UNIVERSITY OF SOUTHAMPTON

FACULTY OF ENGINEERING SCIENCE & MATHEMATICS

SCHOOL OF GEOGRAPHY

Globalisation and Urban Development: A Case Study of Dubai's Jumeirah Palm Island Mega Project

By

Ibrahim Abdul Rahman Al Darmaki

Supervisor:

Professor Steven Pinch

Thesis for the degree of Doctor of Philosophy

September, 2008

UNIVERSITY OF SOUTHAMPTON

FACUALTY OF ENGINEERING SCIENCE & MATHAMATICS

SCHOOL OF GEOGRAPHY

Doctor of Philosophy

GLOBALISATION AND URBAN DEVELOPMENT:

A CASE STUDY OF DUBAI'S JUMEIRAH PALM ISLAND MEGA PROJECT

BY IBRAHIM ALDARMAKI

ABSTRACT

Mega projects have become an important new development strategy in globalizing cities, and a new or emerging form of development in economic, technological, social and political life, influenced by global flows of capital. Despite being acknowledged as an important factor in globalizing economies, the role of mega projects has failed to receive appropriate research attention in terms of analysis of the various advantages and disadvantages that they carry. This research seeks to achieve a better understanding of the nature of urban development, and its implications for Dubai. The research involves an assessment of whether urban mega projects actually develop as a result of globalisation processes and draws conclusions on conflicting discussions about economic growth and social change. The research aims to establish Dubai's attitudes towards urban mega projects and globalisation, focusing on the ways the phenomenon is conceptualized, and on understanding the impacts of the new urban paradigm, with particular reference to the Jumeirah Palm Island mega project.

The research sets out to examine three key issues; firstly what are the effects of global economic factors and foreign direct investment, and how have economic factors have become a catalyst for development? Secondly, the thesis considers the technological and architectural features of large-scale development. Thirdly, it focuses on new social trends and the extent of public participation, and analyses the political dimensions of globalisation. The research reveals that whilst there are some similarities with other mega projects around the world, the Jumeirah Palm Island mega project is the product of a unique development policy. There are many global elements in the Palm Island development but there is also a significant regional dimension, as in many of the underpinning capital flows. It is argued that the adoption of a mega projects policy may have had negative consequences on the indigenous population of Dubai, which has become a minority 12% of the total population.

Contents

Contents

List of Tables

Contents

List of Figures

Contents

Acknowledgments

My biggest debts is to Allah the beneficent, the merciful, who granted me time, health and help to complete my postgraduate education. I acknowledge the government of the UAE for their encouragement and support in my academic pursuits. This thesis is dedicated to the UAE government and people as repayment for their countless and continued support.

I am indebted to my supervisor, Professor Steven Pinch, for his careful reading and insightful comments, which have immeasurably improved the final version of this thesis. The author's gratitude also goes to Dr. Alan Latham for his constructive comments on earlier versions of the literature review chapters. I extend gratitude to Dr. Nick Phelps, who inspired me with many interesting ideas on the structure of some chapters.

The author extends thanks to other Dubai government departments, companies and institutions, in particular, Nakheel, the Municipality of Dubai, the Department of Economic Development, the Statistical Center, the Dubai Train Project Office, Emmar, Deyar, many real estate agents and several other bodies. I am extremely grateful to the staff for their various kinds of assistance. I am grateful also to many persons, government officials, private company senior officers and local and expatriate residents, who gave up valuable time to take part in interviews. I would also like express my sincere thanks to two very special friends, Yousif Muhammad and Fahad Musa, who took over some responsibilities during my time in England. In Southampton, the greatest thanks are to my good friend Phil Myles for proof reading my thesis drafts and his readiness to check my translations and for sitting up to discussing some of my interpretations from Arabic. The author must thank his parents, his wife and children for their patience and apologise for the stress and absences from home.

I would like also to acknowledge the staff of the department of education in the UAE's embassy in London, for their cooperation and supportive services. In addition I would like to thank members of the school of geography for providing a friendly

environment for study. And last, but of course not least, my thanks to my colleagues in the postgraduate research student office for their friendship and helpful discussions.

Ibrahim Al Darmaki
 September, 2008.

CHAPTER ONE

INTRODUCTION

1.1 The research topic

Globalisation drives urban change, and influences the language of urban policy-making and politics. Academics study how cities market themselves in the global context (Duffy, 1995; Whitson and Macintosh, 1996). The processes involved in globalisation and the responses to them have important consequences for the development of what is arguably a new urban policy paradigm for cities. However, globalisation is not a uniform process. In addition to the consideration of traditional factors, such as geographical location and resource availability, the effect of globalisation at the regional and local level depends to a great extent on the existing social, economic and regulatory structures and the way that these impact on global/local interplay. We have seen the growth of "world cities", such as London, New York and Tokyo, but there are a host of other cities around the world which are trying to develop their own position in the world order (Sassen, 1994). How they go about this and how successful they are depends on their vision and on their ability to achieve that vision.

In the Middle East, the situation is best illustrated by the main cities in the United Arab Emirates (UAE), namely, Dubai, Abu Dhabi and Sharjah. In efforts to become established on the world economic map, a unique new form of urban development has been introduced in Dubai, the Palm Islands. Indeed, in no other Middle Eastern region have urban development and patterns changed more profoundly during the past decades than in Dubai (Pacione, 2005). Because of Dubai's unique location on the world map, the city is striving to become a global city through adopting a distinctive mega project-led development strategy. Dubai's successful bid for urban mega projects offers a great opportunity for the city to further its way to becoming a global economy. Federal and local government are aspiring to re-brand Dubai as a global city through offering various support and through attracting global capital.

An increasing globalisation of production, finance, trade and information has initiated a widespread renegotiation of local borders and of local-global articulations (Pred and Watts, 1992; Pred, 1995). As old borders and cultural understandings are reworked, new kinds of spaces are often opened up in the interstices. In the case of Dubai, in the late 1990 and early 2000s, global/regional flows of capital and new cultural characteristics and restructuring opened up new spaces, re-shaping Dubai's landscape. According to some observers, it is '… perhaps the world's fastest-growing global city and intercontinental hub', but it is also a '… non-Arab society planted in the heart of Arabia' (Hirst, 2001). On the same track, Nicolson (2006) describes Dubai as 'the fastest-growing city on earth', due to its huge spending on construction, and noted that it was branching into other global sectors, being 'about to swallow up [the shipping company] P&O in its bid to be a global maritime power'.

Urban development in Dubai grew because of the huge flow of capital into the city. From 2000 and up to the first half of 2004, changes to the infrastructure gave the sense that the city was becoming global. Many trends could be identified, such as the 16% growth in the national economy in 2005.

The last few years have therefore witnessed a plethora of newspaper articles, attempting to describe and analyse this newly emerging city. For example, the well known German newsmagazine, *Der Spiegel,* included an article entitled 'The Gold of the new Pharaohs'. New developments were described, and it was noted, with alarm, that Dubai was likely to become the most modern city in the world, a metropolis that would merge East and West, and become a mixture of Singapore, Seattle, and Saint Tropez (*Spiegel Special*, February, 2003: 126-129).

Dubai's design and planning regime is in sharp contrast with most post-industrial cities in at least three ways. First there is the issue of scale. The city has become a massive construction site; sixteen percent of all the building cranes in the world are currently located in Dubai (Park, 2005). The construction boom in Dubai is fast paced, as it employs a massive workforce, and building goes on around the clock. As one Tower Crane Operations Manager in Al Naboodah construction company has said: "At the most, we as a contractor had about 11,000 men working at the airport. Sites are just flooded

with workers" (Landais, 2006). This amazing development and horizontal and vertical spread continues without showing any signs of slowing down.

Secondly, there is a focus upon mega projects. The explosion of these mega-scale structures and satellite cities suggest a new urban paradigm. Relying on strong media campaigns, mega projects are planned and announced almost weekly. From the early 1990's, the strategic plan focused on tourism, as well as global and regional challenges. A strategy for mega project development was adopted to expand the economy and put Dubai in the global limelight. Urban Mega Projects (UMPs), promoted by the forces of globalisation, have become a key phenomenon, which needs to be studied in depth.

Thirdly the private sector has gained strength and takes increasing responsibility for processes that the traditional urban authorities were finding difficult in the mid-nineties. Large-scale projects (UMPs) rely on the real estate sector. They are characterised by enormous investment, the extensive involvement of global architects and contractors, and unlimited support from government, represented by the ruler of the Emirate himself. Under strong state direction, Dubai passed through several stages of rapid re-export development from the early 1980's. This research will look at how UMPs are used as a way to produce a new image, ultimately to alter the urban economy and to gain better global position. The city has large national real estate corporations and focus on financial flow from government, other Gulf Cooperation Council countries (GCC) and foreign investors. A diversity of strategies, 'city branding', 'place marketing', and global-style spectacles are deployed (Cochrane and Jonas, 1999). Throughout the last decade, a number of large-scale development projects have been proposed and implemented in Dubai, the most important among them being the three artificial Palm Islands, one of which is Jumeirah Palm Island (JPI).

This research attempts to provide an understanding of the specific context and reasons for the boom in urban mega projects in Dubai and relates this to the debates over globalisation and its impacts. This will set the stage for a linkage between urban mega projects and globalisation. The choice of Dubai as a study case is not only because it is the business capital of the UAE, but because it has actively sought growth and global status over the last twenty years. Dubai has developed into a global crossroads, and is

now thriving on a new type of post-global condition. Most Arab cities compete to imitate Dubai in its unprecedented effort to build the tallest, the biggest and the largest ever architectural and urban statements (Al Raouf, 2006).

The development projects create new urban landscapes and a new form of urbanization. This research seeks to provide new analysis of how urban mega projects change are influenced by four dimensions of globalisation – economic, technological, social and political – and how they interplay with local factors. This research identifies key parameters and issues in the mega project context, particularly using the example of JPI, with the aim of revealing the spatial and development dynamics of what are now among the largest urban agglomerations in the world. The JPI is located in a city that has developed dozens of mega-projects since 2001; regional and global investors have contributed to supplying resources to the construction industry, and purchased JPI housing units.

1.2 The significance and purpose of the current research

Globalisation is a common issue for theoretical debate, but few studies have properly understood the complex relations between global potential, mega projects, and the forces and mechanisms of urban change. Recently, there has been some focus in economics and the social sciences on urban mega projects, especially transport infrastructure and planning. Global economic forces interact with local actors, traditions and culture to produce specific local outcomes. One of the attractions of mega project research is that it can question implicit assumptions about globalisation, economics, technological, social, and political relations.

Academic research draws attention to the profound urban changes in world economic centres (Wu, 2003), such as in the Asian Pacific region (Olds, 2001). The literature on globalisation and global cities is growing in both developed and developing countries (Lo & Yeung, 1998). However, we still have much to learn about the detailed impact of globalisation on cities and variations in experiences in different parts of the world. In addition, although there has been abundant research on the impact of globalisation on urban and development planning in various geographical areas, there is a

distinct lack of studies on the Middle Eastern region. This is in spite of the increasing prominence and role of these cities in the regional/global economy as an emerging regional gateway and headquarters. The extra use of the mass media and technology in all urban activities encouraged my interest in this field of the study. Increasingly, urban patterns in Dubai have become similar to those found in other Asian cities. In particular, this research attempts to describe the new urban policy paradigm, in comparison with those in other centres, such as Vancouver and Singapore.

The JPI represents a good case for examining the processes and relationships between global flows and new urban forms of development. Dubai represents a composite quality, reflecting global desires and local needs, embodying the effect of global economic processes. At the same time, it shows the important influence of local state decision-making policies. Dubai has experienced extreme physical development over the last seven years. The area chosen is also a major strategically important node within the Middle East region and North Africa (MENA). JPI was launched in 2001 as the first of the three Palm Islands. It is partially completed, enabling some preliminary assessments.

This research allows a great opportunity to study the impact of globalisation on the largest economy in the MENA region. The thesis attempts to map out local experiences of global and regional changes, the first research objective being to examine how global economic factors and national political restructuring are reflected locally and the extent to which this can catalyse urban mega project development. The thesis attempts to fill some gaps in the literature on urban development in the UAE.

By placing these aims within a local and global context, the research shows how, since 2001, Dubai has joined the ranks of cities and regions using mega project development policy as a method of urban development in its recent economic strategy. It is perhaps more germane to argue that the development has illustrated a local response to broader global and national change. In other words, the importance of studying urban developments lies in the way that they illustrate global experiences and responses to economic change. The sudden development of masses of urban projects is an unusual occurrence, and deserves investigation. Special consideration needs to be given to the inflow of capital for these projects with a focus on where this capital arises.

The research aims also to explore the rationale for mega projects in Dubai, and to understand the roles of the government and private developers in going global. The research attempts to make a contribution to knowledge through its case study on operations, driving forces and dynamics.

The thesis examines some of the ways in which Dubai is becoming increasingly embedded in the global new urban system. It highlights how the city is beginning to exemplify many of the economic, technological, social and political characteristics associated with globalisation, and discusses a suitable framework for understanding the transition.

1.3 Research questions

This thesis concerns globalisation, mega project issues and impacts on urban policy, community action, and broader economic, cultural and political contexts. The research basically attempts to understand the rationale and promotional strategy behind urban mega projects in Dubai. Broadly, the following key questions are addressed: What is the role that globalisation plays in the understanding of contemporary urban development? To what extent did new global flows of capital, images and labour force produce progressive economic and social outcomes?

Specifically, the chapters set out four more questions that guide the research. First, what is the economic dimension of globalisation on Dubai mega projects? This question aims to examine how global economic factors are manifested in Dubai's mega projects, and to identify foreign direct investment in the JPI mega project. How have economic factors become a catalyst for development? These questions can be developed through other sets of questions, such as: Why is Dubai doing this? And why so fast? What is the local urban development strategy? What factors in the policy making process contributed to this situation? Secondly, what are the technological mechanisms that have accompanied the implementation of large-scale development? To what extent are urban mega projects a feature of the process of contemporary urban Dubai? I have analysed the actors and the role of global architectural experts. Thirdly, I focus upon the new social trends that have been brought to the city's communities by the urban mega projects. I

have examined the extent of public participation. Finally, I analyse the political dimensions of globalisation, through answering the question: Did new global/regional interactions contribute to Dubai's mega project sustainability? What are the main internal and external risks that can affect Dubai mega projects? An analysis of decision-making processes by government was made to answer these questions.

The goal is not only to analyze a project and its evolution, but primarily to consider the ways in which the case can contribute to our understanding of theoretical issues. These sets of questions are answered in depth. They offer helpful insights into more generic issues, such as the relationship between globalisation and the new urban policy paradigm in Dubai.

1.4 Structure of the thesis

This research contains ten chapters. This brief introductory chapter has presented the research subject, significance, aims and research questions. Chapters two and three set out the principal concepts of the study and place them within the context of current debates in the literature. The chapters attempt to conceptualise urban mega projects in the era of globalisation in a new way. They start by reviewing the concept of globalisation in order to achieve the most appropriate definition of the concept for the research. Therefore, the main points about globalisation and urban development are presented together. It then proposes that the fundamental factors in globalisation can provide a theoretical background for urban mega project research in Dubai. Chapter 3 sheds light on urban mega projects as a new strategy for urban development in cities. This chapter discusses whether mega-projects are expected to stimulate high levels of regional economic growth, and whether they are expected to provide employment opportunities for the local population, to attract new residents to the region, to stimulate existing and new businesses, and to provide numerous additional economic benefits.

Chapter four addresses the methodological issues, and presents the main research design used in the thesis. A mixture of primary and secondary sources is used to analyse the development of the mega-structures. The first section explains the reason why a qualitative method is employed in this thesis. The next section deals with the design of

the case study. Then the chapter addresses in detail the method adopted for interviews. It spells out the case study method and the central questions which are the main foci of the interviews. The general framework of the interviews is also explained. In the final section, the method of data collection is discussed.

Chapter five concerns the transformation of the global urban environment in Dubai, looking at the administrative and planning systems, and discusses the changing planning phases of the city. Because the political system in the UAE is quite different from those of other countries, it is a prerequisite to make clear the nature of urban development policy and its influence on urban mega project decision making. Finally, the chapter provides an analysis of the case of the JPI mega project, discussing the ways in which it was planned and implemented, how Jumeirah Palm was created, the proposed land uses and activities and the infrastructure and utilities that will support the development.

The next four chapters describe the dimensions of globalisation, examining what globalisation can tell us about economic, technological, social and political aspects. Focusing on the outcomes of globalisation, the thesis' core chapters (6, 7, 8 and 9) outline various dimensions of globalisation in the JPI mega project case study. Chapter 6 examines the question of the economic dimension. Chapter 7 analyses the technological features of the city's projects. Chapter 8 deals with the social dimensions of globalisation in Dubai. The aim is to analyse the experience of Dubai's urban mega projects in terms of globalisation and how it has impacted on social development. The core work of Chapter 9 is to provide answers to the following questions: Is the political system's support for mega projects progressive and productive? Are there internal or external threats to Dubai's mega projects?

The concluding chapter 10 outlines the main results and findings of the research and points to future directions. The research sought both to identify differences and similarities in the process of urban mega project development across the globe, and to explain them by reference to differences in the political, economic and social context. This chapter attempts to pull together the various dimensions of globalisation to identify the impact of urban mega projects as a new urban strategy in Dubai. According to the

evaluation in this thesis, urban mega projects in Dubai have shown the economic benefits of globalisation, but they also have significant impacts on the social and economic structure of the city.

CHAPTER TWO

GLOBALISATION AND URBAN DEVELOPMENT- AN OVERVIEW

2.1 Introduction

According to Albrow (2000) development studies have moved from a theoretical crisis to a paradigmatic crisis, which has prompted some to replace development studies with something called 'global studies'. He considers whether post-modernism, post-development, and globalisation are capable of offering new exciting paradigms with which to explain development. Recently, various concepts relating to globalisation have become common in the analysis of economic change and transformations in urban development. Progress in technology and modern telecommunications have opened the way to knowledge and ideas-exchange amongst populations, social movements, multinational firms and governments. These processes affect local and national policy in a strong way (Woods, 2003). The sections of this chapter will discuss the nature and the effects of these transformations.

The key purpose of the chapter is to develop a theoretical framework to understand the relations between the rapid transformations in urban development in Dubai, and also the U.A.E., and the role of globalisation in them. This chapter has three tasks:

1. It examines the key frameworks through which the concept of globalisation has been understood. Globalisation is an enormously complicated and slippery term. While there is a good deal of consensus that something is happening – the world is becoming more connected, more interdependent, and so forth – there is less consensus about how this 'something' should be understood. Indeed, there is a good deal of debate as to what the key drivers of globalisation are. For some,

globalisation is a purely economic process, for others it is as much about cultural and political processes. In this chapter, we wish to provide a broad overview of the different theoretical approaches to globalisation.

2. Following on from this, the chapter will then explore how globalisation has been altering urban landscapes, with the particular purpose of understanding the rapid transformations in Dubai from a theoretical point of view. A range of writers, from Manuel Castells (1989), to Saskia Sassen (1991), and Peter Taylor (2003), have described the processes of globalisation and their potential to affect urban development. The chapter will also explore how globalisation has been influential in the ways in which new urban policies are framed. It will also describe the way in which local areas have adopted to changes brought on by globalisation, through what is termed "New Urban Policy". The study tries to understand urban branding or the "representational logics of urban intervention" (Jensen, 2005).

