- The weakness of public transport has contributed to the increased risks that children face, as this has led to the increased use of cars (each household has an average 2-3 cars).

Rogers and Power (2000: p.97) emphasise this view by highlighting examples of increases in the risk of accidents; indeed, the car is considered more dangerous than any other transport mode. In 1998, 3,000 people were killed in car accidents, while more than six thousand people were killed or injured on the roads.
The relationships between householders

This section focuses on the relationships between neighbours, using various criteria, such as whether respondents knew their neighbours by name, the number of times they had visited their houses and the relationships between women and children in one neighbourhood.

Neighbours known by name / number of times visited

This question attempted to establish relationships between residents and it focused on how many respondents knew the names of their neighbours and how many times they had visited such neighbours. The findings reflected the impact of architecture on human behaviour; there was a considerable gap between the globalised and non-globalised samples, in terms of the number of respondents who knew their neighbours by name. While only 5% of total respondents in the non-globalised sample did not know any of their neighbours’ names, this rose to 20% in the globalised sample, inferring that one-fifth of the respondents in the globalised sample had no relationship with their neighbours. Furthermore, half of the respondents in the non-globalised sample enjoyed a relationship with more than six of their neighbours, while only 15% of total respondents in the globalised homes sample stated the same.
By looking at the strong correlation between non-globalised homes and the size of plot, we are able to formulate some assertions, as below:

- Small plots reduce the distance between neighbours’ gates and between a householder’s gate and their villa. Some houses in the globalised sample, in terms of the distance from the gate of their villa to the gate of the compound wall, spanned in excess of 11 metres. Thus, there is a correlation between the size of building plot and the type of relationships between neighbours.

- Building houses closer together leads to increased neighbour interaction; for example, residents may share a garage and guard their neighbours’ homes when they are away.

- If the space between houses is very small, this brings neighbours closer together. Narrow alleys result in houses being closer to each other and neighbours are thus more likely to become friends.
- When the distance between houses and the main neighbourhood facilities, such as mosques and groceries, are far away, this leads to an increased use of cars. Thus, the use of cars reduces contact between neighbours.

**Number of visits to neighbours**

This question emphasises the last question, as both discuss the relationship between neighbours. This question probes deeper than the last question, as neighbours may know each other by name, yet have no relationship. Visiting neighbours and relatives ensures that strong relationships are formed.

The diagram below highlights the differences between the two groups in the research: while the percentage of respondents who had never visited their neighbours during the last year was 45% in the globalised sample, only 23% of respondents (less than a quarter) in the non-globalised sample had never visited their neighbours. The greatest differences between the two groups, in terms of the above, were divided into three categories.

![Frequency of Neighbour Visits](image)

**Fig (8.28) Frequency of Neighbour Visits**
The results indicate that, in terms of visits to neighbours, only 8% of the globalised sample had visited neighbours more than six times over the past year. Meanwhile, 32% of respondents in the non-globalised sample had visited their neighbours at least six times over the past year. Other categories also reflected the difference between the two samples, in which the globalised respondents demonstrated a lack of neighbour relationships. The non-globalised sample reported stronger relationships between neighbours.

These differences are apparent in various aspects, with regards to the two samples:

Movement: In the globalised sample, interaction between neighbours is more difficult than in non-globalised areas, as main roads surround globalised houses and are lacking in the second sample. Moreover, houses that are packed closely together, which are small in size, allow parents to observe their children when they go out. However, in the globalised sample, many parents prevented their children from going out without adult supervision, as the roads and motorways increased the risk of accidents and fear.

Meeting: In the non-globalised sample, it was reported that meeting with neighbours was easy, unlike in the globalised sample: the increased usage of cars decreases the chances of interacting with neighbours. However, the closeness of services and mosques to the houses ensures convenience.

A) Meetings amongst women in neighbourhoods

This question focuses on the extent of the relationship between neighbours, particularly women, who reflect a household’s tendency to visit neighbours. The proportion of the two samples, in terms of the above, distinguishes between the two groups. In the non-globalised sample, 31% of women met up with their neighbours,
while only 10% of women respondents in the globalised sample met up with their neighbours. If we convert this percentage to number of respondents, only 4 of the 40 women respondents interacted with others in their neighbourhood.

There are certain obstacles that prevent women from meeting with each other, according to the research. The non-globalised sample specified time as a problem, while the globalised sample cited place as a problem, with regards to meeting neighbours.

**The correlation between women meeting and commuting to school**

There is a correlation between the number of women who meet their neighbours and the number of households that allow their children to commute to school on the bus. Children are one of the main reasons why parents interact, in enquiring about matters such as the time of buses. Indeed, many parents gather in a specific place when they are waiting for the bus. However, travelling to school by car leads to the increased isolation of neighbours, as parents have little opportunity to interact with other parents in the neighbourhood. This is clearly demonstrated in figure 8.30.
Theoretical studies emphasise the view that there is a correlation between the type of house and a strong relationship between neighbours. A comparison of traditional and modern buildings, in terms of student accommodation and appearance, infers that traditional buildings often have a warmer atmosphere; however, modern buildings are more interesting: they are creative, with a progressive design and a dynamic finish, yet modern student accommodation is often cold, sterile and an undesirable living space.

**Type of house**

When respondents were asked about the type of house they lived in, their responses were as expected, as the majority of citizens live in detached houses. This is in contrast with foreign inhabitants, as the majority of these live in apartment blocks. However, in the non-globalised sample, all the respondents lived in villas, while, in the globalised sample, 27 respondents lived in villas, 12 resided in apartments and one lived in an extension in their father’s house.
From the results, it is apparent that the majority of respondents (in both the globalised and the non-globalised samples) prefer villas to apartments. Although some of the householders live in apartments, they would prefer to live in a villa: 12 respondents lived in apartments, yet only 2 of these preferred apartments to villas.
Views of multi-storey buildings

When asked if multi-storey buildings are a good residential solution, more than half of the respondents in both samples agreed that such apartments provided good accommodation. However, the majority of locals considered such buildings as a great solution for foreign residents, as their cultures allow them to live in multi-storey buildings. Thus, some respondents stated in their questionnaire that they liked the concept of multi-storey living, but not for themselves. Fifty two percent of the non-globalised sample advocated the multi-storey building, as did 55% of the globalised sample. Eighty four percent of the non-globalised stated that the multi-story building is not a good residential solution, as did 45% of the globalised sample.