3. Finally, the chapter will answer the question as to what extent have cities been affected by the economic, technological, social and political dimensions of globalisation, and to what extent urban development is affected by globalisation.

2.2 What is Globalisation? How can we understand it?

Globalisation is a relatively new concept in the social sciences, although the process itself is an ancient or at least not a novel experience. The core idea of globalisation as a social scientific concept is that many current problems cannot be considered within the nation state, but need studying at an international, or indeed a global level. The reasons for this are twofold. Firstly, qualitative and quantitative changes in the economic structure of production have reduced the importance of the nation state. Books such as Ohmae's *The borderless world* (1990) and *The End of the Nation State* (1995), Naisbitt's *Global Paradox* (1994), and O'Brien's *Global Financial Integration: the end of geography* (1992) have received perhaps excessive attention (see Martin, 1994; Clark and O'Connor, 1997; Yeung, 1998). The caricature presented by

such books is of a world moving rapidly towards a globalised end state. Another group of scholars holds that the state continues to exercise influence over global economic transformations (Cox, 1991, 1996; Evans, 1997, 1998; Helleiner, 1994; Panitch, 1996; Sassen, 1998a, 1999; Strange, 1996, 1997; Weiss, 1997, 1999). Sassen emphasizes governments' part in 'implementing the new global economic systems and in producing the new legal forms within which such systems operate' (1996: 33), while Strange likewise notes that states may provide a framework of legal rights and duties within which other actors influence outcomes (1997: 70; Evans, 1997: 66). For Panitch, 'the role of states remains one not only of internalizing but also of mediating adherence to the untrammelled logic of international capitalist competition'(1996: 93).

Secondly, a transformation in the technological base and geographical reach of the mass media also means that many social and cultural processes now transcend national boundaries. As Kelly (1999) pointed out, it is a world of intimately interconnected economic and cultural relations, unprecedented in the intensity and extent of the ties they create across space. In this representation, spatial variation simply provides a mosaic of diverse but converging containers for disembodied flows of capital, images, etc. Capital is disembodied from its national origins and negligent of the context in which its circulation becomes fixed; culture is no longer meaningfully associated with place, and the existence of a globalised market is taken to mean that the market dictates global relationships (Kelly, 1999). Place and community become relevant only in a relative sense and cultures integrate and converge through flows of images and information. Developing the ideas of Woods (2003), and focusing only on the economic and political dimensions of globalisation, we can say that globalisation consists of two interlinked factors: the expansion of world markets, the challenges to nation states and corporations, and the appearance of novel, non-geographically bounded, social and political movements. These factors reflect aspects worth noting and needing further detailed discussion.

2.2.1   The expansion of global markets

The first key aspect of globalisation is the change in global economic activity. The change in technology and elimination or reduction of governmental constraints creates multinational networks of production, trade and finance. This big opening-up and freedom persuades some people to use the label "world free of territories" (Ohmae, 1990). Multinational firms create new production networks that use modern means of communication, and flexible techniques to spread their activities all over the world. In trade, globalisation means an increasing quantity of goods and speed of service for global consumption. Sassen (1997) argues that globalisation has led to towards a transnational scope for the world's economic activity. There has been a decisive shift in the nature and organization of activity, with international trade in raw materials and manufactured goods being eclipsed by flows of goods, capital, and information that take place within and between transnational conglomerate corporations (Castells, 1998). In the new global urban hierarchy, some cities represent themselves as "world cities". They have taken over the coordinating roles of worldwide economic activity. Besides that, they have been functioning as international market places for buying and selling of capital and expertise. The relative positioning of others is determined in relation to these global cities (Gedikli, 2001).

Finally, according to writers such as Sassen (1991; 2002), globalisation has been central to the restructuring of international finance sectors over past three decades. Through the production of a range of new financial vehicles, the international financial industry has utterly transformed how the global systems operate (Woods, 2003: 10). Sassen (1990) argues that global economic forces tend to override local economic forces. In her study of New York, London and Tokyo, Sassen (1991) detailed how the growth in information technology had permitted the concentration of financial services in these "world cities". She showed how this concentration was leading, on the one hand, to the creation of a new urban elite, working in corporate headquarters, and, on the other, to the creation of an underclass of urban service workers. She argued that world cities were increasingly embedded in the international economy. Whilst she identified these three cities (New York, London and Tokyo) as being at the top of the international urban

hierarchy, she has also made it clear that the same pressures affect other cities (Sassen, 1994).

2.2.2 The transformation of politics

The second factor involved in globalisation is political. Some argue that there is a new global system appearing, where the political territories become of relatively little importance (McGrew and Lewis, 1992). It is important to consider these debates, since they relate to the effectiveness of local development strategies.

The functioning of the world economy is determined by both markets and the policies of nation states. The political purposes, rivalries, and cooperation of states interact to create the framework of political relations within which economic forces operate. Yet, economic and technological forces shape the policies and interests of individual states and the political relations among states. For this reason, both political and economic analyses are required to understand the actual functioning and evolution of the global economy. According to Scott and Storper (1992) the social construction of institutional and regulatory structures at a regional level is necessary in order to secure economic order and continuity. Savitch (1988) took the view that cities had a degree of autonomy about their response to similar economic pressures. He concluded that the different political responses in the three cities studied, New York, Paris and London had shaped both physical and social development. Fainstein, *et al.* (1992) also concluded from their comparative study of urban development in London and New York that public policy could modify the outcomes of the process. They acknowledged that both cities were being restructured as a result of changes in the global economy, and that there were similarities in the socioeconomic outcomes. They noted that during the 1980s both cities had policies which promoted growth, particularly through investment in urban development projects, such as Battery Park City in New York and the London Docklands. Harding and Le Gales (1997) carried out a more recent review of the impact of globalising forces on urban change and policy in Britain and France. As well as assessing whether globalisation was eroding the distinctiveness of places, they considered whether nation states were losing their superiority relative to subnational levels of government. They found evidence of growing

urban entrepreneurialism and selective strengthening of urban-regional institutions. They pointed out the continuing importance of central government, particularly in implementing redistributive policies.

There are diverse opinions about the significance of local development strategies in the context of a more open global economy. Most commentators think that local cultures and policies can continue to mollify the impact of global forces, both in terms of fostering development and of encouraging a more even distribution of wealth within localities. However, some, such as Gereffi, see the nation state as declining in importance as a locus of analysis and prefer instead to view the world economy in terms of commodity chains and product worlds (Gereffi, 1996). Others, such as Ohmae (1995), take the argument to greater extremes and do not stop far short of suggesting that the state has ceased to function as an effective economic entity and that the future lies with regional economies. Such arguments have stimulated a growing literature on the continued relevance of the state as an entity of economic regulation, political power, and cultural formation (Hirst and Thompson, 1996; Hirst, 1997; Nexus, 1997). Yeung (1998), for example, argues that even global markets are socially regulated and that nation-states form the key arena for such regulation. However, it was noted that there are significant qualitative changes in the organisation of the local state in many different localities. The ability of local government to collaborate successfully with other organisations is central to this process. Thus the state continues to reinforce the role of territoriality as an important organizing principle in the global economy. The state's position remains important, because of its numerous roles in the economy: guaranteeing the rights of capital, creating the conditions necessary for the global expansion of domestic capital, acting as a collective capitalist in its own right, regulating the 'global' economy within and beyond its jurisdiction, and performing a key role in the internationalization of politics (Yeung, 1998). Although cities cannot be handled in isolation from their nation-states, the international relations of the country are also a significant determinant. Practical experiments indicate that the nation-state can make some transformations in its specific structures, so as to increase the capability of multinational firms to act more freely (Gedikli, 2001). For all these reasons, the state is seen as far from defunct. Thus, 'it is not a question of whether capital's globalisation results in the decline of the state, but

rather how the state continues to participate in capital's globalisation in order to reproduce itself' (Yeung, 1998:293).

If the above provides a basic introduction to the idea of globalisation, there is nonetheless much debate as to how these processes should be understood. Drawing on the typology developed by Frans (2000), it is perhaps useful to discuss in some detail the ways in which globalisation has been framed analytically. Frans described nine main types of position on globalisation:

1. He described Martin Albrow, Partha Chatterjee and Manuel Castells as *true globalists*. They look at the major social, political and economic transformations taking place on a global scale. They do not belong to modernity, late-modernity, or post modernity; they indicate the coming of a new era: globality. Some authors feel a sense of inadequacy in discourse to describe and analyse the global age. They still find it necessary to make use of concepts developed in the modern era, which somehow fail to describe the true nature of globalisation.

2. The microchip revolution has accelerated into the 21st century. Computers have had such a profound effect on production, consumption, and inter-personal relations that *cyberspace globalists* (Mike Featherstone), like the true globalists, emphasise its role in the major transformations that are have taken place. The cyberspace globalists believe that domain is going to be the major political, economic and cultural arena for the 21st century.

3. For *neo-liberal globalists* (Kenichi Ohmae, Francis Fukuyama, John Naisbitt), globalisation is a process with an ontology all of its own, the global spread of market logic, liberalism, and democracy. This group is rather heterogeneous and in general structuralist, in the sense that globalisation has an inner and irresistible logic. 'Go with the flow' and 'all will benefit in the end' seem to be the message.

4. For *cosmopolitanist/new-age/postmodernist/culturalist globalists* (Rajni Kothari, David Korten, David Held), globalisation is a fact, but mainly a cultural phenomenon. Spaces

and cultures merge, and identities outside of tradition strengthen in homogenization as a result of globally diffused information. Traditional identities are under threat; indigenous people are alienated from their cultural heritage through the global movement of consumer capitalism. Key words are social movement, indigenous movement, environmentalist movements and increasingly global (transnational) coalitions.

5. *The hybridization globalists* (Ulf Hannerz, Arjun Appadurai) interpret globalisation as a dialectical process where global meets local. Authentic culture is rejected. Culture becomes hybrid, and probably always was.

6. *Neo-Marxist globalists* (Ellen Meiksins Wood, William Tabb) see globalisation in terms of capitalism. They advocate a re-working of the classical Marxist analytical framework on a scientific basis. They see a time of pure capitalist logic no longer contaminated by unequal exchange, on international markets. Class struggle is becoming internationalized.

7. *The historical globalists* (Paul Hirst, Grahame Thompson, Deepak Nayyar) also take the view that globalisation is nothing new. The claim that it is new is fashionable and exaggerated. Periods of history have seen tremendous growth in the internationalization of money, trade and economics, such as between 1870 and 1914, a period of comparable integration.

8. *The non-globalists* (Michael Mann) insist that there is no such thing as globalisation. At most, there is regionalization, but even that is nothing new. The whole globalisation discourse is one without any foundation. These critics tend to concentrate on the nation-state, which they still consider to be as important as ever. In this they are diametrically opposed to the globalists who tend to concentrate in their discourse on the demise of the nation-state.

9. The *diehard modernists* (Ernesto Laclau) argue that globalisation is nearing its end. Enlightened modernity has spread to all corners of the globe, leading to such events as the Universal Declaration of Human Rights. Diehard modernists also feel a decline in

universal norms and values, fed by post-modernism, post-colonialism, a reawakening of fundamentalism and "a growing balkanization at global level". The *diehard modernists* think that international solidarity has become fragmented along with universalized values and norms concerning human rights and emancipation. In the meantime, enlightened autocrats see a chance to bolster political power using a different discourse.

By itself, none of these views would seem to capture the full complexity of globalisation processes. However, we can conclude that the important elements in the evolution of the global system are the expansion of trade, capital flows (particularly direct investments) and a wave of new technologies. It seems that cities are becoming the new sites for global manufacturing production and increasingly play a key role in economic transformations. Indeed, economic growth and development among countries throughout the world are highly dependent on the international activities that take place within its cities. In sum, globalisation has political, economic, financial, technological, environmental and cultural dimensions. Changes and transformations related to globalisation have taken place in all the different dimensions. The next section presents some understanding of how urban transformation has happened in cities through the lens of economic globalisation.

2.3 Globalisation, Cities and Urban Development

From the late 1980s onwards there has been growing interest in the material bases of globalisation. Among the factors mentioned in this regard are: (a) the emergence of 'time-based' competition, which prompts firms to shorten time entering into cross-border collaborative research on the basis of strategic alliances, licensing and joint ventures; (b) the paradigm shift from so-called Fordism to post-Fordism[1], which suggests that the next long wave of economic growth depends on flexible production, knowledge

---

[1] Post-Fordism: A new regime of accumulation based around flexibility which it is assumed has replaced, or is about to replace, the Fordist regime of accumulation based on mass production, similar to flexible accumulation but in contrast with Fordism and neo-Fordism. Used more generally to refer to lower level concepts such as labour practices and forms of industrial organisation (Pinch, 1997: 142).

and design intensity, innovation, scope economies and much shorter product lead times (Lipietz, 1987; Ohmae, 1990; Amin and Thrift, 1994; Jessop *et al.*, 1999 228-231); (c) the transmission of information through the information technology revolution and material resources (Castells, 1991 and 1998); (d) the impact of the 1980s neo-liberal turn which introduced financial deregulation, liberalization, and greater opportunities for cross-border flows, cooperative alliances.

Important contributions to this approach include studies on global finance and the movement of credit and debt across time and space (Strange, 1986; Thrift and Leyshon, 1994), the rise in the pension fund economy (Marden and Clark, 1994), global and regional trade agreements and regimes (Agnew and Corbridge, 1995), the advance of new technologies (Castells, 1989) and the emergence of a transnational capitalist class (Sklair, 1997). These studies and theories have certainly furthered our understanding of the transnational nature of globalisation. Given their concern with the impact of generalized phenomena such as money and information, however, they have been criticized on two grounds. First, they run the risk of presenting an image of the global economy as homogenized and standardized, and, secondly, in consequence, they are insensitive to the heterogeneities and multiplicities involved in the re-articulating of spatial scales and temporal horizons (Mitchell, 1997: 104).

What is apparent from the discussion above is that far from being place-less, globalisation is a process that is concentrated in particular sites, particularly urban ones. Our concern in these discussions is to focus on the important influences of globalisation on the forms of urbanization in the world. In particular I will focus on three elements of the relationship between globalisation and urban development. Firstly, I will simply outline the ways in which globalisation as an economic process is changing the ways cities function. Secondly, I will look at how globalisation, both as an empirical reality and as a kind of ideological leitmotif, has reshaped how urban policy makers approach their work. Thirdly, I will look at the way in which urban policy makers have sought to use globalisation as a kind of policy tool.

Several common tendencies shaping urban development throughout the world can be discerned. Firstly, the progressive urbanization of the globe is certain. Secondly, there will be growing interaction between urbanization and globalisation. The third characteristic of urban development is the likely continuing devolution of powers and responsibilities to local authorities and civil bodies. This process began in the 1990s, when traditional modes of urban governance were found inadequate (Lo, and Yeung, 1998).

Many researchers have studied specific world city cases and compared specific details of particular places and institutional contexts in relation to geo-economic trends (see, for example, Keil, 1999; Keil & Lieser, 1992; Mollenkopf & Castells, 1992; Soja, 1989; Todd, 1995; Grosfoguel, 1995; King, 1991). Such contributions interpret local outcomes with reference to a city's evolving structural position in the world economy. According to Friedmann (1986: 69), world city theory is about spatial organization and international labour, leading, according to Taylor (2003) and Sassen (1991), to definitions of world cities with an emphasis on the production of financial and service products.

Castells defines globalisation as a 'network society', with world cities as crucial nodes. He identifies global cities as "the most direct illustration" of hubs and nodes (1998:415). This means that global cities are centres of advanced services, creating new knowledge within a network of information flows (Taylor, 1999). In 1999 the Global and World City project (GaWC) attempted to define and categorize world cities, ranking them according to pre-requisite criteria of "advanced producer services", such as accountancy, advertising, finance and law, by international corporations. A primary characteristic of global cities is their function as command centres for the operations of multi-national corporations, as key centres around advanced services, information-processing activities and knowledge-based industries (Sassen 1991, 1994; Taylor 1997).

Castells (1998) believes that networks are the basis of a new social morphology. Taylor reviewed Castells' (1998: 386) consideration that cities are not places but processes, and by this is meant 'a process by which centres are connected in a global network'. Global location policy produces worldwide office networks generating world

The Work of Olds

Olds's (2001) study on Pacific Rim mega projects is especially relevant to this thesis, since he has outlined five key aspects of globalisation in order to assess its effects on urban spaces:

First, there is the development and restructuring of the international financial system. Olds argues that all sectors of the world economy have been affected by recent developments. The nature, form, pace, and scale of finance and capital has shifted, with the introduction or restructuring of equity and debt instruments, such as mutual funds, and the lowering of barriers on cross border capital flows. These changes have enabled a diverse array of actors to become involved in worldwide activities. He adds that foreign direct investment (FDI) flows grew rapidly in terms of volume and complexity during the 1980s and 1990s.

The second aspect is the growth of the international property market. The property markets are one sector that is being radically transformed by the globalisation of finance, because investors are seeking to diversify their investment portfolios in both a sectoral and a geographic sense, as a perceived opportunity to improve risk-adjusted returns. According to Sassen (1991), the sharp increases in prices of urban property began in the 1980s in New York, London and Tokyo, a new phase in the spatial organization of the economy and the role of cities within it. The rapid concentration of financial firms, services firms, and high–income workers in major cities contributed to the rapid rise in real estate prices.

The third point is the growth of transnational corporations (TNCs). They are the main factor in the restructuring of the global financial system and in the development of world property markets. TNCs, either alone or in partnership with the state, play a critical role in urban mega project (UMP) developments. Companies like Bangkok Land, Kumagai, Gumi and Henderson Land are playing a prominent role in the development of large-scale tracts of land in Thailand and China, and the scale of such development is breathtaking. Olds (2001) found that the transnational firms also play a key role in providing support work for projects. For example, Jones Lang La Salle has a highly integrated network operating in 34 countries around the world.

The fourth point is the stretching of social relations, world social networks and epistemic communities. Another important aspect of the globalisation age is the dramatic change in the logic of development, leading to the emergence of what Castells (1998) terms 'an informational mode of development'. Following the analytical logic of Castells' theory, these production processes interact with social structures and transform our lives and living conditions. Private capital's drive to maximize profit is the engine of growth and investment. One of the basic ways to increase surplus is to increase productivity, which depends on the relationship between labour and production, through the application of energy and knowledge (Castells, 1989: 8-10).

Fifthly, travel and networking constitute the final dimension. Olds argues that it is important to highlight the increasing amount of travel being undertaken by politicians, developers, architects and planners, who visit the world cities where UMPs are being developed. For example, the British Urban Regeneration Association (BURA) sponsored a 1992 tour of UK planners, academics and developers to several Japanese cities, to examine waterfront mega projects.

Olds argues that, in the Pacific Rim, the forces of globalisation have spurred on changes in urban development. He claims that the changing spatial order exhibits five emerging forms of development (after Douglass, 1998b): first, urban mega-projects (UMPs), which are usually situated within the second form of development, world/global cities, which are in turn a component of the third form, extended metropolitan regions,

which can be part of a fourth component, trans-border regions (e.g. growth triangles) and/or fifthly international development corridors

Overall, the perception of a global space of flows has engendered a development strategy on the part of the local state, driven by the perception that cities and regions are engaged in rigorous inter-urban competition (Castells, 1989, Harvey, 1989c, Lee and Schmidt-Marwede, 1993, Fainstien, 1994, Hall and Hubbard, 1998). In this case, the proposal of an UMP by an outside investor is generally supported, since it is perceived as an opportunity to benefit from inward investment and regenerate the city (Singapore's Suntec City, the Multimedia Super Corridor in Malaysia or Pacific Place in Vancouver are clearly in this type of space). Therefore the representatives of the state (politicians and officials) increasingly believe that they have no choice but to accept the sovereign importance of movement. However, many authors, such as Friedmann (1986), Taylor (2003), and Sassen (1991), have searched for particular ways in which the global economy has affected particular cities and their suburbs. The key priority for these authors was to explore the new urban policy paradigm in the context of globalisation.

2.4 Globalisation and the New Urban Policy Paradigm

Although the world is subject to constant change, the speed of new development has never been as rapid as in the last three decades. The study of globalisation involves understanding cities' competitiveness in economic terms, their marketing, city branding and the 'entrepreneurial city' (Jensen-Butler, 1999). The following section on urban development strategies and policies attempts to provide a clear view of this.

A distinction has been made between urban politics in the years between the end of the Second World War and the end of the 1970s, when urban development experienced labour problems, whereas later it was characterized by an emphasis on capital rather than labour (Şengül, 2000, 51-53). The new urban politics are characterized by a shift from the local provision of welfare and services to more outward-oriented policies, to foster local growth and economic development. Presently, governments are encouraged to adopt certain characteristics, once distinctive to business, such as a propensity to accept risk,

inventiveness, growth orientation, promotion and profit motivation (Hall and Hubbard, 1998, 2-4). Hall and Hubbard state that "entrepreneurial policies exist everywhere throughout the capitalist world, even in the most 'conservative' urban areas". New urban politics are related to the shift from "a Fordist to a Post-Fordist mode of accumulation; i.e. a flexible one". New forms of production and consumption have changed the shape of urban politics. The transition to an entrepreneurial form of urban politics has followed on. Harvey (1987) explored the role of urban processes in the historical development of capitalism and drew attention to contradictions in urban politics. Contemporary urban politics lie within a broad spatio-temporal context, and two issues emerge, according to him: 1) Time-space compression, 2) Reorganization of investment, threatening local identity.

Urban development policies face challenges and two main requirements: First, economic restructuring, and secondly a socially balanced environment with ecological sustainability. In the last ten years, a new paradigm has emerged, comprising three interrelated ideas: urban governance, community participation, and decentralization (Van Naerssen, 2000). Good urban governance can bring benefits to all public sectors. It can reduce the costs of corruption and generate more lasting employment. Politically, it may help to increase public support and can lead to the efficient delivery of urban services, attracting investment and visitors.

With regard to governance, government agencies at all three levels (national, regional, and local) are supposed to enable the other actors to perform their roles correctly. If there are commercial perspectives, the private sector will get a chance, while civil organisations will take responsibility for social, non-profit making activities. Thus, there are four major groups of actors in the development process: the state with its governmental agencies, the private business sector, non-governmental organizations (NGOs) and community-based organizations (CBOs) (Van Naerssen, 2000). Although the notion of participation is broadly accepted, in practice, it is often limited to consulting 'the target-groups' of the urban poor. Participation, however, is more than instrumental (Abbott, 1996). Real participation demands a political process to get people involved, to mobilize their resources (including social capital).

The third concept of urban development policies concerns 'decentralization'; there is a clear tendency to decentralize decision-making and finance from the national to the regional and local (municipal or district) levels. In a centralized system the capital city receives more than its fair share of allocations. Giving secondary and other cities a larger say would mean that they would get a fairer share of the national budget. The local level is supposed to manage its own revenue. However, decentralization is more than a technical or administrative matter. It also implies the creation of a local state structure, with new, more independent functions (UNCHS, 1996b:24). During the last two decades, many types of governing bodies have been convinced to ignore protection constraints and merge more with the global economic system. This has assisted the global flows of space, to provide new opportunities for the creation of new forms of urban policy.

New urban policy involves re-centring the city. Old forms and traditional political and organizational ways had to give way to a new and visionary urbanity in a new world order (Swyngedouw *et al.,* 2002). New urban policy seeks the highest socioeconomic progress. Cities are required to become more entrepreneurial, more market-oriented and more global. Urban marketing policies are a consequence of the economic changes experienced in Western cities since the 1970s, particularly de-industrialization and growth in service industries, the knowledge and technology sectors, and "the globalisation of production, technology, capital and cultural flows through revolutions in information and communication technologies". The trend has led to new inter-city rivalry, which puts increasing pressure on government. 'Urban entrepreneurialism' is the term used by Harvey (1989b). City marketing is an instrument for the modern 'entrepreneurial city'. Urban policies are able to develop and create 'seedbed conditions', favouring and attracting business.

The term 'city marketing' is defined as 'specific planning actions designed to initiate or stimulate processes that improve the relative market position of cities with regard to particular activities' (Ashworth and Voogd, 1988: 65). It applies the concepts of private sector marketing to non-business organizations, such as local authorities, to influence social attitudes. It also involves developing a marketable image (ibid: 65). City

marketing is largely dependent on the formation, communication and management of a city's image. A developing city needs to have an image, and that represents the city's brand.

An important issue is how to attract a creative class to work in new urban environments (Jensen, 2005). City branding provides the basis for developing policy to pursue economic development and, at the same time, it helps the local population to identify with its city. Van den Berg & Braun (1999: 987) assumed that urban branding (or place marketing, as it was labelled in the 1990s) is a response to increased inter-urban competition. They also argued that urban branding tends to lead local government towards a more entrepreneurial and market oriented form of urban management.

New urban policy (NUP) is about how globalisation and liberalization link with new forms of governance, and the relationship between large-scale urban development and political, social and economic power. Swyngedouw *et al.* (2002) studied thirteen large-scale urban development projects (UDPs) in twelve European Union countries. He concluded that UDPs are increasingly used as a vehicle for establishing exceptionality measures (explained further on the next page) in planning and policy procedures. He and other authors revealed that UDPs and real estate markets accentuate polarization, changing budget priorities from social objectives to investment, at the same time restructuring the labour market.

The authors emphasise that new urban policies and projects have a visible effect on economic growth and competitiveness. The policies 'produce, enact, embody and shape new political and economic regimes'. The urban projects are not just considered from the outside, but they are themselves the catalysts of urban and political change (Swyngedouw *et al.*, 2002). There is a clear relationship between new economic policy, NUP and UDPs. This relationship is explained in Figure 2.1.

Figure 2.1 The relationship between new economic policy, new urban policy and urban development projects
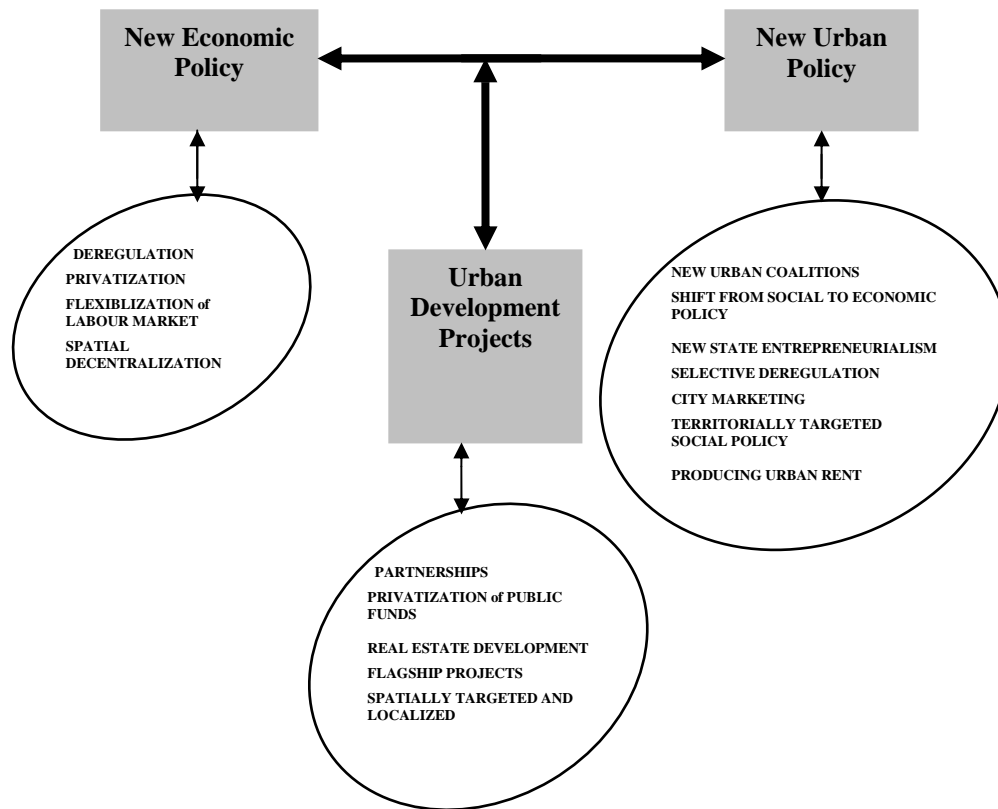
Source: Derived from Swyngedouw *et al.* (2002)

A change has come about in cities, which once considered welfare as a distributive policy, but are now more market-oriented. Urban revitalization is a chance for economic change towards new jobs and investment. As earlier discussed, UDPs have a very important role in turning cities into global competitive actors. Projects can lead to deep power struggles, as key economic, political, social or cultural elites fight for position. Judd (2003) has therefore called UDPs "elite playing fields". Projects shape city futures and create powerful global entities.

2.4.1 Mega Projects and "Exceptionality" as a leitmotif of NUP

Projects can be enabled by "exceptionality" measures, such as the freezing of normal planning, the bypassing of statutory regulations and institutional bodies, the creation of project agencies with special or exceptional powers of intervention or

decision-making, and/or a change in national or regional regulations. Among the most important conclusions about UMPs, Swyngedouw *et al.* (2002) found that large-scale UMPs have increasingly been used as a vehicle to establish exceptionality measures in planning and policy procedures. According to Swyngedouw *et al.* (2002), this is a neoliberal approach, with a selective "middle- and upperclass" democracy, "governing" more elite-driven priorities.

"Exceptionality" is fundamental to new urban policy. The changes involve new policy tools, actors and institutions, with important consequences for policy-making in general and local democracy in particular. There is a trend towards a new local mode of regulation, shaped by the pressures of competitive restructuring and changing priorities, as well as by major political and ideological shifts. Many local authorities and national governments justify exceptionality, for different reasons: scale, time, pressure, the need for flexibility, efficiency, and the need to create a symbolic character to provide international prestige (Matthew *et al.*, 2001). Mega-events like the Olympics are an example (Dyreson, 1998; Espy, 1979; Hill, 1996; Mannheim, 1990; Tomlinson, 1996).

Urban mega projects are the leitmotif of NUPs in global interdependent networks (Douglass, 1989: 10). Urban regeneration is central to urban policy. In the 1970s, local authorities had a key role in defining and delivering urban regeneration projects. Urban regeneration schemes based on mega projects emerged as restructuring processes associated with production and demand forces at all levels; material upgrading responds to socio-economic development objectives. Neoliberal policy is an alternative to traditional redistribution approaches. Growth, competitive development and restructuring are the primary objectives in attempts to affirm the position of cities in the global economy. Physical reconstruction and economic recovery occur almost simultaneously: mega projects provide a solid foundation for future growth and functional transformation. At the same time, urban revitalization goes beyond the city and extends to regional recovery and globalisation strategies.

Thornley (2000) demonstrated how economic globalisation has led to competition for investment between cities. He gave the examples of London, Sydney and Singapore,

all of which sought to achieve world city status. They embarked on large multinational projects to transmit a new, enhanced image through marketing and public relations. The effects of these activities cannot be measured directly but only in the long term, especially in real estate projects. Many projects link economic activities with high-value infrastructure. In short, NUPs aim to generate prosperity through real estate development, according to a strategy of urban entrepreneurship. Bianchini & Parkinson (1993) and Newman & Thornley (1995) note that real estate developments were referred to as flagship projects; it was hoped by many that they would restore confidence and encourage new investment in both the city and the region. In that context, a project's image and symbolic value are particularly important.

After discussing the concept of globalisation and how it led to the emergence of new urban policy paradigm, the next section will examine the four dimensions of globalisation economic, technological, social and political in order to obtain deeper understanding of the impact of globalisation on urban development.

2.5 Dimensions of Globalisation

The focus in this section will be on the key dimensions of globalisation and their socio-economic and political effects on cities. According to Chase-Dunn (1989), since 1991, globalisation has significantly accelerated some processes of trans-border capital transfer, labour, management, images and information flows. The main driving forces of globalisation are the transnational corporations (TNCs), transnational media organizations (TMOs), intergovernmental organizations (IGOs), non-governmental organizations (NGOs), and alternative government organizations (AGOs). The same author added that the term globalisation entered into popular discourse during the late 1980s. Instead of clarifying issues of world development, the catchphrase rather seemed to add confusion and misinterpretation. There are at least five different dimensions of globalisation that need to be recognized:

- Economic globalisation
- The globalisation of technology
- Social and cultural values

- Political globalisation

- Common ecological constraints

As will be discussed in this section, cities in the globalisation era have entered a new phase in four dimensions, namely economic, social (demographic and cultural), political, and technological (Keil, 1994). However, my analysis will not deal with the environmental dimension. This section will look in depth at four dimensions, to enhance our understanding of globalisation effects on urban development. The key globalisation dimensions merit deeper examination.

2.5.1 The Economic Dimension

Although globalisation is multidimensional, the economic dimension is potentially the best starting point from which to attempt to understand it. There is almost unanimous agreement that globalisation of the world economy has significant implications for the economic and spatial organisation of cities (Castells, 1993; Hall, 1993; Lambooy, 1993; Ball, 1994; Amin and Thrift, 1995; Bailly *et al*, 1996; Nilsson and Schamp, 1996; McIntosh, 1997; Budd, 1998). Researchers have pointed out that specific economic activities, like production and finance, have become less tied to particular geographical locations (Hall, 1993; Bailly and Lever, 1996; Boddy, 1999; Lever, 1999). Certainly, the ease with which these activities can transfer around the world can affect, and in some cases undermine, the whole economic structure of urban regions (Mclntosh, 1997). This also implies that certain urban regions could position themselves to take advantage of these possibilities, by attracting international business and capital (Budd, 1995; Jensen-Butler, 1997). Through the basic processes that take place within globalisation, its spread in the production and financial perspectives is most important, according to the principle of interdependence illustrated in Figure 2.2.

Figure 2.2 The key components of economic globalisation
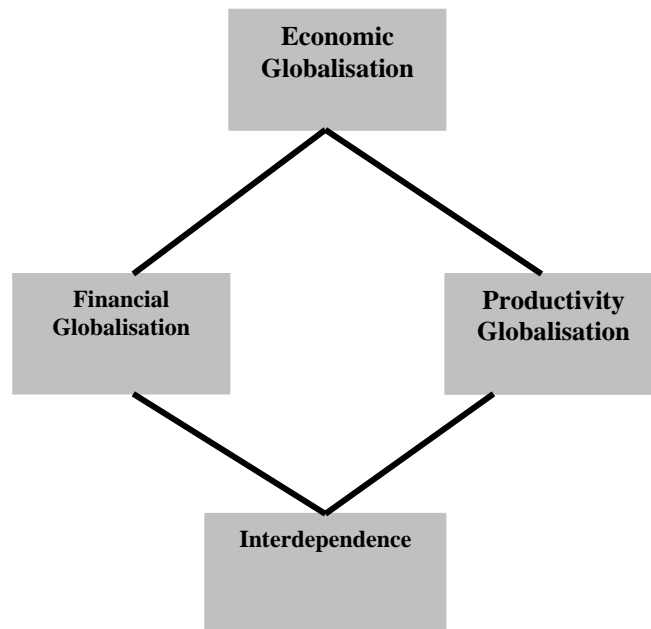
Source: Abdel Hamid (2006:16).

The term globalisation has deepened the interdependence between actors in the global economy and become the driving force of economic growth between international parties to exchange. Some believe that this is the beginning of the globalisation of production, capital and the productive forces of capitalist production relations, and thus also the capital of production and its dissemination everywhere (Abdul Hamid, 2006: 24). This shows that globalisation based on the principle of economic interdependence leads to the advancement of an orderly cross-border framework. Thus it can lead to the globalising of mega projects at the levels of productivity, financial, technological, marketing and management. In this sense, mega economic projects tend to become global projects, in order to take advantage of opportunities and increase returns (ibid: 24).

Pinch (1997) argued that major transnational corporations have been a force behind globalisation. They have the capacity to shift production across the world, continually comparing countries to find the optimal locations for their activities. Countries have to possess a number of attributes if they are to attract transnational capital.

One inducement is low corporate tax and the lack of need to contribute to a welfare state. In the early 1990s, multinational corporations directly employed about 70 million workers, and these workers produced one third of the world's total private sector output, with a global sales value of USD 5,500bn in 1992, which represents one quarter of the total value of world trade (Bailey *et al.*, 1993). More companies are forming international networks and capital flows are increasingly internationally oriented (Spaans, 2004).

Both multinational and transnational corporations are developing new forms of business and products in order to take advantage of economic globalisation. According to Pine & Gilmore (1999: 6-14), there is an extreme added value in moving from commodities, goods and services into the dimension of 'experience'[2], which is what they term their 'fourth dimension'. They state that 'there is no such thing as an artificial experience' (Pine & Gilmore, 1999: 37), but that there is unlimited opportunity to turn cities into new sites for consumerism. Part of this has to do with the movement of leisure into new dimensions in urban centres, such as in museums or shopping malls. Short (1999: 41) identifies two broad themes of US urban development, in what he terms the 'city of work' and the 'city of play'. As a part of a 'culture shift', cities are now represented as 'fun places', where life is not just about work but increasingly about having time for leisure (ibid: 52).

The spatial structure of cities changes as a result of global pressures and demands, and in response to developmental needs and conditions and the priorities of government. Certain changes in spatial development can be attributed primarily to globalisation, and the activities of international corporations. Olds (1995) lists four of

---

[2] The term e*xperience economy* is first described in a book written in 1999 by B. Joseph Pine II and James H. Gilmore, entitled "The Experience Economy". In it, they describe the experience economy, as a next economy following the agrarian economy, the industrial economy and the most recent service economy. This economy is supposed to begin to sell "mass customization" services that are similar to theatre, using underlying goods and services as props (Wikipedia, http://en.wikipedia.org/wiki/Experience_economy, accessed on 7.4.2008)

.

them: (1) prestige projects and high-rise commercial developments; (2) special development zones; (3) villas and high-class housing estates; and (4) port development strategies. This follows the globalisation of property markets and the increasing participation of and competition among a small group of international architects, who design projects worldwide (what Olds termed the "global intelligence corps"). For example, in Shanghai, the rapid development of high-rise commercial (mostly office) buildings has taken place since the early 1990s in the downtown area.