These findings are in accordance with the theoretical part of the research, which indicated that the majority of people do not prefer multi-storey buildings. A survey conducted in Istanbul (Unlu et al, 2008: p.2) showed that only 6% of respondents had viewed unique multi-storey buildings, while only 5% stated that high rise buildings were a good idea.

![Graph showing views of multi-storey buildings](image-url)

**Fig (8.33) Views of Multi-Storey Buildings**
8.3. The Designers’ Questionnaire
This section focuses on the feedback from the designers’ questionnaire, in considering the main factors in formatting architectural and urban products. This data is important in clarifying client and designer trends and refers to actual rules and standards, in terms of size of plots and materials.

Citizens’ architectural preferences
The findings indicated that the majority of clients preferred the modern style: 60% of all respondents expressed a preference for the modern, while only 20% of respondents preferred the traditional style. The remaining respondents preferred to mix the modern and traditional styles.

An interesting indication is that level of education appears to have a bearing on architectural preference. Hence, we should highlight this relationship, in order to clarify the reasons for the preference of the modern style in the majority of clients in the UAE. The proportion of clients between the ages of 21 to 40 accounted for 72% of the globalised sample and yet only 60% of the total respondents preferred the modern style: this gives us an important indication that not all people in this category endorse the modern style. Some people still prefer traditional houses.
A second indication is that the level of education is correlated to the modern style, as both are usually relative to progress. Thus, we compared the number of respondents with graduate degrees and the number of clients who preferred the modern style and
the findings indicated that 60% of respondents advocated the modern style and a similar number (68%) were graduates: of these 72% were aged between 21 and 40.

The final indication is the level of satisfaction, in terms of modern building materials, which offer multiple choices in the colour and type of building materials. However, modern building materials available for use in vernacular buildings are limited, in both form and type.

With reference to the theoretical part of the research, Al-Naim (2005) supports these findings, emphasising the transformations that have been produced in the globalisation era. According to researchers, the Gulf States have been transformed from an isolated culture to one that is more open; moreover, this transformation has also influenced the traditional and social order, with many citizens influenced by imported architectural styles.

**Concept of design**

This question determines the source of design, as the type of design is dependent on its source. There are many factors that have led to these findings, such as level of education, as indicated in the last section. A second factor is the nationality of designers, as the majority of them are from other cultures. Such designers do not understand the culture and social considerations of the UAE and, as a result, we can interpret the dominance of clients, in terms of designs.

- Level of education affects the type of design, as many clients studied abroad. Moreover, they use several methods of communication, such as the telephone and the internet.
• Furthermore, many designers in multi-cultural communities push their own ideas and concepts, rather than those of the clients: this demonstrates why the majority of houses and designs are a mix of eastern and western cultures.

In the era of globalisation, the design of buildings and building materials does not amaze us, as everything has been dramatically transformed, even lifestyle.

**Usual size of house plot**

This and the next question focus on the size of plot and the built area within the era of globalisation and the important aspects of these questions are summarised below:

The sizes of plot and built area have a strong impact on the relationship between family members and this is true, in terms of households living in the same neighbourhood. Hence, we compared many aspects of globalised and non globalised houses, especially in terms of those that have been strongly influenced by the size of plot and the built area.

**Size of plot and relationships between neighbours.**

In non-globalised houses, when the size of a plot is small (1000 m² maximum), the number of houses in a specific area is greater than the number of houses in a globalised area. This leads to an increased closeness between homes and encourages strong relationships between neighbours. However, in globalised areas (majority of plot more than 1000m²) see Figure (8.32), the distance between neighbouring houses is increased and this leads to a reduction in social connections. In the figure below, we can see the difference between the two samples. There is also a correlation between the size of plot and the number of assistants in each house. If a plot is sizeable and has a huge garden, this leads to an increase in the number of assistants in the home (probably because one person cannot manage such a house). In addition
to this, another social factor is that a lot of householders employ male assistants, such as gardeners, farmers and drivers. This actually leads to the isolation of women in the houses and the main gate, in terms of privacy considerations. As a result, the meeting of neighbours at the front gate becomes impossible.

**Usual size of the built area designed**

This question completes the dissection that began in the previous question, with regards to the correlation between the size of plot and built area and the relationship...
between neighbours in the same neighbourhood. The main subject here is the impact of the built area and spacious houses on the relationships between neighbours. Thus, we concentrate on this aspect through the following factors:

**Impact of large houses on activities**

When houses are spacious, the chance of kids playing out with the children of neighbours dramatically decreases, especially if there are many cars and the main roads around the houses are busy. There were differences between the globalised and non-globalised samples, in terms of this. In the globalised sample, the majority of houses had a built area of more than 400m$^2$. Although globalised neighbourhoods are surrounded by walls, in order to provide security and privacy for kids, these places are often soul-less and unwelcoming. Many kids gather in non-globalised neighbourhoods, even though facilities may not be as good; for example, they make their funny, using available materials.

The research results indicated that security for children in globalised neighbourhoods is poor, with 30% of respondents voicing this. However, only 10% of respondents in the non-globalised sample stated that security was poor.

**Number of bedrooms in a house**

This part is important, as it enables us to make a connection between the number of bedrooms, the size of house and the number of family members. While the number of family members reached 242 persons, the number of bed rooms -for same
samples reached to 192. So this indicates to the range of person/bed room equal 1.26, which means there are exaggeration in size of built area and number of bedrooms.

8.4 Interviews
This section concentrates on the analysis of the interviews: the results are highlighted and compared. The section is divided into two aspects: decision makers which include sex questions and experts that encompass five questions.

8.4.1 Decision makers
This case focuses on the main decision makers, in terms of the built environment in the U.A.E, such as housing programmes like the Sheikh Zayed Housing Programme (SZHP) and the Mohammed Bin Rashid Housing Establishment (MRHE), and municipalities such as Dubai municipality (DM), Ajman Municipality (AM) and the Ministry of Public Work (MPW). As a result, this interview reflects the opinions of the authorities and other associations.
In the interviews, leaders were questioned about the impact of globalisation on the urban landscape and the environment of the built area, as follows:

**New requirements, in accordance with the impact of globalisation**

This question sought to examine the main rules, codes and standards that have changed as a result of globalisation and the results were as expected, as there are no set rules, standards, codes and techniques, in respect of globalisation. In terms of service spaces, opinion was divided into two trends. Some agreed that the service sector has not changed, while others rejected this opinion: this infers differences in

![Development changes](image)

**Fig (8.37) Development Changes**

- In the first aspect of the decision process, 100% of interviewees stated that there have been significant changes in the decision-making process. This is due to differences in the use of materials and building methods.

- The second aspect focused on the standards and codes for buildings and 100% of respondents said that they had witnessed dramatic changes in
standards and codes. This is due to the fact that the majority of building materials were imported from outside the country, along with specific features and specific building methods.

- 100% of interviewees were familiar with the approaches and techniques, as standards and codes are in accordance with international standards.

- Required service spaces did not have consensus if this was a result of the impact of globalisation. Many leaders stated that they did not rely on international standards; however, they did consider cultural and weather conditions. As a result, 72.5% stated that globalisation has changed service space, while only 28.5% of interviewees denied these changes.

The aims of globalisation are implemented in accordance with the views of decision makers. Globalisation has sought to unify standards, codes and conditions, with regards to the construction of buildings and others aspects. Lewis (2002) indicated that the building style of globalisation is based on standardisation (functional logic, economic scale and aesthetic composition). However, ornament, sentimental aspects and local culture are ignored.

**Weaknesses in the level of offered infrastructure, due to the fast-paced urban development**

This is a very important question in this field, as there are arguments as to whether globalisation and the subsequent boom in urban development have been distributed and whether they have aided or damaged the infrastructure. Below, we have noted major differences, even between decision makers.

- Electricity: this is an essential aspect of modern life. Many respondents (86%) indicated that globalisation has badly affected the electricity
supply; only 14% of respondents stated that globalisation had no effect on the supply of electricity. Indeed, since 2004, UAE electricity services have been disrupted as a result of the erection of multi-storey buildings in the northern emirates of Ajman, Umm Al Quwain and Ras Al Khaimah.

- Water supply: This question divided the respondents into two groups. The first (43%) stated that globalisation has had a negative effect on water supply, while the second group said that globalisation has had no effect on water supply (constituting 57% of respondents).

- Sewage network: This question also yielded a divided opinion: 57% of respondents stated that globalisation has had a bad effect on the sewage network, while 43% said that globalisation had no affect on the sewage network. One of the major drawbacks of globalisation, according to theoretical research, is the pressures of such globalisation on the infrastructure of a city. Hassan (2000) indicated that high-rise buildings are the main cause of a weak infrastructure and weak electricity and water supply networks.
8.4.2 Experts interviews
This section focuses on the opinions of the experts, as this plays a main role, in terms of the support of or opposition to the phenomenon of globalisation. Hence, this category incorporates experts from many areas, such as politics, economics and social and urban design. In the interviews, the many natural aspects of life in the U.A.E, in order to generate specific ideas were investigated. Thus, the questions were divided into social, environmental, urban and economic aspects, as follows:

There have been major changes in the region over the last 30 years, as a result of globalisation. There are thus many aspects of life that needed to be researched, in order to investigate the role of globalisation in changing lifestyles in the study area, The results were readily apparent; 100% of respondents had witnessed change over 30 years, as a result of globalisation. The chart below outlines how all interviewees stated that globalisation has changed the UAE, in terms of society, the environment,
urban planning and economics. Moreover, one of the interviewees indicated that morals and manners had also dramatically changed during this period.

**Main problems in UAE, due to the current urban development**

This question indicates both problems and changes; some of the respondents considered changes as progress, without any comments. This question has investigated some problems during the era of globalisation, such as the cultural community, environmental life, urban development and the economic situation.

Tellingly, 100% of interviewees asserted that there are problems in all aspects, as a result of the impact of globalisation. Hence, the results indicated that there is a general consensus that globalisation has damaged many aspects of the community.

**Social factors due to the current urban development**

This question highlights social phenomena, such as identity and the gap between the rich and poor. Many researchers blame globalisation for the majority of these social problems, despite the fact that a significant amount of these problems are caused by an extension of the community and the subsequent increase in population.

**Identity**: this problem has dominated as the main social problem in the U.A.E, due to the fact that UAE citizens make up only 20% of the total population. Thus, the results were as expected: all the interviewees stated that they had a problem with identity and that globalisation was the main cause of this problem.
**Class differentiation:** this has been exaggerated by the impact of globalisation and the research results emphasised this view. Seventy five percent of interviewees asserted that globalisation has increased the gap between rich and poor, while only 25% regarded this as a problem (due to the fact that the UAE is a rich country and so this cannot be considered a problem).

![Fig (8.39) Social Factors](image)

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**Relationship between the low cost of labour and the size of houses**

This question reflects the impact of globalisation on the built environment, although, in global cities, the size of houses has decreased, due to the vertical extension and apartment living (these are small, compared to the detached house). In the U.A.E, another trend has been noted; i.e., the majority of families tend to extend their plot and the built area of their house. The experts were asked whether there is a relationship between the low cost of labour and the size of houses and the results
were as expected. All the experts indicated that there is a relationship between these two factors.

**Relationship between low cost labour and crime**

In this question, the opinions of the experts were different, as some stated that there is no relationship between crimes and low-cost labour. However, there are many other factors associated with crime, such as education and culture. Thus, the results of the research were divided into two groups: 75% of respondents indicated that

![Relationship between Crime and the Low Cost of Labour](image)

Fig (8.40) Relationship between Crime and the Low Cost of Labour

there is a strong relationship between low cost labour and crime, while 25% did not believe that there was a relationship between the two factors.