The consumption-oriented economy

The new global economy is sometimes called 'a consumption-oriented economy' (Matthew *et al.*, 2001: 42). Convention centres, sports facilities, Expos and entertainment complexes can all be seen as components of a consumption-oriented economic development strategy. Although each component has unique features, they share a similar pattern of development, often requiring the resources of a higher level of government or the creation of a new governmental or quasi-governmental body. They aim to attract both middle and high-class visitors, willing to spend on the acquisition of tourist experiences, or investors willing to spend capital on consumption-oriented businesses. Completing the circle is the creation of residential and commercial places of beauty, which drives up land values in areas adjacent to the consumption zones.

The strategy of using scarce public resources for consumption-oriented development brings new political challenges and a new form of urban politics and development based on image. Zukin *et al*. (1998: 647) claimed that modern cities no longer exist on the basis of their tangible production but on the simple basis of money being passed around. Competition between cities to regenerate run-down areas and to expand into new areas makes matters worse. Consumerism tends towards a desire to create an urban image as a new selling point and to create cities with a certain lifestyle, look or feel, and indeed create, in some cases, a perfect cityscape (Boyer, 1992). However, the creation of a city's image is at times the subject of socio-political debate. In Las Vegas, for example, the tourism economy has two sides to it, the negative one being the emergence of socio-cultural and economic problems, with low-paid jobs, a lack of

affordable housing, and the bankruptcy of small shops and businesses (Parker, 1999, 118–121). Development policy that aims to create production-based economic activity and jobs is good, but a purely consumption-based policy is another matter.

Rhetoric can be seen as a part of the decision-making processes and may also be seen as an important element of a city's economic development strategy. As Pagano and Bowman (1995) point out, image creation has very tangible effects on local government; it provides a rationale for the allocation of scarce resources. Furthermore, consumption-based competition between cities means that image marketing will become more evident as cities search for a unique image to bring visitors and investment capital to their city (Fainstein and Judd, 1999; Holcomb, 1999).

The shift to include consumption-oriented activities in development policy is in part a reflection of larger changes in regional economies. The growing number of urban entertainment complexes, sports facilities, and convention centres is tangible evidence of the importance of consumption as a feature in local policy. For some cities, such as Las Vegas or Orlando, the consumption of entertainment services by visitors forms one basis of the urban economy. Perhaps the most striking feature of the shift toward consumption-oriented development is the way in which it shows off the "renaissance" of cities, as in Baltimore or Detroit. However, cities that divert public resources into creating consumption services must face difficult questions about the expected returns. This point is all the more significant when a city relies on creating an image and selling consumption to visitors as the key to its renaissance (Matthew *et al.*, 2001).

FDI and tourism as a driving force

Many empirical studies have attempted to determine the relative roles of domestic economic policies and external factors, such as trade and capital flows (Cernat and Radu, 2002). A common result is that openness has a major positive influence on growth (Dollar, 1992; Dollar and Kraay, 2000; WTO, 2000; Williamson, 1993, 1994; Sachs and Warner, 1995). However, economic growth stems from the increased contribution of regions to the world economy, as well as the impact of various policy options. However, the pace of implementation is not always tenable (van Brabant, 1994). The contribution of

foreign capital and international capital flows helps the development of a given region, especially when domestic savings are meagre (Eaton and Tamura, 1996; Firebaugh, 1996; Dixon and Boswell, 1996). Dixon and Boswell (1996), however, argue that FDI also entails 'negative externalities'. By excluding domestic firms from the market, FDI may increase the market power of surviving firms and create an output decline.

FDIs have a significant impact on economic growth for several reasons. The impacts are especially magnified within small economies. They relate to five variables - domestic investment, technology, employment and labour, competitiveness in the export market and the environment. Until recently, FDI was directed at developed countries, particularly the US, Japan and Western Europe. In 1998, FDI in developed countries totalled USD 460 billion in inflows and USD 595 billion in outflows. Developing countries' share of global FDI increased annually during the 1990s, reaching 37 per cent in 1998. FDI flows increased from 0.8 per cent of GDP in 1991 to 2.7 per cent in 1997. Inflows of FDI to developing countries continue to be concentrated in only a few countries. The foremost receiver countries are China, Brazil, Mexico, Singapore and Indonesia, accounting for 55 per cent of the total (UNCTAD, 1999).

Foreign investment in developing countries increased dramatically in the 1990s, accounting for as much as 37% of FDI in 1996 (Table 2.1). The end of the century, however, showed a reduction to around one quarter of total FDI (USD 198bn in 1999 out of a total of USD 827bn).

Table 2.1 FDI Flows, 1965-1996 (Billion USD)

	1965-69	1970-74	1975-79	1980-83	1983-87	1988-92	1993-96
Industrial Countries	5.2	11.0	18.4	31.3	59	139	152.2
Developing Countries	1.2	2.8	6.6	13.4	18	37	79.8
Developing Countries Share of World Total	18.7	20.3	26.4	30.0	23.4	21.0	34.4

Source: World Bank Development Report (1985: 126), for the period up to 1983, and Goldar and Ishigmi (1999) for the period thereafter

One explanation for the increase was the transferring of production to areas offering cheap labour, and production of goods in stages, in different countries, to obtain

optimal value. FDI is partly connected with the privatization of public enterprises and with portfolio investment.

The attraction of some of these countries to foreign capital was also related to the expectations of large gains on the domestic stock markets, with prices appreciating and domestic rates of interest rising. Avramovic (1992) and Bello (1998) suggest that some of the capital inflow represented repatriation of capital held abroad by local nationals. This was the case with China and recently many Middle East and Southeast Asian states. It is argued that globalisation, as a mega trend, is changing the nature of international tourism. A landmark was achieved of 635 million international tourists in 1998 and a turnover of USD 444bn, at a cost of USD 180bn (Keller, 1996). The expansion of tourism is due to population growth, the increasing affluence of many nations, diversification of motivation for travel and expectations, as well as great technological achievements in information and communication; add to that heavy competition amongst more and more tourist resorts and destinations, and deregulation. These are the province of global forces. Technologically advanced distribution channels and up-to-date multimedia information reveal the best connections and the best prices for the most attractive destinations in the world (ibid).

The economic dimension should be the point of departure in any analysis of the globalisation process. However, globalisation is more than a 'rising density of economic integration between countries and economies' (Wade, 2003: 567). It is driven by new technologies that enable flows of information and telecommunication, bringing societies and citizens closer together. The next section seeks then the linkages between technological innovation and globalisation.

2.5.2 Technological Transformation

Pinch and Henry (1999: 667) related technology to three factors: material objects, the processes involved in their production and the knowledge involved in their design, production and use. These factors involve social, economic and political influences. Technologies inevitably involve compromises between competing elements, most

crucially what Castells (1989) labelled the emergence of an 'informational mode of development' and the 'information age'. In Castells' theory, production processes interact with social structures and transform lives and living conditions. A basic way to increase surplus is to increase productivity. Processes are characterized by technical relationships of production and modes of development. This leads to a consideration of the emerging community of developers, architects, planners and academics, who draw upon each other in shaping new urban landscapes globally.

Globalisation represents a revolution in technology in new forms of post-industrial activity, led by an elite seeking to strengthen global market and fiscal positions. Globalisation shrinks the world through networked economies, with the Internet as a symbol of the technological and communications revolution (Abdul Hamid, 2006). For instance, e-commerce has dramatically increased since the mid-nineties. According to estimates from the United Nations Conference on Trade and Development (UNCTAD), the total value of e-commerce in 1995 was only USD 0.1bn, rising to 3bn in 1996, 22bn in 1997, and reaching USD 1,234bn in 2002. That is a dramatic increase of 1,233,900% in just seven years at an annual average rate of 176,271%, as illustrated in Table 2.2.

The spread of new technology is a measure of the effect of globalisation and urban development. The key question is to determine how technology drives globalisation. Central to the question are the multinational corporations (MNCs), but they are not the only players. MNCs increasingly profit from innovation, by taking technological processes and products to international markets. This seems to be the most global of technological activities. Markets have become global quickly, with several kinds of trade and patents offered to foreign countries. Such processes have moved many analysts to define globalisation and the international integration of markets entirely in terms of technological exploitation. Technology is not just a modest, facilitating function, nor can its role be downplayed. One of the innovative functions offered by information and communication technologies is to lower the cost of moving goods and knowledge around the world (Daniele, 1999).

Table 2.2 The evolution of the volume of e-commerce between 1995-2002

Years	The volume of e-commerce (billions of dollars)	The annual growth average
1995	0.1	-
1996	3	299
1997	22	633.30
1998	74	236.40
1999	180	143.20
2000	377	109.40
2001	717	90.20
2002	1234	26.80

Source: UNCTAD (2003)

Some authors play down the role of technology (Went, 2002:6), and in fact few contemporary analysts claim that globalisation is the direct result of technologically driven phenomena alone (Kitson and Michie, 2000: 14). Furthermore, there could be no backlash against globalisation if globalisation were to be understood as the natural outcome of technological processes, since that would imply that globalisation is irrevocable.

Info–telematic technology is producing a new urban dimension: the digital city. Information is the new currency for urban economy, and the city produces it, elaborates it and transfers it. Many functional urban processes follow the same pattern, meaning that, in a short time, the many functions of the real world (finance, commerce, health, administration, etc) will have transferred to a digital one (Fistola and La Rocca, 2001). Urban planners may struggle to manage this environment or envisage a system encompassing the tangible dimensions of the city. Failure to adapt means failure in urban modernization.

Sklair (2006) points out that capitalist globalisation results in the large-scale creation of iconic architecture, over and above production and marketing. There has been considerable research interest in the political economy of iconic architecture in globalizing cities. MNCs, foreign capital and/or foreign architects play major roles (Sklair, 2005). Transnational corporations used to operate in a geographically dispersed manner but with self-contained production processes. Feenstra (1998) believes that it is

important to make sure that the mobility afforded by technological progress turns them and their subsidiaries into integrated production and distribution networks at regional and global levels. Gutman (1988: 93) concludes: 'There has been a tremendous expansion in opportunities to consume architectural culture over the last few decades'. The so-called 'signature architects' or 'starchitects' have been at the centre of the intensifying trends in the production and marketing of architectural icons (Sklair, 2005).

The importance of architecture as a technological dimension

Paolo (2003) argues that the markets for architectural practice have grown geographically in recent years. Advances in information technology have made it possible for architects to work from an office that is far from the site being developed. International trade agreements open local markets to global competition, allowing professional services to operate within them. According to Daniele (1999), the most striking features of interaction with globalisation are:

a) the international exploitation of technology;

b) global innovation by multinational companies; and

c) global technological collaborations

Thus, architecture is considered to have a key role in the global technological dimension (Sklair, 2005). The question has to be asked as to whether the word 'architecture' can be used legitimately in describing the workings of globalisation. Some argue that architecture is neither purely local nor purely global (Cairns, 2004: 99). However, architecture can be seen as a cultural pursuit, along with literature and the arts, taking place within the context of history, politics and economic development; it may also be the expression of its highest religious values, reflecting harmony, equality and community, as in ancient temples and cathedrals all over the world. Architecture today requires the integration of many pre-manufactured elements into constructed frameworks. A difficult aspect of an architect's job is to make sure that highly sophisticated equipment, electronics and other systems can be readily installed into structures and effectively operated.

There is a new experimentation with materials, and advanced computer-aided design (CAD) - a modern creative weapon of cutting-edge designers, which allows them to be inventive, exploring techniques and creating concepts that would have been unbelievable a decade ago. Advanced computing power allows designers to develop ideas into conceptualisations on their computers (Stappers, & Hennessey, 1999). Where drawings were previously used, advanced computing can illustrate concepts in evolution. It allows architects to describe complex shapes and geometries relatively easily, and in less time (Brookes and Poole, 2003: 17). Katodrytis (2005) states that architects are now equipped with enhanced tools that create and fulfil dreams.

Brookes and Poole (2003: 15) state that construction companies prefer to synchronise production and distribution regionally and globally, with major consequences for their structures (Went, 2002: 99), information technology increasingly being organized on an international scale. The construction industry is beginning to reflect other industries' skills better than before. It is influenced by other industries and their modes of working. Universal factors change the way we think about building design and about efficiency and effectiveness. Globalisation has allowed cross-border technical mobility, but at what cost to civil and human rights and social problems (UNESCO, 2002). The next section will look at and discuss some of the social implications of globalisation.

2.5.3 The social impact of globalisation

It is said that mega-project development may create new economic opportunities and social spaces as it shuts off old ones (Gellert and Lynch, 2003). The landscape changes that mega projects entail can give rise to new cultural forms. Economic prospects in cities are positive, but social impacts present a potentially major challenge. The most significant aspects concern labour market adjustments and social differentiation Tsenkova (N.D, http://www.ucalgary.ca~tsenkova). In response to structural and macroeconomic pressures, labour market adjustments have taken place amid changing employment patterns in various sectors.

One might consider globalisation as the rise of a 'network society' (Castells, 1998), but that does not mean the end of the story of the subject of geography (Bauman,

1998), or the loss of spatial referents in the construction of social identities (Savage *et al.*, 2005). Social relations change, global social networks and epistemic communities are formed. This is a dimension often overlooked by some economists' analyses of globalisation. Pacific Rim UMPs, for example, use extensive social networks and spirals associated with transnational actors who have power and broad capacity (Olds, 1997, Mitchell and Olds, 2000).

According to Tsenkova (N.D, http://www.ucalgary.ca~tsenkova) "generally, one can argue that the social dimension of globalisation refers to the impact of globalisation on the life and work of people, on their families, and their societies". Concerns are often raised about employment, working conditions, income and social protection. Outside of work, the social dimension encompasses security, culture and identity, inclusion or exclusion, and the cohesiveness of families and communities (ibid). There is a need to understand the relationships between social elements and physical environments and to understand the ability of local actors to manage their local practice within globalisation and to determine local conditions. A new ideology of partnership is emerging, which may enable social flexibility and give opportunities to exploit the strengths of people, associations and communities involved in local affairs.

Sassen (1991) argues that globalisation relates to the liberalisation of the global economy and flexibility in the labour market, but these may increase volatility and instability at local level. The global cities of New York, London and Tokyo form a kind of trans-territorial marketplace, with centralized service nodes for the management and regulation of the new world economy. The vast majority of localities and regions have no special advantage in terms of their geopolitical position, location, infrastructure, services, environment or social capital.

Globalisation has an effect on democracy. Globalisation of the economy - just as in the periods of industrialisation and colonisation - inevitably leads to local community decline, as it becomes destabilised and less integrated. According to Castells (1989: 347), "people's opportunities to affect their local conditions, and to use the local political arena for this purpose, are gradually weakening unless local authorities and communities are

given power to regulate and to influence the basic mechanisms that condition the daily existence of citizens". In other words, local government and community fade away together, "unless democracy is reinvented to match the space of flows with the power of places".

New major parties, especially MNCs, also demand rights, such as the abolition of restrictions. They might be the new "users of the city", leaving a strong imprint on the urban scene. Ownership of cities has not been contested in this way in the past (Sassen, 1998a). The new 'users' city' often places strict demands on city spaces: challenges are difficult to make in what Marinote calls the second-generation metropolis (ibid). According to Sassen (1998a) the survival of the city of late modernity, the users' city', is fragile, and depends on the economy of high productivity, advanced technologies, and intensive exchanges. City spaces include large airports, high rise business areas, and five star hotels and restaurants, with a kind of sparkle new to the business world. There remains the question as to whether the city can actually meet the costs involved in maintaining its role. These costs include maintenance of infrastructure and business, with all the requirements of advanced communications facilities, and high level security amongst a culture of universality (Sassen, 1998a). The appearance of violent behaviour may be an indicator of the acute degree of inequality. Indifference among an elite may be met with despair and anger from the poor, leading to hard struggle over contested spaces (ibid). However, analysis of social phenomena in transforming localities is complex and tricky.

Economic globalisation has a dynamic of its own. One of the most positive processes is what ECLAC has termed the "globalisation of values". This concept refers to the gradual spread of shared ethical principles (ECLAC, 2000) and "is manifested most clearly in declarations on human rights". The two main dimensions of concern are: civil and political rights, by which individuals are autonomous in the eyes of the state and can take part in public decision-making; and economic, social and cultural rights, which reflect the values of equality, solidarity and non-discrimination (CNUCED, 2002: 21).

In recent years, the social movement has made new efforts to preserve the identity of groups threatened by a global tendency towards cultural homogeneity. The

"right to be different" relates in various ways to human rights in the normal sense, in which citizens are equal among themselves and to the state (ibid: 22). The unprecedented development of communications media has strongly influenced all processes and has given rise to new problems. However, globalisation builds close relations among different cultural traditions and ways of life, and promotes diversity in the interpretation of how the world should be (ibid: 22). However, there has been a theoretical shift, in which cultural imperialism and Western hegemony have been replaced by a 'cultural hybridization' paradigm[3]. That is not to say that there will not be polarization, particularly between the so-called 'world cities', which have come to symbolize the ultimate triumph of globalisation (Elsheshtawy, 2004: 170).

2.5.4 The political dimension

Globalisation has been studied primarily as an economic, social and technological process, while its political dimension has been largely neglected. The fact that the market has become global while governments have remained national is a contradiction that highlights the most significant change brought about by globalisation.

The response of governments to globalisation has been to pursue international co-operation, not because it is their inclination, but because they have no other choice (Levi, 2002). The expansion of the phenomenon of international organizations shows the direction in which governments are travelling in order to seek a solution to problems they cannot solve alone. The weakness of international organizations lies in their decision-making procedures, which are based on the principles of unanimity and veto and on a lack of executive powers. The most widespread definition of this way of managing globalisation containss the expression global governance. This is a formula that justifies the established world order, which is based on the principle of national sovereignty and on the dominance of multinational corporations in the world market Levi (2002).

The role of the state in the economy has often been controversial, even more so over the last thirty years, with neoliberal thinkers singing the praises of unregulated

---

[3] For a discussion of this issue, see Oncu and Weyland (1997), Al Sayyad (2001) and Jacobs (2001).

markets and recommending de-regulation, opening-up and privatization. The push for a minimal, pro-business state, especially in developing countries, has been further intensified with the rise of globalisation and many radical neoliberal "reforms", often implemented under pressure from multilateral agencies (such as the IMF, the WORLD BANK, and the WTO) (Chang, 2003). According to Griffin (2004), because of globalisation, states, especially small, poor ones, are less able to regulate their economy, and illegal border activities have increased, both in terms of smuggling and the movement of refugees. The transfer of funds from one country to another has also been made easier, as well as the migration of low-skilled workers without the correct papers (mostly to rich industrialized and oil producing countries). The transfer of information, news and opinions has also been made easier, faster and cheaper through new technology. It means that states are less able to control what the population reads, sees and thinks.