All findings in the interviews emphasised the theoretical aspect of the research, in many ways. Changes in lifestyle have arose as a result of the impact of globalisation, whether in terms of social life, architectural style or the economic situation (endorsed by many experts in both theoretical and empirical studies). In addition to this, the researchers emphasise the impact of globalisation on identity, as the very aim of globalisation is to unify style, with no consideration for local identity. The
latest findings are the relationships between the sizes of house and the low cost of labour and the rate of crime and low-cost labour.

8.5 Summary
This chapter focused on the analysis and discussion of the research results, comparing the results with theoretical and empirical studies. This chapter is divided into four parts: users’ questionnaire, designers’ questionnaire, decision makers’ interview and interviews with experts. The user questionnaire was divided into three parts and discussed the impact of globalisation on homes in the United Arab Emirates. The first section focused on general information, which reflected aspects such as the size of users’ families and their level of education. The second part of the questionnaire focused on the needs of users, in terms of their houses, and their preference for facilities such as transportation and shopping. The final section of the user questionnaire illustrated the relationships between neighbours and the impact of urban planning.

The three remaining parts of the user questionnaire formed the basis of this study. The designers’ questionnaire concentrated on the preferences of users and clients, in terms of house design and build, and important aspects of this were client preferences, in terms of traditional and modern architecture, and the size of housing plots. The interviews with decision makers outlined the impact of globalisation on building instruction, decisions and conditions. In addition, the impact of globalisation on the infrastructure, such as the electricity and water supplies, was also discussed. Interviews with experts focused on various relationships, with regards to the globalisation era. The first relationship referred to the impact of globalisation and the many aspects of changes in lifestyle, while the other relationship referred to the impact of globalisation on phenomena such as poverty and crime.
Chapter Nine: Conclusions and Recommendations

9.1 Conclusions
This thesis focused on the relationship between globalisation and architecture and, to conclude, the main ideas discussed in this study are outlined. The literature review was the first part of the study and the theoretical studies were divided into three pivots in this thesis. The first concentrated on the phenomenon of globalisation and the various aspects of this, such as the political, economic, social and environmental aspects. The second pivot indicated the impacts of globalisation on architecture; thus, some questions were presented, such as ‘is globalisation beneficial or not?’ Are there any opponents of globalised buildings and new materials, reflected in the progress of the development of communities and countries? The third pivot focused on the relationship between architecture and human needs, discussing various physiological and biological needs in humans and how buildings may fulfil these needs.

Part two of the thesis concentrated on the empirical domains and was divided into four chapters: first one, research methodology, fieldwork, which focused on the methods employed in the empirical research, and the data collection procedures, in terms of the research. The first method of data collection was the questionnaire for users and designers, which aimed to gather qualitative and quantitative data. However, only qualitative data was obtained from the interviews with the decision makers and experts, as the majority of the data was based on numbers or indications. A further chapter discussed housing in the UAE (with a focus on groups), in terms of the development process and the built environment and housing. The final chapter showcased the research analysis and a discussion of the findings.
There were three issues in this thesis, in terms of investigating the relationship between the three pivots. The phenomenon of globalisation was considered as the main pivot in this study, as it constitutes many aspects: i.e. social, political, economic and environmental issues. The second phenomenon focused on the impact of globalisation on architecture and the spreading of the phenomenon of globalised architecture, while the third and final study investigated the relationship between architecture and human needs, especially in terms of the era of globalisation. The three-portion pivots were interrelated in this study, as each one influences the others.

9.1.1 Globalisation and its impacts
This was divided into two parts: aspects of globalisation and the features of this phenomenon. In the first part, the investigation was divided into four aspects: political, social, economic and environmental. The political aspect concentrated on changes in the rules, laws and policies affected by the phenomenon of globalisation, such as sovereignty and democracy, and the UN report indicated that globalisation appears to have changed public strategies and the organisation of policy. It has sought to move states from regulating to investing and to move away from state building institutions to public institutions.

The economic aspect is considered a strong pivot in the phenomenon of globalisation, due to the fact that the main goal of globalisation is economic development. Economic globalisation has transformed the global economy in many ways; firstly, such globalisation is based on the freedom of the exchange of goods and capital worldwide and, secondly, economic content has changed dramatically (it was dependent on the manufacturing sector for 20 years, prior to the onset of globalisation). The service industry has dominated the market through the spreading of services in the fields of finance, insurance and real estate. Finally, FDI seeks to transport companies and factories from high cost to low cost labour. As a result,
there was an increase in the rate of unemployment, which raised the rate of investment for investors.

The third aspect of globalisation is the social aspect and the importance of this aspect lies in the differences between the supporters and the opponents of globalisation. Supporters indicate that globalisation has enhanced social life, due to the spread of organisations that advocate human rights and the protection of children. Opponents, however, emphasise that the essence of globalisation goes against human rights, as it increases investment through a decrease in labourers’ wages. Often, the main factor in this aspect in the gap in incomes: Approximately the gap between 20% of the world’s population in the richest and poorest countries increased from 30:1 in 1960 to 82:1 in 1995.

The final aspect of the phenomenon of globalisation is the environmental aspect. This reflects the essence of this study, as it concentrates on the architectural aspect of the environment. The environmental aspect of this research covered many issues, such as global warming, high-rise buildings and the global city, and these issues, to varying extents, have an impact on the environment. In terms of the comparison of theoretical and empirical research, with regards to the environment, there is a consensus that globalisation has affected the environment. Despite this, some experts have supported all aspects of globalisation, although they acknowledge that there are threats to the environment.

The main feature of globalisation is the ignoring of place, culture and weather, when constructing buildings in global cities. No experts or interviewees have opposed this view; indeed, some see it as an advantage, in terms of it reflecting the progress and development of a place. However, many interviewees emphasised the significance of local considerations, as this was more concerned with human needs.
The second feature was the balance between the economic and social considerations. While economic globalisation seeks to apply a global agenda, such as FDI and free trade, the local agenda demands more support for domestic activities. Thus, the interaction between the social and economic aspects of globalisation was divided into two findings: advantages (such as an increase in jobs, due to the growth of the economy) and disadvantages (such as social life creating an increase in the marginalisation of the indigenous community). The findings of the empirical study emphasised this view, as the majority of interviewees mentioned economic margins more than the other aspects, such as the social and environmental aspects.

The third feature was the balance between the modern and the sustainable. There is no doubt that globalisation leads to an improvement in life, but it certainly is not sustainable. Thus, there are opposing views, in terms of sustainability; some experts have indicated the globalisation protects the environment, with the aid of non-governmental organisations worldwide. However, many respondents endorsed the modern style, although some stated that the multi-storey building was unsuitable for their needs.

The final feature was the many issues surrounding globalisation, such as poverty, crime, migration and density. According to several researchers, there is a correlation between poverty and globalisation, as the main objective of globalisation is investment. Although economic growth has increased during the era of globalisation, the number of poor people has dramatically increased, according to many statistics, especially in developing countries. This view was emphasised in the empirical study, in terms of the interviews with experts and decision makers. Many respondents indicated that the era of globalisation has widened the gap between rich and poor and that there is an increasing number of poor people in the UAE.
Usually, crime is interrelated with the global or metropolitan cities. Thus, the new, modern technologies should be used to help limit crime; i.e., through the use of modern telecommunications. However, in reality, the rate of crime in global or mega cities is more than the crime rate in the countryside. Many respondents endorsed this view, citing a rise in the number of crimes with the increasing rate of globalisation; however, they indicated that there were many reasons for the increase in the crime rate.

Important issues in the era of globalisation are soaring density rates and the level of migration in global cities. The statistics indicated that the number of migrants has doubled between 1965 and 2000; however, the resulting economic growth and modern transportation should ensure the creation of jobs in poorer countries. Density is another problem in global cities, as globalisation aims to gather the maximum number of residents within a limited space, in order to encourage global phenomena, such as skyscrapers and huge shopping malls.

9.1.2 Globalised Architecture
This section discusses the relationship between globalisation and architecture and the influence of globalisation on architecture, in terms of materials, design and methods of construction. Many subjects were discussed in this part, such as the comparison of the traditional and modern, the impact of globalisation on buildings and how globalisation has affected urban planning in cities and neighbourhoods.

The comparison of the traditional and modern architecture highlighted many differences in the two, such as the aims of each type of building and whether these are supportive or contradictory. While the aim of traditional architecture is to express civilisation and the power of leaders and communities, modern architecture has sought to symbolise the state and embodies the brand of companies. The second
subject was a comparison of the traditional and modern architecture and whether these can co-exist. Many experts indicated that a mix of such architecture is easily achieved and creates a unique location. However, a number of researchers pointed out that the integration of modern and traditional architecture is impossible, as each type has its own aims and agenda. The empirical study indicated that the users, the designers, the experts and the decision makers endorsed the integration of traditional and modern architecture.

Globalised building was the second issue in this part of the research and focused on the impact of globalisation on buildings (i.e., building materials, building methods and the design of buildings). There is a consensus that the unifying of standard, codes and conditions, in terms of building, would lead to similar buildings being implemented worldwide. Often, decision makers and clients have sought to rebrand their cities and projects, by applying the modern style. The findings from the empirical study endorsed this view, as the majority of respondents applied the modern style in their homes and other projects. Meanwhile, although multi-storey buildings have increased in the region, the majority of user respondents preferred the detached house. At the same time, iconic buildings in the south symbolise the cities and countries, through the use of strange and amazing designs.

The final issue referred to the globalised urban area, including the global city, and whether this was a dilemma or an opportunity. Various phenomena, such as transportation networks and density, were discussed and it was ascertained that the global city presents the clearest image of the effects of globalisation, as it exhibits all the features of globalisation, such as free trade, high rise buildings, banking headquarters, huge shopping malls and iconic buildings. Although there are many problems connected with global cities, many people prefer living in such cities, for
several reasons (namely, the high quality of the infrastructure, the various services and the important bodies that operate out of global cities). Furthermore, the global city houses many companies and bank headquarters, presenting the opportunity of jobs.

Issues such as density and the transportation network are products of the global city. Indeed, many experts believe that there is correlation between an increase in roads and an increase in the number of cars on the road: this poses many threats to health and quality of life. Several researchers have indicated that there is a correlation between density and land-use in the global city. The empirical study emphasised this view, as a major issue for residents in the samples was traffic and the risks posed by an increase in vehicles on the road. The roads and transportation networks and traffic have become a cause for concern and are the main issue, in terms of the safety of children.

9.1.3 Human needs in architecture
This part of the research discussed the most important subject in this study; namely, the relationship between architecture and human needs. Architecture reflects human needs, as it is the result of human vision and goals. However, the architecture of the era of globalisation reflects the market and the economy, as economic activity dominates globalisation.

This part focused on basic human needs and discussed the theories of Abraham Maslow and Max-Neef. These theories concentrate on general human requirements, such as physiological needs, safety needs, belonging needs, esteem and self-actualisation. The study then focused on the importance of human needs in architecture, which indicated that a house built without any human considerations is a shelter rather than a home. The next subject concentrated on culture, which plays a
large role in human needs, in terms of religious beliefs, habits and way of life. Finally, it was discussed how residents in the past identified with architecture, as it reflected human needs, but the establishment of architecture is now dependent on the views of clients.

There are many motivations that affect residents, in terms of architecture. Such factors do not change human behaviour, but they do encourage a particular behaviour. Some researchers summarised these factors, as follows: friendship formation, group membership, personal space, personal status, territoriality, communications, and cue searching and personal safety. In the empirical study, it was noted that urban planning encouraged meetings and gatherings more than any other factor. However, some spaces allowed the avoidance of this, due to the risks of accidents and anti-social behaviour.

The findings in this part of the research focused on the relationship between neighbours and whether the form of houses and neighbourhoods impacted on these relationships or not and, in comparing the globalised and not globalised houses, we found many differences between the two groups (in terms of public transport and cars, the number of visits between neighbours, the number of assistants in each house and the number of cars in each house). Also, questions in the survey discussed how urban planning affected lifestyle and the results indicated that differences in urban planning led to differences in behaviour.