However, nation-states can play important roles in the making of world cities, despite the power and influence of transnational corporations. White (1998) and Hill and Kim (2000) demonstrate how Japan and Korea developed Tokyo and Seoul respectively into world cities as a part of their national policies. Although the important position of nation-states as producers of world cities is a factor in this way, some researchers claim even more significant roles for nation states in global and world city formation. These researchers claim that nation states aspire to achieve a new world economic order by devolving urban policies in the cities themselves, forcing them to become more self-reliant and compete with one another to serve the needs of capital. Nation states still have an essential role to play: traditionally they protect their populations and their environment from improper interests. However, in a global economy in which Monsanto, Microsoft and Wall Street are so much more powerful than the nation state, the latter can no longer ensure protection. The task of nation states today is therefore to introduce a global environmental legislation that is more powerful than any nation state or any transnational corporation. The nation state was a framework inspiring the confidence of those engaging in politics and science, as its role was to realize post-war developmental paradigms. This central role reflected how, from the 19th century, the modern state had increasingly taken the initiative on development.

The role of the social state as a generator of technological and political externalities is and will remain very important (CNUCED, 2002:24). Political discourse is being shaped by an acceptance of the principles of pluralism, alteration of power, division of the powers of the state, election of authorities as a basis for the legitimacy and recognition of the majority and respect for minorities, and these principles have begun to be applied much more widely (ibid).

International political relations have undergone far-reaching changes in recent decades. The end of the cold war produced a dramatic change in the climate prevailing among sovereign states, while a number of local conflicts generated international tensions of a very different kind than those before (ILO, 2001). The United States and Europe made serious efforts to form a bloc capable of playing a leading role in global economic and political life. The changes left representative democracy in a position of unprecedented predominance (ibid).

Globalisation presents opportunities and risks, because disparities are created, while genuine equality of opportunity is absent at international level (CNUCED, 2002: 25). Global finance and national macroeconomic policy, based on domestic interests and contexts, create a tension (ILO, 2001). Governments feel uncertainty in the face of the macroeconomic policies of developed countries, which do not take on board to a sufficient degree their effects on the rest of the world, and lack coordination mechanisms to ensure global coherence. Developing countries are threatened by global financial volatility, which may affect economic growth (Ffrench-Davis and Ocampo, 2001; Rodrik, 2001). On the other hand, rising costs mean that developers are more reluctant to try to implement strategies that will not be sustainable, and this situation may also lead to policy change (CNUCED, 2002).

Economic processes create new divisions of labour, production and consumption, while political transformations attempt to match local dynamics with what was assumed to be required within a deregulated international economy and neoliberal dogma (Swyngedouw *et al.*, 2002), with globalisation as a political objective. The neoliberal rationale and methodology lead to a convergence of world cities under a global economic

order, diminishing welfare state policies. Nation-states serve as change-agents to foster a post-Fordist economy. Smith (2002: 434) asserts that "national states are reframing themselves as purer, territorially rooted economic actors in and of the market, rather than external compliments to it". Swyngedouw (1997) calls this scale adjustment "glocalisation", within a process of social conflict and political struggle. He concludes that, although local characteristics influence urbanization patterns under globalisation, the kind of "local" scale depends on context and on those who hold power over the political economy of the cities and the welfare of their populations (Swyngedouw, 1997: 144).

The city is the political entity that is most vulnerable to macro-economic forces, though some researchers believe that cities are more capable than they were perceived to be, even under globalisation. Clarke and Gaile (1997) saw autonomy and decentralization deriving from "glocalisation" and the "hollowing out[4]" of nation-state political hegemony as an opportunity for cities to negotiate with higher-level political and economic actors. Thus, local government is an active agent and broker for urban development, connecting local interests and macro-environmental opportunities via strategic interventions. Consequently, the development patterns of world cities vary, depending on political decisions and available resources.

Choices available to local leaders include the pursuit of slow or smart growth strategies, fostering community development, embracing regionalism, and promoting supportive national urban policies. Savitch and Kantor (2002) acknowledge that cities must obtain cooperation from higher government to implement strategies, but they also observe that cities can influence higher government through bottom-up initiatives. Such bottom-up initiatives are possible because cities are locations where actual value-adding activities take place through location-based human capital and knowledge accumulation (Clarke and Gaile, 1998).

---

[4] The transfer of power from the nation-state to political units at other levels such as the supra-national or sub-national level (see Jessop, 1994) may also refer to the transfer of powers at the local government level to private sector organisations rather than other political jurisdictions (Patterson and Pinch, 1995). It also used to refer to the contracting-out of activities by private corporations (Pinch, 1997: 142).

2.6 Conclusion

We can conclude this literature review with a broad definition of globalisation, pointing to an increase in interconnections, or interdependence, a rise in transnational flows, and an intensification of processes such that the world is becoming a single place. In other words, globalisation refers to the process of reducing barriers between countries and encouraging closer economic, political, and social interaction. It implies a diminishing importance of national borders and the strengthening of identities that stretch beyond those rooted in a particular region or country. This definition is especially useful in as much as it captures key features of globalisation: cross-border flows, identities, and social relations, but it is vague about the nature of social relations and silent about hierarchies of power. However, we can attempt to sort out some aspects of globalisation by recognizing at the outset that it is not a unified process, but the final result of the action of different forces.

With this perspective, we may identify four dimensions acting on globalisation. a) an economic and financial dimension, b) a technological dimension, c) a social and cultural dimension, d) a politico-institutional dimension. It is important to underscore here that these different dimensions do not all point in the same direction. In particular, the most powerful dimension, the economic and financial one, would seem to be driving the world toward greater polarization and urban transformations between developed and developing countries. Lately, mega projects have become one of the most dramatic manifestations of these changes in globalisation. I have argued that globalisation was motivated by mega project development, the powerful force of FDI and MNCs, and the initiation of some new urban policies act through epistemic communities to support mega project proliferation in cities. New urban development transformation has been identified as a key feature of a set of new urban policies that involve City Marketing, Urban Branding, City Imaging, Flagship Projects, and Exceptionality. The next chapter will therefore address the mega projects and their implications for understanding the new urban policy paradigm.

CHAPTER THREE

URBAN MEGA PROJECTS

3.1 Introduction

As indicated in the previous chapter, the broad dimensions of globalisation have contributed to the formation of new configurations in the social and spatial systems of urban areas (Pryke, 1999). Although there is an expanding literature discussing globalisation processes, urban mega projects have unfortunately been a rather neglected issue in the literature. Some important effects of globalisation in world cities are mediated through the large real estate projects (see Sassen, 1998b: 89, in Haila, 2000: 2253). However, there has been increasing interest in some types of mega projects over the last decade, such as the construction of dams, roads, channels, artificial islands, and skyscrapers.

This chapter will discuss the nature and effects of mega projects on urban development. The key intention is to develop understanding of the relations between mega projects and urban development. Thereby, the chapter will focus on the way in which globalisation articulates new forms of urban projects, in the formation of a new 'scalar gestalt' of governance and on the relationship between large-scale urban development and political, social and economic power relations. The objective is to prepare the ground to analyze a particular project in Dubai and its evolution and to consider the ways in which the case study can contribute to our understanding of theoretical issues.

Having already presented an overview of the trend in global development policy, this chapter will be concerned with the mega projects themselves, and their meaning for cities in general terms. In the course of this analysis it needs to be borne in mind that, whether their impacts are positive or negative, urban mega projects are typically

conceived and produced by powerful elite groups with little democratic input to the policy-making process by the local population (Roche, 2000: 126).

The chapter is structured as follows. First, I attempt to understand the phenomena of mega projects and the creation of new urban policy and new urban forms, as a response to globalisation. In Section two, the background history and epistemic logic of urban mega projects will be outlined, to help in the understanding of the new urban forms. The third section focuses upon provides further definition and discussion of mega projects, and how we ought to understand them. Some examples of different mega projects around the globe will be given. Fourthly, it sets out main characteristics of urban mega projects, which may help to explain the underlying forces at work in mega project controversies. Attention is thus given to the different types of risks in mega projects. Finally, the chapter will explore the management of mega projects, the strategies that enhance their potential for success and failure, the lessons learned in decision-making processes, and changes in such processes by governments.

3.2 Urban mega projects as a response to globalisation

Mega project research helps to analyse how global forces interact with local actors to produce specific outcomes. Gellert and Lynch (2003) claim that globalisation is an inevitable part of mega project development, and that, powered by FDI, state interest and modernisation. UMPs are processes that 'reflect global pressures', bringing about changes to local, regional, and national regulation or governance. Though local, they do follow global trends (Swyngedouw *et al*., 2002). During recent decades, urban mega project implementation has relied on the real estate sector to cope with the intensified competition (Couch *et al*., 2002; Swyngedouw *et al*., 2002). With flows of global and regional capital, a number of urban mega projects were created in Gulf Cooperation Council Countries (GCC). In some European, Pacific region and South East Asian countries property projects are also used as a means towards growth-oriented local economic development (Loftman and Nevin, 1996).

Globalisation raises the competition between cities, leading sometimes to re-duplication and oversupply. To lure FDI, public finance has shifted to projects such as hub airports, high-speed trains, huge convention centres and sports complexes, hosting global events that represent top international status (Douglass, 2000). The super-airports of Japan, Korea, Hong Kong and Malaysia typify the oversupply, with short- and even medium-term losses expected in some cities. Some areas of East Asia have too many high-technology parks accommodating many businesses, world trade centres and massive land development schemes, sometimes with no firm idea of what the future economic benefit might be (ibid). Despite the high risk of replication, each city feels compelled to devote vast resources to costly infrastructure, and there is no identifiable mechanism to put a ceiling on efforts (ibid).

The past two decades have witnessed the advent of a new era of mega projects throughout the world that are related in one way or another to the processes of globalisation, as Altshuler and Luberoff (2003) have argued. The more general reasons for this boom include (Flyvbjerg *et al*., 2003; Altshuler and Luberoff, 2003):

- *Institutional innovations in syndicating loan packages*: private sector involvement in mega projects has boomed since 1980 when public projects began to be turned over to private developers.

- *Globalisation of laws regarding property rights*: projects are consequently now vastly easier to run from afar due to lower transaction costs in all phases of project development.

- *Technological innovations in very large structures*: for instance, buildings over 100 storeys high can now be constructed.

- *Emergence of a broad urban class of affluent consumers:* A new consumer middle class ready to buy from global markets has been encouraged by Mega-malls, global franchises, world trade centres and other consumption-oriented mega projects. Huge enclosed shopping complexes became the ideal for securing global chain stores and franchises in otherwise inadequately planned and managed cities.

- *Intercity competition for global investment.* Transnational corporations are shifting from owning the means of production to controlling channels of distribution through

sub-contracting, patent and copyright agreements, and licensing (Douglass, 2000). This pushes intercity competition even further, as cities compete with ever larger schemes with greater financial outlays in sunk capital in the built environment that is perceived to be required to attract and host global enterprises.

- *International world city formation:* The production of urban space is now part of the formation of a global hierarchy of cities (Friedmann, 2002; Knox and Taylor, 1995; Clark, 1996; Sassen, 2000). In this hierarchy, city regions begin to articulate more with each other in a global network than they do with their own national economies (Castells, 2000).

In sum, we can argue here that UMPs might be seen as a response to globalisation. After discussing the ways in which mega projects became a response to globalising forces, the next section gives further background to the nature of mega projects.

3.3 Background to urban mega projects

The new urban policy developing in parallel with the new globalisation economic policy has repositioned cities on the competitive landscape. This has involved reimagining and recreating urban space, not just in the eyes of the master planners, but primarily for the outsider, the investor, developer, or the money-packed tourist (Swyngedouw *et al*., 2002). UMPs cover the gaps in the 'post-modern city' through integrated restructuring (ibid). Some UMPs, such as high skyscrapers (trade centres) and airports, are designed to be the functional and symbolic 'command and control centres' of the world economy. Other UMPs such as shopping malls, expos and splendid hotels are consumption-oriented. The finance, design, construction, and marketing phases of these projects are structured by the agents of contemporary globalisation processes, the global property developers. Transnational organizations have developed a comprehensive knowledge base and understanding of current and future trends in the design and commodification of built space.

The development of projects highlights and reflects the aspirations of a particular set of local, national, regional and international actors that shape, through the exercise of their socioeconomic, cultural, or political power, the development trajectories of each area. As such, the UMPs can be considered as "elite playing fields," on which the aim is to shape an urban future in line with the aspirations of the most powerful segment(s) among the participants (Warrak, 1993). For example, the Tumen River Area is being planned as the new 'Rotterdam', a USD 30bn series of urban and rural mega projects in the Northeast Asian border area between China, Mongolia, North and South Korea and Russia (Imai, 1993; Kim, 1993; Marton *et al*., 1995). This twenty-year project is being coordinated by the United Nations Development Project (UNDP) and at present is in the feasibility study stage. Hong Kong has its Port and Airport Development Strategy (PADS), Thailand is developing the Eastern Seaboard in association with a new international airport, and Singapore, Malaysia, and Indonesia are experimenting with growth triangles - coordinated regional development zones (Parsonage, 1992; Rimmer, 1994; Douglass, 1998a; Grundy-Warr *et al*., 1999).

Olds (2001) argues that harnessing the future is key to explaining why UMPs have been developed in their current forms. Olds cites that, in the Pacific Region, the forces of globalisation have had a powerful influence on urban and local economies. In general, the realization of the global created a developmental strategy at the local level of governance (Hall, 1994, Harvey, 1989a, Castells, 1998). Robins (1991:13) suggests that movement and global flows have been such that they have smothered the personality of individual locations. Castells (1998) also suggests that flows may sometimes change the personality of places. The opening up of land for the development of UMPs is related to the restructuring of the economy, and the growth of the tertiary and quaternary sectors of the economy.

Altshuler and Luberoff (2003) examine closely the history of mega projects in urban USA, with a close eye on the political dealings that surround projects. Applying various urban political theories to a range of case studies relating to urban highways, rail transit and airports, they show how the technical analysis supposed to support decisions on developments was usually subservient to the pressure of various local interest groups

and the exercise of local, state and federal political power and policy. They noted that the main contrast between the 1950s and more recent times is that in the former there would be little or no questioning of decisions, however disruptive to particular communities or environmental interests; lately, a much more careful balancing of business benefits against community costs has had to be undertaken.

Among the most important conclusions from their review of UMPs, Swyngedouw *et al*. (2002) found that large-scale UMPs have increasingly been used as a vehicle to establish exceptional measures in planning and policy procedures. This they interpret as part of a neoliberal "New Urban Policy" approach and its selective "middle- and upper-class" democracy. It is associated with new forms of governing urban interventions, characterized by less democratic and more elite-driven priorities.

Previous research suggests that UMPs are poorly integrated at best into the wider urban process and planning system. As a consequence, their impact on a city as a whole and on the areas where the projects are located remains ambiguous. Most UMPs emphasize socioeconomic polarization through the working of real-estate markets (price rises and displacement of social or low-income housing), and changes in the priorities of public budgets, which are increasingly redirected from social objectives to investments in the built environment and the restructuring of the labour market. The UMPs reflect and embody a series of processes that are associated with changing spatial scales of governance; these changes, in turn, reflect a shifting geometry of power in the governing of urbanization (Warrack, 1993). Powerful political influence may be conferred by symbolic mega projects. As a source of economic activity, they generate incomes and create employment opportunities. Expanded and improved economic infrastructures enhance the capacity for other productive economic activities that generate income and create jobs (ibid).

Mega projects have therefore become the leitmotif of urban policy. In such a context, urbanization processes will become more internationally interdependent (Douglass, 1989: 10). Although there are significant differences between the nature of UMPs in different cities and countries, most of the largest undertakings are financed and

administered by special authorities that operate independently of city governments. A complete understanding of the policy priorities of urban governments can only be gained by examining the multitude of authorities that have taken responsibility for mega projects. In sum, the urban transition and transformations of the built environments of cities over the past several decades are inseparable from an intensifying process of globalisation that has focused national energies on a handful of huge city regions that are now the magnets for the current wave of mega projects. Having examined the background to UMPs we now need to focus on their definition in more detail.

3.4 Definitions of Mega-Projects

Interestingly, as wit the term 'globalisation', the mega project phenomenon is elusive, in that there is no fixed definition of it. Indeed, there is no exact way to determine whether some projects are mega or not (Fiori and Kovaka, 2005). Most definitions are inexact and tied to specific project types. Basically, a mega project is an extremely large scale investment project. Altshuler and Luberoff (2003) define mega projects as "initiatives that are physical, very expensive, and public". On his website (http://flyvbjerg.plan.aau.dk/megaprojects.php), Bent Flyvbjerg defines mega projects as typically costing in excess of USD 1bn and attracting high levels of public attention because of substantial impacts on communities, environments, and budgets. Others have defined mega projects as those which transform landscapes rapidly, intentionally, and profoundly in very visible ways (Gellert, and Lynch, 2003:15).

The prefix mega to indicate "very large" became common in science and engineering during the late nineteenth century (See Chambers Dictionary of Etymology, 3rd ed., s.v. "mega."). The term mega-project itself dates to the late 1970s, when the Canadian government and the Bechtel Corporation more or less simultaneously adopted it, the former to describe massive energy development projects to which it had recently committed, the latter to describe its general portfolio of very large-scale projects (see Sallott,1980). A Mega-Project is therefore a large-scale investment by the public or private sector. The value of each project is to exceed USD 250 million, while some enlarged the value of investment to reach over USD 500 million (Pollard, *et. al*., 2006). However, Warrack (1993) has suggested that in some contexts, a USD100 million size

- They require high investment expenditure of USD 250 million and more

- They often involve large amounts of global/regional/national capital,

- They are typically linked to global networks,

- Their life span should be 50 years and more

- A global workforce may be involved in construction and operation

- New institutional forms may be involved in planning, construction and operation

- Some have been seen to bypass the 'traditional' governmental systems of the West

- There is considerable uncertainty as regards demand forecasts and cost estimates

- Indirect benefits are shared, not solely for the benefit of the operator

- New systems of governance emerge, commonly favouring the needs of international elites above those of deprived populations.

So we can observe from various definitions that mega projects are large-scale (typically complex) land-based infrastructure projects. They often link local with global

networks, and are frequently perceived as national icons of development, critical to the delivery of national and regional development strategies. The term mega project denotes initiatives that are physical, very expensive, and public. More specifically, mega-projects involve the creation of structures, equipment, prepared development sites, or some combination thereof (Warrack, 1993).

3.5 The Distinctive Characteristics of Mega Projects

UMPs are effectively designed to act as functional districts within global cities that are integrated into 'stretched out' development corridors and global city lattices. From the developer's perspective, they simultaneously (and theoretically) enable the process of capital accumulation to occur in the medium to long term, while boosting individual city's socio-political comparative advantage at regional and global scale (Hall, 1995: 27; Sassen, 1991: 187–8; Ford, 1998; Sirat and Ghazali, 1999).

Given the size and pace of construction, mega projects can create mismatches with and disrupt social environments. There is a great difference between a mega project during construction and its post-construction operation. There are various numbers of direct and indirect workers that have an effect on local population growth and the range of demands placed on communities. Mega project construction can take four to eight years and workforces ranging from a few hundred to several thousands. The infrastructure required for this population is costly to the local community, both during construction and on project completion. The new activity created is overpowering for the existing economic base, and may not even be compatible with it in the future. An associated result, although intangible, is that the community "character" and lifestyle may be forced to change. The human impact on the community can be highly disruptive, with great stress deriving from forced and rapid change (Warrack and Dale, 1982).