9.2 Recommendations

9.2.1 Introduction
This part is divided into two sections; namely, findings and results. Firstly, the paradigm suggests the adding or elimination of some features in residential complexes, so that such complexes become more humane and fulfil human needs.
Indeed, decision-makers should consider the many elements of urban design, such as planning of plot size, the size of the built area, the location of streets and alleys and the location of service spaces. A second general recommendation applies to many organisations throughout the UAE and the main bodies will benefit from these recommendations, such as municipalities, housing programmes and urban planning authorities.

9.2.2 Specific Recommendations (Paradigm for suggested neighbourhood)
This paradigm contains many features and elements that emphasise the major role of people in urban design. This prototype is designed from concrete and is void in neighbourhoods, which means that elevation of these house changes from looking over the street to facing open spaces. The prototype also recommends the shrinking of the size of plots and the built area, as this would reduce the distance between neighbourhood services and houses, discouraging the use of cars and encouraging residents to walk between their houses and such services.
Fig (9.1) The Design of a Suggested Paradigm for a Neighbourhood.
Shape A

The prototype supports the placing of internal elevations on the streets, rather than external elevations, as this trend has increased contact between neighbours and offers a better space for children. Moreover, it reduces the use of cars and increases interaction between neighbourhoods, rather than dividing them into isolated islands. The figure below contains a sketch illustrating the location of houses around a social space.

Fig (9.2) Housing Complex Surrounds the Social Space.
Shape B reduces the size of streets and moves them out of a complex space. Doing so would encourage pedestrians, both adults and children, to move freely within their neighbourhood.

Fig (9.3) The Streets are Located on the Back of Houses.
Shape C Eases the movement of pedestrians between housing units and service spaces in a neighbourhood, through separate streets, whether between houses or between houses and service spaces. The current situation indicates that the streets are not safe in neighbourhoods, for many reasons such as accidents and lack of security. Thus, the main recommendation is that there is a connection between houses and services.

Fig (9.4) The movement Between Houses and Facilities Becomes Easier.
Shape The size of plots and the overall size of a built area should be decreased by establishing smaller plots and increasing outside space, in order to encourage interaction between neighbours (including children). Plots are currently in excess of 1000 m², which has led to an increase in the number of assistants employed, such as servants, gardeners, drivers, etc. As a result, relationships between neighbours have diminished, as all outside work is done by assistants rather than householders. Moreover, the absence of householders in common spaces and the neighbourhood leads to increased risks, in terms of incidents and security.

Fig (9.5) Reduce the Plot and Built Area Size to Outside Space.
Shape

Alleys should be shaded throughout neighbourhoods, so that people are encouraged to walk instead of relying on their cars. Also, roads, alleys and streets should be curved, rather than straight, in order to keep these spaces sheltered from the elements.

A Comparison of the actual and suggested Paradigm

<table>
<thead>
<tr>
<th>Actual</th>
<th>Suggested</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum size of plot 1000 m^2</strong></td>
<td>The maximum size of plot is 600 m^2</td>
</tr>
<tr>
<td><strong>Minimum size of built area 300 m^2</strong></td>
<td>Maximum size of built area 300 m^2</td>
</tr>
<tr>
<td><strong>Streets separate the units</strong></td>
<td>All units placed on open space</td>
</tr>
</tbody>
</table>

Fig (9.6) Comparison between Actual and Suggested Paradigm

Fig (9.7) Creating Shadows Develop the Activities.


9.2.3 General Recommendations

These recommendations are divided into three parts: the first part is the general recommendations which deal with a lot of authorities. The second part is addressed to the designers due to their important roles in the developing residential areas to be customised with human requirements. The last part is concentrated on decision makers’ authorities such as housing programmes and municipalities thanks to their planning roles.

- General Recommendations

1- Minimising the size of plots offers many other benefits; it increases and promotes relationships between neighbours, reduces the cost of the infrastructure and encourages residents to walk around their neighbourhoods.

2- Reducing the size of roads, streets and alleyways between houses extends the paths between houses and their neighbours.

3- Encouraging the use of smaller vehicles and discouraging the use of larger ones ensures there is more space on the roads and in neighbourhoods.

4- Children should be encouraged to commute to school by bus only, as there are many advantages associated with this. For instance, it develops the relationship between parents, as they may converse when waiting at the bus station for their children.

5- Facilities in the centre of neighbourhoods, such as mosques, small shops and playgrounds, should be enhanced and enlarged, ensuring that they are within walking distance. This encourages residents to walk and thus increases the chance of residents meeting when they go out.

6- There should be a balance between the size of built area and family members, as below:
A) The number of family members should be considered, in terms of the size of a house. Because the findings indicated the rate of persons/bedroom in globalised houses reached 1.2 persons/bedroom.

B) Households should be divided into categories, in terms of their size, and the requirements of each household such be met.

7- There should be a decrease in the number of cars, as the use of vehicles has drastically increased in global cities. This can be achieved by:

A) Encouraging the use of public transport.

B) Providing suitable pavements for walking on.

C) Approving the use of buses, in terms of children commuting to school.

D) Minimising car parking spaces, in order to encourage residents to rely less on their cars.

8- Increase the awareness of the types of house design before this phase, the nature of functions in the house and the identification of real needs, in order to discourage the building of overly large homes.

- **Recommendations for designers and consulting offices**

  1- Architects should be encouraged to manage their offices and contribute to the design of homes. In many cases, the majority of foreign architects manage their own offices.

  2- Various policies and standards should be implemented that support the localisation of elements such as elevations and the type and colour of building materials.

  3- Designers should have rules to follow, in an attempt to reduce the size of homes (i.e., an approved equation should be used to calculate the size of a home). There is a correlation between the size of families at present and those expected in the future and the scale of house design.
4- Any mode design should be prevented if it ignores social and weather considerations.

- **Recommendations for decision makers**

5- Domestic shops and playgrounds should employ local citizens, as this reduces the risks associated with foreign labour, such as problems with security. Thus, parents will be encouraged to let their children go out, without fear.

6- A special space should be allocated for women to meet; i.e., such a space could be attached to a children’s playground. Such a space should feature the products of globalisation (for example, a café).

7- There should be the allocation of a main hall in the centre of neighbourhoods, which residents may use to conduct wedding ceremonies or official meetings.

8- There should be special walkways or pavements for pedestrians that are shaded by trees and other means of shade, in order to encourage residents to walk through their neighbourhoods.

9- Social and environmental scientists should be involved in urban planning, in order to ensure that any social and weather requirements are considered in any future plans.
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Appendixes

- Appendix 1 User Questionnaire (Original)
- Appendix 2 User Responses (Arabic)
- Appendix 3 Designers Questionnaires (Original)
- Appendix 4 Designers Responses (Arabic)
- Appendix 5 Interview (Experts)
- Appendix 6 Interview (Decision Makers)
Questionnaire (Users)

General information

1. Gender
   - Male
   - Female
2. Age (years)
   - Less than 20
   - 20-40
   - 41-60
   - More than 60
3. Level of education?
   - Primary
   - Secondary
   - Graduate
   - Postgraduate
4. Occupation sector?
   - Governmental
   - Private
   - Business
5. Marital status?
   - Single
   - Married
   - Divorced
   - Widowed
6. Number of family members?
   - 2 or fewer
   - 3-5
   - 6-10
   - More than 10
7. Do you have any disability?
   - Yes
   - No

The questions

1. Which of these problems you are facing?
   - Traffic
   - Identity
   - Security
Do you think the current construction development is responsible for the mentioned problems? Traffic
- Yes
- No

2. Which of these facilities is/are important for your life?
- Car
- Public transport (bus, metro, etc.)
- Telecommunication (telephone & internet)
- Television and satellite
- Shopping malls
- Other, please specify

3. How many servants do you have in your house (housemaid, driver, etc.)?
- N/A
- 1-2
- 3-4
- More than 4

4. How many cars do you have in your household?
- N/A
- 1
- 2-3
- 4-5
- More than 5

5. What is the type of your house?
- Villa
- Apartment
- Other, please specify

6. Do you prefer to live in?
- Villa
- Apartment

7. Do you prefer to shop in?
- Shopping mall
- Local souk
- Local grocery
- Online shopping
- Other
8. How many persons travel with you when you go to your workplace?
   - Only me
   - 1-2
   - 3-4
   - More than 4

9. Do you think multi-storey buildings are a good residential solution?
   - Yes
   - No

10. Do you think the traditional house is suitable for nowadays?
    - Yes
    - No

11. Please rate the noise levels in your neighbourhood?
    - High
    - Medium
    - Acceptable

12. Please rate the privacy level in your neighbourhood?
    - High
    - Medium
    - Acceptable
    - Bad

13. Please rate the level of the serviced spaces (mosque, green area, shops etc.) in your neighbourhood?
    - High
    - Medium
    - Acceptable
    - Bad

14. Please rate the level of security for children in your neighbourhood?
    - High
    - Medium
    - Acceptable
    - Bad

15. Please rate the level of security (in general) in your city?
    - High
    - Medium
    - Acceptable
    - Bad

16. Please rate the level of sense of belonging to your neighbourhood?
    - High
    - Medium
    - Acceptable
    - Bad

17. Where does your child wait for the school bus?
    - At home
    - Specific place
    - N/A
    - If N/A, how do they go to school?
o Walking
o By car
o Other, please specify..................
18- How many neighbours do you know by their names?
  o N/A
  o 1-3
  o 4-6
  o More than 6
19- How many times did you visit your neighbours last year?
  o 1-3
  o 4-6
  o More than 6
  o Never
20- How do you usually go to serviced spaces (mosque, shops, etc.)?
  o Walking
  o By car
  o Other
21- Do you feel secure when your children are playing in the neighbourhood?
  o Yes
  o No
22- What are the main risks faced by your children in the neighbourhood?
  o Car accident
  o Security
  o Anti-social behaviour
  o Other, please specify............... 
23- Do the women meet in the neighbourhood?
  o Yes
  o No
24- If no, what are the main obstacles?
  o No available time
  o No available space
  o Other, please specify..............
25- Can you live in your home without assistant staff (servants, farmers, drivers, etc.)?
  o Yes
  o No
26- If you haven’t assistant staff, would you prefer to live in?
  o A smaller house than yours
  o A bigger house than yours
  o Neutral
| الأسم | القسم | الرابطة | العمر | 教育 | 工作 | 工作类型 | 工作地点 | 工作性质 | 工作时间 | 工作人数 | 工作类别 | 工作经验 | 工作地点 | 工作性质 | 工作时间 | 工作人数 | 工作类别 | 工作经验 |
|-------|-------|---------|------|------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|          |       |         |      |      |      |         |         |         |         |         |         |         |         |         |         |         |         |         |
|          |       |         |      |      |      |         |         |         |         |         |         |         |         |         |         |         |         |         |
|          |       |         |      |      |      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
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|          |       |         |      |      |      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
5- ما هو نوع مسكنك الحالي؟
   √ قيلا
   ◐ شقة

6- آخر، برجع تجديدها
   ◐
   √ قيلا
   ◐ شقة

7- ما هي طريقة التسوق المفضلة لديك؟
   ◐ مراكز التسوق
   ◐ الأسواق التقليدية
   ◐ البقالات المحلية
   ◐ عبر الانترنت
   ◐ بطرق أخرى، حددتها

8- عدد الأفراد الذين يحملهم عادة في السيارة غالباً وانت ذاهب العمل؟
   ◐ لوحدي
   ◐ 2-1
   ◐ 4-3
   ◐ أكثر من 4 أفراد

9- هل تعتقد أن البناءات السكنية فكرة جيدة في السكن؟
   ◐ √ نعم
   ◐ لا

10- حدود مستوى الإزعاج في منطقتك السكنية؟
    ◐ مرتفع
    ◐ متوسط
    ◐ مقبول
    ◐ لا يوجد

11- حدود مستوى الخصوصية في منطقتك السكنية؟
    ◐ √ جيد
    ◐ متوسط
    ◐ مقبول
    ◐ ضعيف