Most studies of UMPs focus on 'uncertainty', especially in terms of cost overruns. Flyvbjerg (2005) describes mega projects as "a fantasy world of underestimated costs, overestimated revenues, overvalued local development effects, and underestimated environmental impacts". Planners may sometimes have doubts about a project, because of

the sums of money involved and the costs of creating infrastructures, such as for new stadia or convention centres. In spite of that, projects create a sense of excitement, movement, cultural and recreational opportunity, progress and urban vitality. They can also raise scepticism when they fail to live up to expectations, when costs overrun and when performance is low. The social cost should be considered (Forkenbrock, 2004).

Many mega projects are transport-based, but, in general, these do not constitute urban mega projects (e.g. the Channel Tunnel). The Bartlett School of Planning, University College London (2005), conducted a study with CoE under the aupices of the Volvo Research and Education Foundations on a particular Urban Mega Transport Project (UMTP). Diverse challenges and expectations made the evaluation more demanding and increasingly unsuited to conventional planning and appraisal methodologies. The research raised several key points that characterise the problems of UMTPs, which may be summarised as follows:

UMTPs, although funded by parties across the globe in both developed and developing countries, have been insufficiently studied, despite the magnitude of their costs and potential impacts on urban and regional development. Demand for projects has grown at such a pace that specialists in the field typically move quickly from one project to another without adequate opportunity to reflect on or fully evaluate project 'achievements, shortcomings and outcomes'. Narrow appraisal and evaluation procedures focus on engineering, economic and financial aspects, neglect 'systemic interactions between uncertainties', and fail to offer 'adequate insight into the economic, social, spatial and territorial futures that might result'. There is a growing feeling that many UMTP planning processes achieve 'low levels of cost-effectiveness and patchy economic and environmental benefits, with consequent low credibility amongst the public at large'.

The above research presented a three-fold response to the challenges. The first involves systematic examination of how to treat complexity, risk and uncertainty in the planning dimension. The second involves investigating how projects may or may not contribute to a sustainable development vision. Thirdly, there are underlying issues, impacts and technicalities associated with the challenges, not least of which are

accessibility, accountability, affordability, biodiversity, development and change (Figures 3.1 & 3.2).

Figure 3.1 Multi-dimensional Facets of Proposed Mega Transport Project Analysis
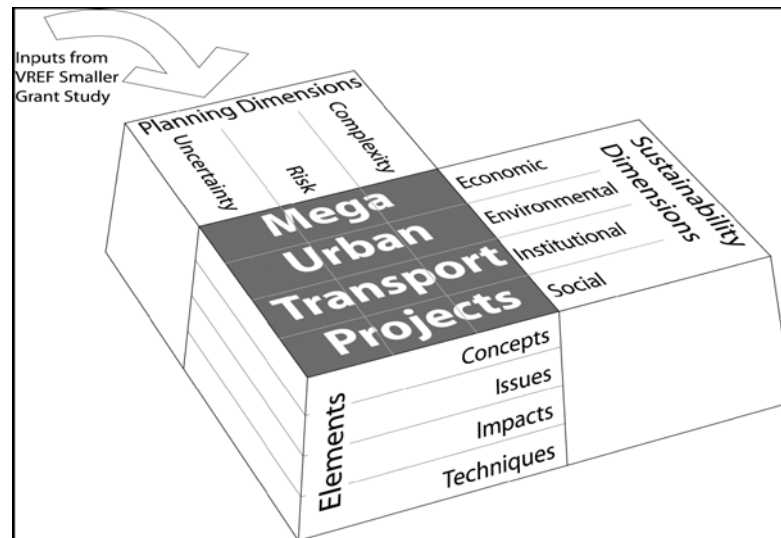
Source: VREF Application ID No. CoE, 2005-6. Bartlett School of Planning, University College London, "Global Centre of Excellence in Mega Urban Transport Project Studies", Submitted to Volvo Research and Education Foundations April, 2005.

Figure 3.2 Example of Analytical Pathway Illustrating Cross-relationships and Mega Urban Transport Project Challenges
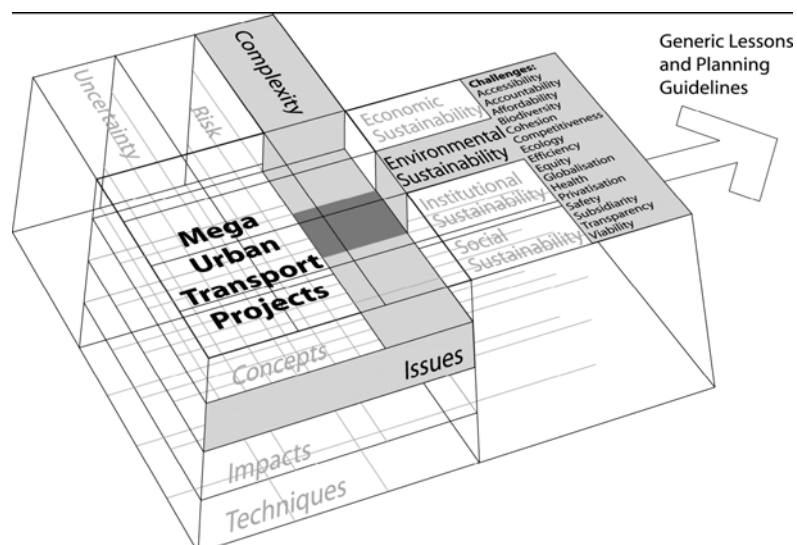
Source: VREF Application ID No. CoE, 2005-6. Bartlett School of Planning, University College London, "Global Centre of Excellence in Mega Urban Transport Project Studies", Submitted to Volvo Research and Education Foundations April, 2005.

Warrack (1993) makes the point that, whereas the public benefits of mega projects tend to be longer-ranging and regional or national in scope, the negative impacts tend to be immediate and local. Many can only be built in or around rural areas, often remote from the metropolitan urban centre. Difficulties become magnified in the community or sub-regional context. James (2004: 45) concluded that mega projects rarely fulfil original goals. Limited results are couched as 'just the start' of delivery on original promises. Nevertheless, policymakers continue to be sucked into supporting projects that can only be counted on to deliver diminishing returns on continued investment. At community level, the benefits can easily be overestimated, and construction costs underestimated.

Typically, local businesses are unable to compete effectively or to the extent anticipated (Warrack, 1993). Moreover, local labour skills may not match project requirements and employment opportunities may be taken by outside workers (ibid). Manpower pre-planning and training is needed to avoid this scenario. Even when a mega project is successful, communities and local government need help in the early phases of project development. A mega project failure can be a disaster for any but the largest and wealthiest of communities. A financial base for coping is needed.

Consumption trends of urban mega projects

A new urban pattern has been to focus on producing landmark buildings, particularly in developing countries, such as the spectacular skyscrapers of Taipei, Hong Kong, Dubai and Kuala Lumpur, where the Petronas towers in fact form part of a larger real estate project known as Kuala Lumpur City Centre (Bunnell, 1999; Morshidi and Suriati, 1999).

In fact, various manners of mega projects have emerged around the globe, including consumption oriented mega projects, such as shopping malls, stadiums and Expos. Consumption-oriented development has become commonplace in the West, in particular in US cities. Large-scale, high-profile centrepiece projects are a pattern of modern urban development (Matthew *et al.*, 2001). Expos play an important role as

3.6 Risk Considerations

Returning to the subject of risk, mega projects cannot be considered as conventional projects expanded to bigger proportions. Increasing the size to that extent creates exponential risk. The designs and sizes are beyond previous experience of operation, capital investment, market strategy, environmental impact and government policy. Public interest requires mega projects to be as successful as possible (Flyvbjerg, 2005). Urban mega projects are assumed to have a short and long-term economic impact on the host city and on the flow of tourists to it. National and international tourists, private sector decision-makers and investors will also have a long term cultural impact on the city. Some of the assumed impacts are "easier to measure and to establish than are others" (Roche, 1992). Long-term impacts are usually difficult to establish, given the relative infrequency of and lack of funding for, systematic longitudinal studies.

The consequence of all this is that mega projects can cause controversy. Political leaders join with commercial and industrial parties to promote new mega projects, while economists, environmentalists, and social advocates stand in opposition (Forkenbrock, 2004). The central issue is whether financial and social benefits match the costs, but proper evaluation is difficult to achieve. Furthermore, planners do not always fully show their hands when they produce figures. The public looks kindly on projects if they think that most of the costs will be met by outside agencies and visitors. In the excitement, planners can also get away with relaxed environmental restrictions (ibid).

Flyvbjerg *et al*. (2003) warn about the large risks associated with mega projects. They take a more international perspective compared to Altshuler and Luberoff, and are almost entirely critical of mega projects. The authors speak of the difficulty in forecasting what the final costs of projects will be and whether they will perform as promised. They claim that it is unwise for governments to continue to invest in mega projects under the delusion that the risks simply do not exist (Forkenbrock, 2004). Flyvbjerg *et al*. (2003) present three case analyses of European multibillion-dollar transportation projects: the Channel tunnel, the Great Belt rail and the highway link connecting East Denmark with continental Europe, and a similar project, the Yresund link between Sweden and Denmark, to show how much major miscalculations and misrepresentations have cost the public. They advise: (1) not to trust cost estimates (the Channel tunnel, they note, had an 80% cost overrun); (2) not to trust demand forecasts, especially for rail projects; and (3) not to take literally optimistic forecasts of project viability.

The authors focus on the erroneous forecasting of costs, user demand and viability. It is not that honest forecasting is impossible, but errors multiply through a combination of deception and misrepresentations by project advocates, contractors and public officials. They devote separate chapters to inaccurate representations of environmental impacts and regional and economic effects. Flyvberg *et al.* (2003) provide solid documentation to back their claims. For example, 12 European and North American urban rail projects had a mean cost overrun of 40.3% and a mean overestimation of passenger numbers of 47.8%. The authors further discuss present political factors and financial risks and call for greater accountability. They also make recommendations for addressing the risks surrounding nearly any mega project. Forkenbrock (2004) concludes that mega projects are part of a permanent and evolving planning strategy that is not inherently bad and is often the only way to achieve important new infrastructure. They may be full of risk, but a paradox is that more and bigger mega projects are being planned and built despite previous poor performance in terms of costs and benefits.

Economic considerations are important, but it is imperative for project sponsors to recognise the social environment around mega projects. Too often, priority is given to public relations more than proper managerial functions. Scepticism about rapid growth

and change will continue until public management becomes effective (Warrack, 1993). At the same time, while mega project displacement is less likely to affect wealthy communities or dominant ethnic groups, those outside the centres of power are more likely to suffer, though indigenous activism, and transnational advocacy networks have helped (Gellert and Lynch, 2003).

The future for mega projects is full of uncertainty; there must be a time limit on their continuity (ibid). However, projects are ongoing, with new container ports, petrochemical facilities, and urbanisation projects on the increase. Globalisation is supposed to justify displacements in the name of progress, separating people from nature, and removing the planning process from the landscape (ibid). The hierarchy shares optimism and ignores risk.

Bruzelius, *et al*. (2002) makes the point that there are different types of risks in mega projects:

- Cost risk (construction, maintenance, operation)
- Demand risk (traffic forecasts, revenues);
- Financial market risk (future interest rates);
- Political risk (regulation, parallel public investment, pricing on adjacent parts of the network);
- Many mega projects benefit global (corporate) interests more than local, even though their patrons often (by default or design) have local and national governments meeting the lion's share of financial, social and environmental costs (and risks).
- Mega projects may cause an increment in physical and social fragmentation in urban areas Swyngedouw *et al.* (2002).

Warrack (1993) notes that financial risks can be avoided if sponsor/government consultations are conducted early and continuously. Decision-making links can ensure that government staff are familiar with the regulations and legislation. However, mega projects represent greater complexity and uncertainty. Sponsors also need to be informed of policies, regulations and administrative intricacies. Again, Flyvbjerg *et al*. (2003)

gathered evidence from over 200 major projects worldwide, mainly road and rail projects, to assess the discrepancies between delivery and initial budget. They found that costs were underestimated in 90% of projects, on average by 28% (45% for rail projects and 20% for roads), and traffic was overestimated by an average 65% for rail projects, whereas road projects tended to underestimate traffic, by around 9%. There was little difference between public and private projects. Some projects were delivered within the budget, but over-optimism is the general rule. Flyvbjerg *et al*. (2003) see inherent risk and systematic bias, often deriving from the search for short-term gains. Flyvbjerg (2003) indicated several problems: (1) Costs overrunning by 50 percent and above 50 are common. An Aalborg University study (in Denmark) reviewed 40 urban rail projects, and found actual costs to be on average 45 percent higher than estimated; (2) User demand is normally overestimated. Flyvbjerg concluded that "traffic estimates used in decision making for rail infrastructure development are highly, systematically and significantly misleading." Data shows the same pattern emerging with other types of project, apart from transport infrastructure: over-optimistic viability forecasts are the rule rather than the exception. A World Bank study of large numbers of projects found no indication that the problem is diminishing, but it is rather widening (Flyvbjerg *et al*. (2003).

3.7 Strategic Considerations and Lessons Gained

Many argue that mega projects will continue to evolve, and, although neither Flyvbjerg *et al*. (2003) nor Altshuler and Luberoff (2003) suggest that such projects are inherently bad ideas, both provide evidence that planners and officials need to look carefully at public interests before making a decision. Warrack (1993) provides analysis of strategic considerations. He lists three basic components of decision-making processes: the sponsor, the government and the interface between them. He concludes that strategic considerations can improve the chances of success. The development strategy for any city must include a plan to "capture the multiplier" of economic benefits. An orderly sequence of mega projects can lead to competitive investment decision-making in the project location.

Regardless of project sponsorship and size, government is responsible for the major and final decisions. Warrack (1993) argues that sponsors would be wrong not to recognize the legitimacy of government responsibility for decision-making in cases where impacts are large and diverse. At times, even government does not recognize the scale of its responsibility and may fall short in organizing and managing the public policy and decision-making processes. Sponsors can place themselves in a strong strategic position by showing "early and graceful acceptance of government policy involvement and initiation of an open consultation process based on understanding and trust". With responsibility taken on both sides, more rational, reliable and expeditious mega project decision-making can result.

Some argue that all information on mega projects should be subject to independent peer review. According to Ehrenfeucht (2004), information produced by promoters cannot be trusted, because it is often biased to make their project look good on paper in terms of large benefits and low costs. Warrack (1993) also notes a link between decision-making and the peculiar characteristics, conditions and requirements of individual mega projects. Sponsors, owners, managers, analysts and decision makers all need to become familiar with these characteristics at an early stage. Successful experience, especially at top management level, is invaluable. A wide array of decisions is needed for conventional projects; the term 'exponential' comes into play again for mega projects. Significant continuity of expertise is essential.

Even if conditions for success are favourable, decisions can make or break a project. Employment and contractual agreements should not be made if some aspect runs contrary to personal or professional interest. Negative recommendations should be considered, allowing time for further investigation; otherwise decisions will ultimately lack objectivity. Altshuler and Luberoffs (2003: 8) defined four political eras in the USA, the fourth mega project era beginning in the mid 1970s. They call it the 'the era of do not harm', which meant that governments at all levels must avoid or mitigate the undesirable side effects of mega projects. That related more to the nature of the projects rather than the number built. The aim was to make cities more competitive, and less liable to disruption (Forkenbrok, 2004). However, Savitch and Kantor (2002) criticized the

American model for its quick-fix mega projects, low value jobs and social polarisation, arguing that cities need not, and should not; give in to a market-centred approach. They proposed that cities should pursue policies that "strengthen their bargaining position and enable them to avoid becoming captive to a single development strategy". They identified three types of policy that might enhance bargaining and choice: "…community development partnerships that integrate neighbourhoods in the political process and act as a counterweight to business influence, regional initiatives of various forms and national urban policies that can ensure the long-term security of cities (Reichl, 2005)

Flyvbjerg (2005) noted that urban governments adopt mega projects to embody large potential economic benefits; they are not usually built just for the sake of it. However, most governments do not have an articulated policy about mega projects, and their attitudes and actions are a good predictor of how they will react to a project proposal. Some are bold, while others are risk averse; some are progressive while others are complacent; some are distracted by unrelated matters; some give more, some less priority to economic development; some take different stands on international trade and foreign capital flows; some consider the length of the queue for mega projects. It is likely that government, while favouring economic development, will express support in general terms, but actions and decisions are what count.

Attitudes condition responses, but governments may favour or oppose particular mega projects, and early assessment of the actual position may save a great deal of frustration and expense. Governments should allow consideration of mega projects on their objective merits. If government attitudes appear positive, full mega project investigation may be worthwhile. Therefore, Warrack (1993) suggests that resource-region governments should welcome mega projects as one economic strategy, have one or more mega projects underway at any given point in time, and optimize mega project benefits with specific measures. Effective handling of a mega project enhances credibility with developers and markets. In a recessionary period, government could take special measures. Steady state employment is preferable. The optimal timing for a mega project is for it to be built during an economic downturn and be ready for opening as growth occurs.

3.8 Conclusion

This chapter has examined UMPs model and their links with globalisation, and how these projects can strengthen our understanding of emergent development in Dubai. Mega projects can be understood as a response to globalisation and technological innovation, as well as intercity competition for global investment, powered by FDI, state interest and modernisation. This leads back to the initial question: Are UMPs motivated by global forces? This chapter has analyzed the effects of urban mega projects on urban development processes. UMPs can be defined, mostly from the cost perspective, as those which transform landscapes rapidly, intentionally, and profoundly in very visible ways. They are effectively designed to act as functional districts within global cities that are integrated into 'stretched out' development corridors at a regional and global lattice level.

The chapter also outlined a set of key policy messages to mega project decision-makers that might help improve urban project implementation abilities. The government must make major and often final decisions at every level in the approval process. The sponsors, owners, managers, analysts and decision makers who are responsible for setting the characteristics, conditions and requirements for projects need to become familiar with all aspects of the project at an early stage. Typically, there is heavy reliance on international markets and infusions of foreign capital.

The chapter has also shown that most previous work has concentrated on mega projects in general rather than urban mega projects in particular. Furthermore, our knowledge of urban mega projects is restricted to a few cases, most notably those in the Pacific Rim examined by Olds (2001). As numerous geographers have pointed out in recent years, there is an urgent need to look at the distinctive characteristics of globalisation in different contexts. The rest of this thesis will therefore examine how the stylised characteristics of UMPs apply in the case of Dubai. The following chapters set out to answer the four key questions that guide the research. First, what is the economic dimension of globalisation as regards Dubai's mega projects? This question examines how global economic factors manifest themselves in Dubai's mega projects, and

identifies foreign direct investment in the JPI mega project. How have economic factors become a catalyst for development? These questions can be developed through other sets of questions, such as: Why is Dubai doing this? And why so fast? What is the local urban development strategy? What factors in the policy making process contributed to this situation? Secondly, what are the technological mechanisms that have accompanied the implementation of large-scale development? I will describe who are the key actors and the role of global technical experts. Thirdly, I focus upon the new social trends that have been brought to the city's communities by the urban mega projects. I will examine the extent of public participation. I will analyse the political dimensions of globalisation, through answering the question: what are the main internal and external risks that can affect Dubai's mega projects? An analysis of decision-making processes by government will be made.