12- حدد مستوى نقاء الهواء في مدينتك؟
    ◐ √ جيد
    ◐ متوسط
    ◐ مقبول
13 - الرجاء تحديد مستوى توفر الخدمات (المسجد، المساحات الخضراء، نلعب الأطفال) في منطقتك السكنية؟

- جيد
- متوسط
- مقبول
- ضعيف

14 - الرجاء تحديد مستوى الأمان على الأطفال في منطقتك السكنية؟

- جيد
- متوسط
- مقبول
- ضعيف

15 - الرجاء تحديد مستوى الأمان الذي تشعر به في المدينة؟

- جيد
- متوسط
- مقبول
- ضعيف

16 - الرجاء تحديد مستوى الانفتاح إلى بيتك السكنية؟

- جيد
- متوسط
- مقبول
- ضعيف

17 - أين ينطلق أبنائك حائط المدرسة؟

- في البيت
- في مكان خاص لذلك
- لا يوجد

18 - هل يوجد مدخل غيري إلى المنزل تعرفه بالإسم؟

- لا يوجد

- 3-1
- 6-4
- أكثر من 6
19- كم مرة زرت جيرانك خلال السنة الماضية؟
- لا يوجد
- 1-3
- 4-6
- أكثر من ذلك

20- كيف تذهب إلى منطقة الخدمات الخاصة في متنقتك (المستشفى، المكتبة، الخ.)؟
- المشي
- بالسيارة
- وسائل أخرى

21- هل تسمح لابناءك باللعب في متنقتك السكنية؟
- نعم
- لا

22- ما هي أهم المخاطر التي تواجه أبنائك في متنقتك؟

23- هل يمتلك السلام في متنقتك في أي مكان (المستشفى، المكتبة، مكان مخصص؟)
- نعم
- لا

24- إذا كانت الإجابة لا! ما هي المعوقات التي تمنع اجتماعهم؟
- لا يوجد وقت مناسب
- لا يوجد مكان مناسب
- أسباب أخرى

25- هل تنتمي المشيش بنسكانك الحالي دون حدود (خادمة، مربية، الخ.)
- نعم
- لا

26- هل تعتقد أن العماله؟ هل أفضل السكن في مسكن
- أصغر من مسكن
- أكبر من مسكن
- لا يوجد فرق

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1- What does the client (citizen) prefer in design?
   - Modern style
   - Traditional style

2- Usually, the design concept comes from:
   - Owner’s concept
   - Your concept
   - Joint concept (owner + designer)

3- What is the usual house plot area that you design?
   - Less than 500m²
   - 500-1000m²
   - 1001-1500m²
   - 1501-2000m²
   - More than 2000m²

4- What is the usual size of the built area that you design?
   - Less than 200m²
   - 201-300m²
   - 301-400m²
   - 401-500m²
   - More than 500m²

5- What’s the usual number of bedrooms that you design?
   - 1-2
   - 3-4
   - 5-6
   - More than 6

6- Type of air conditioning?
   - Window
   - Split unit
   - Central system
   - Other, please specify..........
الباحث: م. محمد محمود آل حرم

جامعة وولفرهامبتن كلية الهندسة
دولة الإمارات
العمارة والملكية المتحدة
رسالة الدكتوراه بعنوان: العمولة والعمارة في دولة الإمارات - نحو إعادة صياغة عصرة إنسانية

1. ما هو المطار الأكثر طلبًا من قبل السكان الموطنين؟
   - المطار التقليدي
   - المطار الحديث
   - كلاهما بنفس المستوى

2. غالبًاًا، من أين تأتي فكرة التصميم؟
   - من المالك
   - من افكار المصمم
   - تطوير تصميم بين الطرفين
   - تصميم جاهز

3. غالبًا ما هي مساحات الأرض التي يتم تصميم المساكن عليها؟
   - أقل من 500 متر مربع
   - 1000-500
   - 1500-1001
   - 2000-1501
   - أكثر من 2000 متر مربع
   - أقل من 200 متر مربع
   - 300-201
   - 400-301
   - 500-401
   - أكثر من 500 متر مربع

4. غالبًا ما هو عدد الغرف في المساكن التي يتم تصميمها؟
   - 2-1
   - 4-3
   - 6-5
   - أكثر من 6 غرف نوم

5. غالبًا ما تكون الكيفية التي يتم تصميمها
   - تكييف عادي
   - كهف (سلبية)
Interview (Experts)

1- What are the main changes in UAE due to globalisation last 30 years?
   o Social life
   o Environmental
   o Architectural urban
   o Economic
   o Other, please specify.......................  

2- What are the main problems in UAE, due to the current urban development?
   o Pollution
   o Dehydration
   o Traffic and density
   o Other, please specify.......................  

3- Do The UAE face social problems due to the current urban development such as:
   o Alienation
   o Identity
   o Class differentiation  

4- Do you think that the globalisation impacts affect the urban development?
   o Yes
   o No  

5- Do you think there is relationship between the Low cost Labour and the size of houses?
   o Yes
   o No  

6- Do you think there is a relationship between the Low cost Labour and the crime?
   o Yes
   o No  

7- Do you think the gap between rich and poor classes is increased?
   o Yes
   o No
Interview (Decision Makers)

1- What are the new requirements according to globalization impact?
   • In Decision Process?
     o Yes
     o No
   • In Standards, Quality and Codes?
     o Yes
     o No
   • In Approaches and Techniques?
     o Yes
     o No
   • In the required Service’s Spaces?
     o Yes
     o No

2- Are there changes in the costumer’s requirements in the following aspects:
   • Design and style?
     o Yes
     o No
   • Type of Material?
     o Yes
     o No
   • Size and spaces?
     o Yes
     o No

3- Do you think there is weakness in the level of offered infrastructure due to the fast urban development?
   • Electricity
     o Yes
     o No
   • Water Supply
     o Yes
     o No
   • Sewage network
     o Yes
     o No

4- Did you think that the Open Door Policy is successful in UAE in these actors:
   • Economic actor?
     o Yes
     o No
   • Social life?
     o Yes
     o No
   • Urban and architecture?
     o Yes
     o No