CHAPTER FOUR

METHODOLOGY

The aim of my research is to examine four dimensions of globalisation and their effects on urban mega projects in Dubai. A combination of theoretical and empirical data thereby lies at the heart of this research, and is important in locating the development in a context of global and local trends. Chapter four answers two essential questions: firstly, how to create a methodological framework for the research, and secondly, what are the considerations that need to be taken into account when constructing interviews in urban case studies. Edwards and Talbot (1994) state that selecting the correct method is as important as selecting the right research question. This research does not attempt to identify a new mode of globalisation as such, but it does seek to identify processes which might contribute to the creation of new urban development strategies, with new implications.

The research uses a case study approach to examine global/local interactions in the development processes of UMPs. The case study situates urban relations within a wider context by examining how global, regional and national factors shape the development process. Studying locally specific events along with identifying how localities experience a complexity of global and regional events is important. This also provides an insight into local community perceptions of the development processes experienced in Dubai.

The aim of this chapter is to outline the research methods I used to examine the impact of different dimensions of globalisation on urban development in Dubai. The broad aims here are to analyse how UMPs have transformed Dubai and to identify the key factors in the process of development. I have adopted the research approach advocated by Sassen (1991) and Castells (1998), which focuses on the interrelationships between individuals and institutions, and their contribution to the processes of globalisation. Efforts will be made to set the stage for a discussion on the city's plan of action and the

potential impact of mega projects within a broader economic, technical, social and political context, in an attempt to account for current urban trends.

4.1 Qualitative Methods

The methodology used in the research is qualitative in nature. This approach was selected because it allows for the investigation of individual and corporate perspectives on phenomena that might be difficult to obtain from a quantitative study. Qualitative data can highlight the social processes and social relations that underscore globalisation processes (Olds, 2001:256). Qualitative data from a number of relevant and authoritative sources can be incredibly rich in detail, and enable the analyst to engage in deeper levels of abstraction (Syerr, 1992). The study of institutional aspects of urban development should be conducted in a critical way. Personal access to data leads to firsthand knowledge (Gummesson, 2000), leading to further understanding via a hermeneutical spiral. Qualitative method is a normal way to obtain firsthand knowledge, through which to gather meaning and significance from perceptions, actions and circumstances. In other words, reading between the lines of what is said or done. The advantages of the method and its limitations and pitfalls are described in Strauss and Corbin (1998) and Junker and Pennink (2000). It is therefore usually considered necessary to obtain validation and triangulation through secondary analyses, for example, through literary research and observation.

The objective is to improve understanding of contemporary urban development in Dubai, to see how urban developmental mechanisms can lead to the creation of a new type of urban project. As regards these issues, a vast amount of primary and secondary material was found, indicating the complexities of development processes. It was therefore decided that in order for the research to be carried out in sufficient depth, only one case study would be undertaken in the city. A range of qualitative methodologies were used to achieve the purposes of this study.

4.2 Mega Project Case Studies

In the last decade, there has been increasing interest in mega project research and other urban development studies. Mega projects research allows analysis of the interaction between global economic forces and local factors and culture, to produce specific local outcomes. Yin (1984) advocated the use of case studies to study such complex contemporary social phenomena. He argued that the case study's unique strength is its ability to utilize a full variety of evidence, artefacts, interviews and observation. For these reasons, a case study approach has been widely adopted in much recent research about cities. Some studies (e.g. Fainstein, 1994; Newman, 1994; Savitch, 1988) have focused on the redevelopment of areas within cities. Other research (Judd and Parkenson, 1990, Le Gales, 1993; Sassen, 1991) has also focused on the level of the city.

One of the attractions of mega project research is that it can question implicit assumptions about familiar institutional and social relations. However, there is a danger in making observations about social phenomena within transforming cultures. A growing body of literature is addressing the theoretical and methodological issues relating to mega project research. Using a rigorous methodological approach, some researchers are investigating the influences of global flows. Yin (2003) states that case study methodologies are especially appropriate when:

- A contemporary phenomenon is investigated within its real-life context.
- The boundaries between the phenomenon and the context are not clearly evident.
- The form of the research question is focused on understanding and explanation ('how' and 'why' questions).

Some introductory research from secondary sources (such as Flyvbjerg (2003), Altshuler and Lebrouph (2003) and Olds (2001) was undertaken on the development of mega projects in different contexts (Western mega projects). The purpose of this was to familiarise the author with the nature of UMP development processes and to identify the source material likely to be available.

The decision to focus research on Dubai came out of interest in the dramatic changes that had occurred in Dubai in recent years. The case study site was chosen from several visits to many project development areas, such as Jebel Ali, Dubai Marina, the Sheik Zayed Road, and Jumeirah Palm Island (JPI). JPI was found to be the most concentrated area of development within the city. The development was more advanced than in any other project and thus considered the most suited as a subject for this research. It has been possible to identify changes and continuity to the work in and around the project since 2003, following government interest in the development of the southern areas of Dubai to fulfil the city's new economic strategy. The selected project is used to investigate global flows in detail, in order to illustrate the objectives the government hoped to achieve, and to see what instruments had been utilised (for example, financial subsidies, the creation of large real estate development companies). The main developer (Nakheel) identified the JPI project as the biggest project to involve cooperation with transnational corporations and global finance. The development stimulated questions such as: What division of finance supported this expensive and controversial project? Who actually are the sources of finance? How much public and private money went into the project?

Another reason for choosing this project was that it entailed major change in ideology and economic planning. It was the largest urban mega project in the whole of the Middle East. The project was also the first of its kind in the world. It was expected that the development should be, at least, partially completed by the end of the research, so that some preliminary assessments could be made. Adopting this methodology and considering Dubai's urban mega projects particularly, JPI should provide a clear indication of trends regarding the connectivity of the city to globalisation.

4.3 Source of Data

Having identified the type of analysis, the next step is to construct the case study, supported by a wide variety of sources and types of information, in order to clearly show how the globalisation process is viewed in the four dimensions under consideration. Yin (1984) considers a case study as an examination of 'events within their real-life context'.

Yin (1984) provides starts by identifying six sources of evidence three of which are to be used in this thesis. The first is documentary evidence from a wide range of sources, including, in this case, local government publications outlining policy objectives and long terms goals. Private sector companies also produce a range of documents defining their vision of how the urban mega projects would change the economy as a result their participation. This type of information was important as both a starting point for investigation and as a method of supporting interview evidence. However, we must bear in mind that many sources of information are prone to bias, with policy objectives often illustrating political expedience rather than honest discourse. However, this does not necessarily have to be a problem; there may be discrepancies between policy objectives and media statements, but the information is an important starting point for the interviews.

The second source is archival records, which provide a diverse range of supporting data and statistical information, such as economic data on infrastructural spending and investments, as well as public surveys and census data. This kind of source is more objective. The two categories can be studied from a sociological point of view to form the basis for subsequent analyses and to underpin case study evidence.

4.3.1 Semi-Structured Interviews

The third source of data cited by Yin (1984) is the personal interview. Having started to construct a case study based on evidence from Yin's first two categories, it is possible to identify important factors within UMP development in Dubai. Initial research based on documentary and archival sources of data began to identify four groups that could provide in-depth understanding of the UMP phenomena. It was possible to classify the interviewees into groups determined according to their relationship with mega project developments, to understand the web of relationships between them and construct a balanced interview programme.

The first group comprised those within the planning and economic development departments of the local authorities. Their main role was to manage the development process through policy and planning controls and, importantly, to investigate methods of

changing the urban and economic environment. This group was relatively diverse, and different departments had various development objectives. The second group comprised government and semi-governmental mega project development corporations, including Nakheel, Emmar, Hill International, Parsonse and several other smaller developers and contractors. Importantly, interviews with members of this group highlighted the way in which local bodies perceived economic change, and the way in which development represented a response that would regenerate local business. In essence, local entrepreneurs were interested in the changing economy and consequently in how global economic changes influenced the local level. The third group comprised another sector of smaller developers – design and architectural companies – and those from the private sector who invested money and work as contractors, and whose predominant interest is defined along financial lines and profit. The final group was the community, the people who live in the city, particularly those living near to the development and those who have experienced many socio-economic problems associated with the recent urban boom. These interviews were conducted in various organisations, such as residents' associations and community groups, where common sentiments and individual opinions were expressed. A full list of interviews is given in Table 4.1 below.

Table 4.1 Categories and number of interviews conducted during the fieldwork

Category	Number of interviews
Municipality of Dubai	5
Nakheel	11
Economic development Department	7
Local Government Institutions	5
Local Entrepreneur	3
Local Residents	6
Labourers in JPI and Al Quze area	6
Construction Developers	3
Transnational Corporations (TNCs)	4
Real estate Agents, Investors and brokers	6
Architectural Company	4
Newspaper and Magazine Editors	2
Others	2
Total	64

The research objectives concerning development and new urban policy trends could not have been fully addressed without the data from the interviews, which provided an in-depth and original contribution to the subject not obtainable from other sources. The interviews had four main objectives:

- To solicit the opinions of key players about strategies for the future, and policy changes that need to be made.

- The interviews were the most important stage of the research because they enriched information on certain aspects that could not be found in documentary sources, e.g., the co-operative processes among different public organizations, and the extent to which public managers have clear understandings of the city's economic objectives.

- The interviews also sought to identify the importance of local players and their responses to changes in global and national structures.

- The interviews filled gaps in the data from the different documentary references and are useful in checking data correctness.

In addition, the interview data illustrated subjective experiences, provided an objective account of policies and a subjective illustration of their rationale and background. The interview programme was designed to enable detailed exploration of the perceptions and actual experiences of both public officials and international companies in respect to their role in the urban development processes, and to see how they facilitated the business environment in the study case. The main questions to be answered in the interviews were: How is the power of economic globalisation reflected in what is happening in Dubai? How are development projects planned and carried out? What is the role of the different players in the city's urban development process? What are the main urban project implementation mechanisms? What extensive urban development projects have been proposed or delivered to the city and urban neighbourhoods? What are the roles of local government, the property market and local government institutions? Further examples of questions are in Appendix 2. Most of the interview questions were formulated during the reading stage, and some when new information came to light

during the interview process. The questions, which aimed to clarify different urban development characteristics in the city, contributed significant value to the analysis stage.

An outline of the study was written prior to the start of interviews. This helped to focus the interviews by identifying key organizations and individuals. In most instances, the initial approach to interviewing was by a telephone call or a visit in order to make an appointment for an interview, as some of my email messages were ignored. Many of those interviewed suggested other potentially useful interviewees.

Overall, a total of 64 interviews were carried out in the city. A total of 26 interviews were conducted on the case study in Jumeirah, over a period of about two and a half months. The reason for this relatively long period of time was the difficulties in arranging meetings with some of the key players in Nakheel and because several officers refused to be interviewed. The head of the research and documents department provided useful contacts, including former heads of departments and employees at the Jumeirah Palm Project. The engineers interviewed in Nakheel provided very useful contacts with private sector developers. The fieldwork in Dubai lasted 13 weeks (from 18-10-2005 to 27-12-2005 and from 1-10-2007 to 22-10-2007), where I interviewed 38 key players regarding the various research questions. The remaining 26 interviews took place during the case study stage on Jumeirah Palm Island, lasting 11 weeks (from 24-5-2006 to 26-7-2006 and from 25-10-2007 to 8-11-2007). The vast majority of interview data was collected from dialogues.

In attempting to examine my own role, I looked to Hammersley and Atkinson (1983), who constructed a typology of interviewer-interviewee relationships. According to their definition, in this research there was a realisation that the development process by the local authority, Nakheel, and the MNCs, meant that I was an outsider. The same was not true of interviews with local residents, who accepted that I was an insider and a local researcher. One problem of being an outsider is non-acceptance and therefore the creation of boundaries to available evidence. To overcome this potential barrier, care was taken not to alienate those being interviewed by building up an understanding of the background issues of UMP development, which resulted in an intrinsic development of

shared knowledge. Hammersley and Atkinson (1983) characterise this position as 'acceptable incompetence', the researcher being an outsider, but becoming a more competent insider.

Through building on this role of an 'acceptable incompetent', an important part of the interviews came at the end of them, when respondents had become more relaxed and spoke more freely (especially as they were not tape-recorded). This allowed the interviewees to remain focused, while still able to express their viewpoints. The informal gathering of aims, views and understandings of how the city had changed was useful in constructing questions for others and for directing the research down various different avenues. There were two advantages to this method. Firstly, the interviewees raised issues related to the initial question, but that were not necessarily on my interview schedule. This highlighted a series of links between topics and brought up topics of which I was unaware. This was important, bearing in mind the interview objective of examining people's understandings and experiences of risks of urban transformation. Secondly, I was able to develop the questions to suit the person I was interviewing.

It was from this position of 'acceptable incompetent' that contacts were made with potential interviewees. Some interview groups were harder to access than others. People from larger developers such as Nakheel and Emmar were often hesitant and reluctant to be interviewed. Potentially, this illustrated a belief that they felt no obligation to meet with the public in the same way as the local authorities. Companies such as Nakheel were clearly pivotal in having a significant influence over the development of JPI. Initial requests for interviews were met with cautious replies, although contacts were made eventually through a combination of persistence and openness with the interviewees regarding the topics of my research.

It is interesting to note that several of local interviewees made positive comments about the fact that a local researcher was undertaking the research; however, a number of people also suggested that local interviewees might be more open with an outsider who was not connected to the area. One of the problems of asking questions of a politically direct nature is the methodological difficulty in obtaining data. Most local officers and even inhabitants were very conservative in the debate about the political dimensions of

globalisation. An approach was taken to asking the questions in such a way as to show care about interviewee opinions, such as by asking: "Are you happy with current developments?" In the context of the current drafting of new regulations, people might be hesitant to respond to an outsider, who might be a 'secret shopper'. Dubai has an official group of 'secret shoppers', who make regular reports assessing the government's institutions and their employees' performance competence.

It is important to note here that, generally, most government department staff would not reveal critical opinions because they consider that the researcher could write a report against them, particularly on political matters. In this case, they may be able to talk more freely with an outsider (foreigner) than with a local researcher. The opposite would be the case if an outsider talked in depth about social issues, as they may try to give some ideal picture about their culture. Another issue I faced was the thought by Nakheel and some private sector interviewees, that I might belong to another real estate company. Therefore, I had to introduce myself and show some official proof that I was a PhD student. My student card, a letter from the UAE embassy in London, and a letter from the School of Geography at Southampton were all very helpful in this regard. A fear is growing that competitor developers are seeking sensitive information. The responses to questions were interpreted in the context in which they were given, and in the context of by whom they were given. It is clear that when an interviewee responds, he or she will be very careful in answering possibly sensitive questions on specific negative issues that could occur within new urban policy and political aspects. Also, higher level staff may be very careful about giving out information, which may possibly affect his or her position.

As with other sources, there is always a risk of bias, with interviewees choosing to be selective in their disclosure of information, and not wanting to be too self-critical. Triangulating interviews overcomes this problem, with the previous two sources of data and cross-referencing between different interviews. One of the main techniques is to overcome the interviewer's own biases, and for the interviewer not to ask suggestive questions. However, it is not only the interviewer who has the power to influence the outcomes of an interview, but also the interviewee, by arguing for a certain course of events and against another (Lehrer, 1999). For example, it is clear that when using interviews as empirical evidence, information should always be verified against other

sources. Known as triangulation, this method is necessary to elucidate certain agendas. However, the fact that an interviewee's story does not stand up against the evidence of what everybody else is saying does not mean that the story being told is not valid. Of course it is always the researcher who has to decide whether it is fact or fiction (Lehrer, 1999: 40). Lehrer (1999) argues that the truth lies somewhere in between fact and fiction.

An outline was written prior to the start of the interviews to help to focus the interviews on identifying key organizations and individuals, and key stages in the process. Local government officials, real estate and development agencies, architects, planners, private developers and local residents were approached for interview.

The questions for each interview were prepared in advance. They focused on the objectives and outcomes of development. Some questions were designed to fill gaps in the story, or to clarify particular issues. Other questions explored views about processes. Follow-up questions were asked as and when needed. The information from interviews was collected by note-taking rather than on a tape recorder, because some interviewees can feel threatened by the presence of a tape recorder. They appear more guarded and do not give information as freely. Their opinions should remain confidential, to protect their reputation. Being something of an outsider (Hammersley and Atkinson, 1983), with links to a university and academia could inhibit the responses, which I needed to avoid, and I believed that the presence of a tape recorder may have made the interview situation more uncomfortable and consequently would have affected the quality of dialogue. Interestingly, the vast majority of the interview data took the form of short stories in the form of narratives – their answers expressed a 'narrative form of knowing' (Czarniawska-Joerges, 1995:13). In the urban context, critics such as Budd (1992) adopt the narrative form. He constructs a 'narrative' regarding the City of London in order to highlight the particular material circumstances which have given rise to distinctive forms of urban development, social practice and behaviour. In other words, 'each urban community has its own story to tell', even though cities are being impacted by broader global imperatives (ibid, 26). The 'urban narrative' approach is similar to the spatial narrative approach of Harvey (1985) in his analysis of the building of the Basilica of the Sacré Coeur in Paris.

The interview notes were written up directly after the interviews. Despite some initial concerns about note-taking whilst interviewing, I found the process easier than expected. Respondents spoke slowly (and perhaps more thoughtfully) in consideration of the fact that I was writing. Additionally, I was able to make side notes and instantly copy down quotes, sometimes asking for a repetition. There were disadvantages to this system. These mainly related to the fact that I had to make decisions on the spot regarding what was relevant and what was not relevant. Whilst this was clear most of the time, it did mean that any reappraisal of what was relevant might mean revisiting for future interviews.

The fieldwork brought to light information on urban development and spatial changes in Dubai. It also discerned the institutional roles, policies and regulations that facilitate urban development. The initial material collected was analysed.

After completing the first wave of interviews, I read and re-read the interview data a number of times and identified issues such as areas of contradiction between interviewees, areas of consensus, popular themes, and local conflicts. Generally, these topics reflected what was already evident from background reading, though the interview data developed these topics by highlighting diversity in understandings and experiences of urban development. For example, whilst the existing literature identifies the topic of partnership working to be important, the interviews developed the topic by identifying the recognition of urban change, the development of a diversity of partnership working and varied formal and informal channels of communication.

By interviewing people in their workplace I had opportunities to gain more of an insight into the working environment of some of the movers and shakers of urban development in Dubai. Having participated and observed part of the field of study, visiting the city sometimes daily provided regular interaction with local residents. This produced a number of insights; for example: the influence of indigenous Dubai people towards newcomers or any private building activity; the types of people in shopping malls; the general reactions to government officials; the experience of transportation problems. Making use of these data and validity checks, I was able to perform a hermeneutic circular analysis, as outlined in Chapters 6, 7, 8 and 9.

4.3.2 Collecting Secondary Data

Having gained an initial understanding of the context of data sources, the process of collecting more secondary data began. First of all, a desktop search was carried out to obtain wide-ranging information on the city's history, urban development progress and real estate market. Most of the written documentary references were found in the public library, and included books, magazines, daily newspapers, real estate company news bulletins, official statistics and data, annual yearbooks, local media, relevant academic studies etc., as well as information from the internet. The study started with a reading of the most important references about the city. Key documents were found at the Al Raas library in Bur Dubai, which has a good review on old Dubai. More detailed information on the development of Dubai was available at the Department of Research in the Municipality of Dubai. Jumaa Al Majed's cultural centre has a collection of some material. It was necessary to obtain some material from the Abu Dhabi cultural complex, which has a useful collection of press documents as well as a good collection of books on globalisation, planning and development. The collection from Nakheel was not generally available to the public, but after conducting interviews with Nakheel staff, the researcher was given access to Jumeirah Palm Projects documents. The researcher has free access to most of the Jumeirah Palm Island project, including some confidential reports. The documentary research focused on the study of plans, reports, and statistical data. Qualitative reviews of the development in specialist journals were also of interest. The secondary data were used to construct an overview of the economic and urban development, urban spatial restructuring in Dubai, and the basic characteristics of Dubai's property market and urban development activities. Some statistical data and project-related documents are used in an in-depth analysis of specific cases.

The secondary data are used to construct a view of the basic characteristics of Dubai's property market and urban development activities. Some statistical data and project-related documents are used in the in-depth analysis of specific cases. There will also be an intensive study aiming to provide particular understanding on the flagship urban mega projects leading to other development projects.

Owing to a lack of previous research of a similar kind, extra field studies were conducted to make up for the shortage of data and information. From my investigations, it would appear that some of the data is the first on this particular topic. The first task therefore was to collect and abstract the data obtained from published and unpublished statistics and up-to-date surveys and fieldwork. The fieldwork also concentrated on physical sightseeing and observation in some urban real estate mega project areas in the city. I made trips to the construction site at Dubai Marina, Jumeirah Palm Island, Dubai Land, Arabic Ranches, Dubai Internet City and Dubai Festival City. Site observations involved casual visits and 'hanging out' to observe activities around construction sites. As an observer, I took pictures; I documented the evolution of the construction by taking an extensive amount of photographs and field notes. This was essential in helping me to understand urban development mechanisms in the city. The fieldwork involved visits to several public and private institutions in the city to gain first-hand experience of the city's urban projects. A brief return visit was made to Dubai in April, 2007 to see the completed JPI development. Subsequent visits to JPI have been made to observe recent development and to carry out interviews with expatriate workers.

This stage was followed by data collection from appropriate sources on different field visits to Dubai municipality, Emmar, Nakheel, Deyar, the municipality's public council and the Dubai train project office. National newspapers were also particularly useful, both in terms of familiarisation with current debates and as a source of specific information. The author already had a considerable background to the process of mega project development in Dubai when he visited different official departments for his Masters dissertation.

The field study was more effective and easier to conduct due to the city being near to home. The author visited various UAE academic contacts. The time spent living and travelling in England and UAE also left me feeling differently about development issues in Dubai. The city never stop changing; each time I went back to Dubai I was identifying a new understanding of development dynamics.

4.4 Concluding Summary

The themes developed in Chapters 2 and 3 formed the basis for the study of Dubai UMPs, and allowed analysis of developments in the light of the theoretical issues that had already been raised. In this chapter, I have tried to address methodological concerns and form a workable framework for analysing UMP development in Dubai. I have chosen qualitative methods, as the most information can be acquired through interviews. Consequently, standard statistical methods are not appropriate in this context. A series of interviews in a case study approach of a qualitative nature were used to examine the activities and rationales, enabling analysis of how local social life, business, technology and local politics is affected by global and regional changes.

These interviews were largely with senior policy makers from different government departments and agencies, as well as private development and construction companies, local residents, directors and managers of different government institutions. Semi-structured, open-ended questions were used in the interviews, with the objective of allowing maximum response to issues. A variety of material relating to the research topic has been uncovered. A wide variety of research techniques were employed within the case study methodology to both acquire and analyse data in an effort to address all of the outlined research questions.

The initial analysis for the case study was undertaken immediately after completion of the fieldwork. The volume of material presented a problem, and much of it had to be discarded. Owing to the nature of the research questions and the dynamics of the research process, a critical writing style was adopted involving continual dialogue and interchange between consideration of the data and the theories available to explain urban mega projects. The research continued to identify the underlying forces driving the process of development and to locate them within a wider economic context. In this way, the aim was to develop an understanding of the urban mega projects that have led to such special arrangements.

The case study approach draws on various sources: documentary research, local government publications, in particular from the Dubai municipality and Nakheel publications, plans, reports related to JPI based policies, and newspaper cuttings, were used. The next chapter begins with a discussion of Dubai's urban planning policy, in order to learn more about its development. Chapter 5 provides an outline of the context in which the development of the UMPs occurred.

CHAPTER FIVE

CITY PLANNING AND URBAN DEVELOPMENT

5.1 Introduction

The objective of this chapter is to analyze how mega project policy in Dubai has developed through the city planning system (the urban policy paradigm). The analysis begins with a review of Dubai's history, to enable a deeper understanding of the city's evolutionary dynamics and structure. Seven urban growth phases are detailed, along with the pivotal incidents that shaped the course of history. A case study of the Jumeirah Palm Island is taken as an example of the new development phase. This provides the background for understanding the economic, technological, social and political dimensions of globalisation that will be discussed in detail in Chapters 6 to 9. Dubai's urban development and planning processes are a product of its planning regime, economic environment and historical context. The city landscape is unique, and boasts dozens of urban mega projects. Dubai's transformation from a small fishing port to the first city in the Middle East is widely acclaimed.

5.2 The History of the Emirate of Dubai

Archaeological excavations provide evidence of ancient populations that occupied the region which is now contemporary Dubai. Historical evidence dates back to the third millennium BC, with examples such as the settlement of Al Qusais (ceramics, stone tools and bronze can be found in the Dubai Museum). The city has been a centre of commerce and maritime trade since the fourth century B.C. (Institute of Research and Arabic Studies, 1978: 650). The first historical record of Dubai was in Abu Obeid Abdullah bin Abdul Aziz Al Bakri Al Andalusi's (1095) book "*Mu'jam Masta'jam*", which contains no reference to urban characteristics (Al Bakry Al Andalusi, 1996: 442, 434). The modern state of Dubai appears on European maps from 1500 (Municipality of

Dubai, 2003). From this time, Dubai was renowned in the Arabian Gulf region for its diving industry and pearl trade (Department of Information, 1974: 11). It is the capital and, indeed, the only city in the Emirate. Dubai was referred to by the Italian merchant Gasparro in 1587, in his talk about commerce in pearls (Billecocq, 1995: 86, 87). Dubai has been a crossroads and a centre for marine business for as long as can be remembered. Ships laden with goods travelling between China and India in the east, and between Portugal, Holland and Britain in the west, used to anchor in the city's creeks (Department of Information, 1974). There is no consensus on how Dubai or *Dibai*, as it was widely known until relatively recently, was named. Of the two theories widely espoused by historians, the possible favourite is that Dubai is derived from *Dab,* the Arabic name for a spiny tailed lizard which was common in the desert of the Lower Gulf, although is little known today because they avoid urban areas. Others believe that Dubai is a derivative from an Arabic word meaning 'land devastated by locusts'. Other arguments are that the word 'Dubai' means an abundance of money and effort (Elsheshtawy; 2004: 190).

Dubai Emirate comprises large areas of land stretching from the Arabian Gulf shore between the emirate of Abu Dhabi to the south and the emirate of Sharjah to the north (see Figure 5.1). Dubai itself is divided into two parts by a 10 km long creek (Figure 5.2). The southern part, called Bur Dubai, is the official centre, while the northern part, named Deira, is the business centre, where the majority of markets and merchants are based. The city owes its position to the creek acting as a natural harbour for commercial traders. Other factors that have contributed to the site's present position are its proximity to potable water, its strategic position overlooking the navigational front facing Iran, and its positioning on the old trade routes between Europe and India. The city has benefited enormously from this position as a supply station for ships (Institute of Research and Arabic Studies, 1978). In 1833, eight hundred people set out from the clan of Bu Flasa, a subdivision of the Bani Yas tribe from Abu Dhabi and settled in Dubai, to establish the family rule of Al Maktoum. Its policies and administrative rule were characterised by tolerance. Dubai at that time attracted nomadic families, who used coastal areas for pasture, which encouraged them to stay and put down roots. Businessmen in coastal areas of Persia, such as Lanja, were searching for a good business

environment at a time when the ruler of Dubai was establishing an open door policy (ibid).

Figure 5.1 The location of the Emirate of Dubai
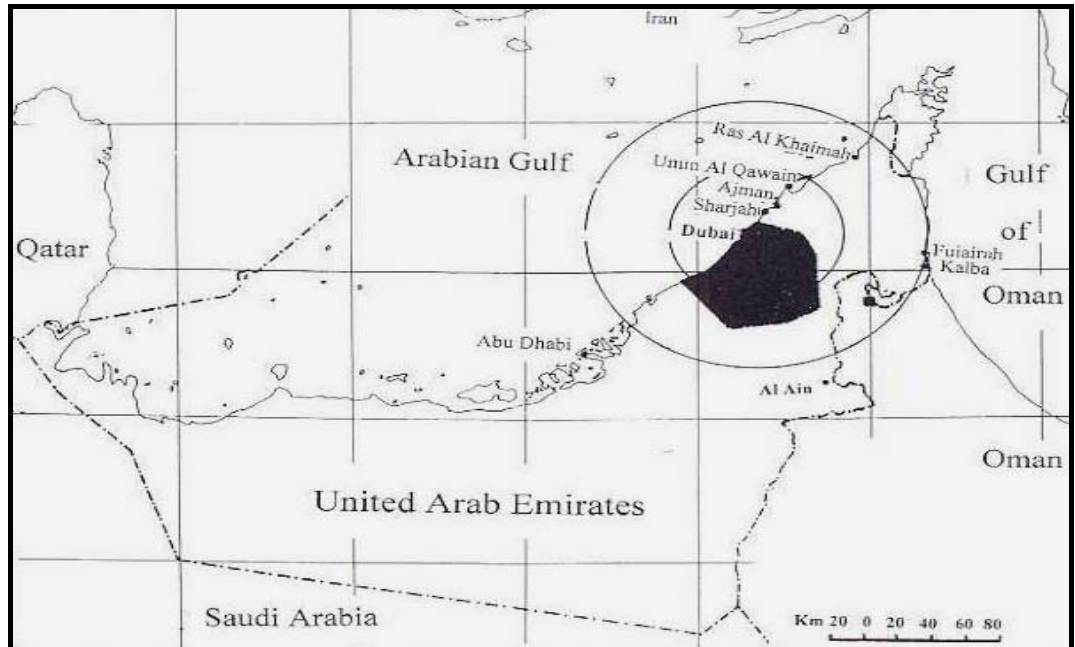
Figure 5.2 The Creek of Dubai.

Source: Municipality of Dubai.

5.2.1 The End of Lanja, the Beginning of Dubai

This section highlights how the end of Lanja spelled the making of Dubai. Hostility developed between the government of Iran and the state of Lanja in Persia, ruled by Al Qawasim Arabs[1]. The enmity developed into open political rivalry. In 1877, the Iranians seized power. They hastened to expel and replace the Arabs, and, in the months that followed, taxes were increased many times and new charges were imposed on basic services. In 1902, a tax of 5% on the cost of all goods passing through Lanja was imposed, which impeded port movements (ibid). The collapse of Port Lanja meant that many businessmen sought to move their business activities to the opposite shore of the Arabian Gulf (Interview with a local entrepreneur, on 6.12.05). Dubai was nearby and gave easy access to traders. The rulers of Dubai encouraged traders to move there. In fact, most traders from Lanja settled in Ras Al Khaima or Sharjah, rather than Dubai. Therefore, the city of Sharjah became the alternative business port to Lanja. However, Sharjah Port gradually lost its position for many reasons. First of all, silt and sand accumulated at the entrance to the Sharjah creek and good dredging equipment was not available to clear this. In addition, there were a number of internal disputes.

The visionary Sheikh Maktoum, the ruler of Dubai, did everything possible to attract Gulf traders. He cut tariffs on imports and exports and initiated systematic programmes to encourage the wealthy traders of Lanja to continue to move their business activities to Dubai. He gave them lands without the need for any personal guarantee, and with a view to protecting Dubai's commercial wharf. Maktoum's idea was that once the major businesses had settled in Dubai the smaller businesses would follow. The collapse of Lanja continued, with the majority of big businessmen preferring Dubai as a location for their business activities. Other professionals, smaller businessmen, shipping personnel and their families followed (Interview with a local entrepreneur, on 6.12.05) as anticipated by Maktoum.

---

[1] They are the present rulers of the emirates of Sharjah and Ras Al Khaimah.

5.3 Analysis of Urban Development

Towards the end of the last century, change in global economic activity, technological changes and the liberation of trade contributed to an increase in the number of multinational companies (production, trade and services). This led to the quickening turn of the wheel of growth in the city of Dubai, especially after the pouring in of oil returns from the 1970s. However, unlike many of its Arab neighbours, Dubai's oil is expected to run out in about the next 10 to 20 years. From the outset, Dubai has been serious about using its oil revenue to bootstrap its way into a much more diversified economy. It had adopted a series of successful business decisions, such as the creation of the free trade zone of Jebel Ali, and incentives to businesses and other developments in the eighties helped situate Dubai as a major regional player in the global economy. In the sixties and seventies, Sheik Rashid (the ruler) was personally responsible for many of the decisions that determined the future of Dubai. He made the decision to establish Port Rashid and he supported the proposal for Port Jebel Ali to be developed as a new industrial centre.

This section draws on secondary analysis of published and unpublished documents, combined with selected comments from my interviews, to explore in detail the urban structure of Dubai. It examines aspects of the built environment, explores change over time, and discusses the extreme urban transformation that occurred in Dubai, particularly in the period 2000-2007, which increasingly reflected global characteristics, and created new urban landscapes, such as the Palm Islands mega projects. A key question concerns how Dubai developed its urban context. Providing the answer to this question requires tracing the urban growth development process. This chapter provides new analysis of how urban development in Dubai was conceptualised and carried out. The large expansion of developed land is considered to be one of the most important results of the urbanisation process, changing the city from a small town to a centre of business in the Middle East. In the historical urban frame of development, we can see that the city of Dubai passed through seven main phases.

5.3.1 Before 1822

The period up until 1822 is considered as the beginning of the modern history of the city of Dubai. We do not have any precise sources on the demographic composition and urban elements of the city in the period, apart from a description given by Lieutenant R. Cajon of the British army in 1822, which gives a picture of a city and a map (Figure 5.3), created during visits to the region. In a first report about the city, Cajon mentioned the creek and coral beds, simple stone and mud buildings, three circular towers and the fortress, a population of between 1000-1200, 150 negro soldiers guarding the city, and a dependency on fishing, shark finning and pearl diving, which brought in an annual revenue of 20 to 30 thousand dollars (Cook, 1990:115).

Some points arise from Cajon's description of Dubai's built environment. The construction materials were very limited in the small nucleus of Bur Dubai. We can also note that the city was exposed to external danger, perhaps from tribal disputes, as a fence surrounded the city.

Figure 5.3 Dubai in 1822
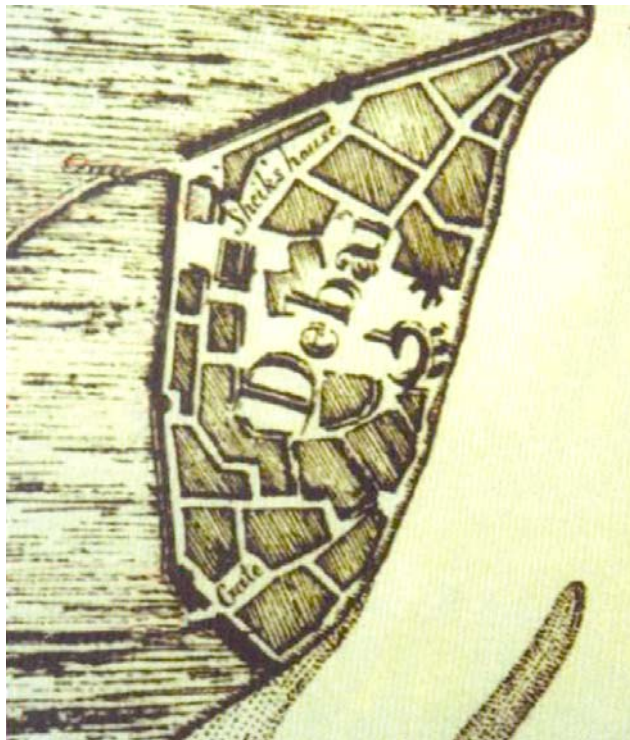
Source: Cook, (1990)

5.3.2 Between 1822-1935

Lorimer wrote at the beginning of the nineteenth century that the city had extended to three small areas (Lorimer, 1984):

1- In Deira, there were an estimated 1,600 houses situated among palm trees, with a mixed population of Arabs, Baluch, Iranians and Indians. There were also about 350 shops or businesses.

2- Bur Dubai consisted of 200 houses and 50 shops or offices and an old fort. This quarter was occupied by Indians.

3- Al Shandaqa quarter on the other side of the creek consisted of 250 houses occupied by Arabs and Baluch (ibid).

Dubai expanded on both sides of the creek, adjacent to the sea and the hub of the shipping trade, which was central to development. Lorimer estimated the urban area to be one square kilometre (ibid, 455), though Doxiadis Associates estimated the land area to be 20 hectares (about 0.2 sq km) at the time. That estimation is perhaps not accurate, because the city in this period had expanded into three parts. According to different maps and Lorimer's descriptive texts, it is more likely that Dubai covered 1.7 sq km by the end of 1935, not 80 hectares, roughly 0.8 sq km for the same year as estimated by Doxiadis Associates (Table 5.1).

Table 5.1 The built area in Dubai from 1900-1993.

Growth rate %	Area (hectares)	Year
-----	20	1900
4.04	80	1935
9.60	200	1945
4.80	320	1955
10.60	530	1960
13.01	1800	1970
21.20	4700	1975
12.30	8400	1980
5.50	11000	1985
48.6	17841	1993

Source: Doxiadis Associates, Comprehensive Development Plan for Dubai Emirate, Vol. 2, 1985: 409.

The buildings were made of lime rocks, mud brick and palm tree fronds. Lorimer estimated the population of the city at the beginning of the 20th century to be made up of about 10 thousand people. He noted that Dubai was one of the biggest ports in the region, and that the ships used to come to it regularly. The major exports were pearls and dried fish. Dates were imported from Basra, and rice, sugar and spices from India. The majority of imports were destined for the interior areas, especially Al Buraimi. By 1900, Dubai numbered 355 pearl picking boats, 50 fishing boats and 20 trading ships (ibid: 445).

5.3.3 Between 1935-1960

The first phase of urban growth extended from 1935 to 1960. In this phase, the style of growth was slow and natural, with limited expansion according to limited economic activity and slow population growth. The majority of the population was concentrated in the small zone at the entrance of Dubai Creek. The creek and the Arabian Gulf played a key role as a source of income for the city, with increased trading activity. Most of the area was utilised for housing and some business premises (Dubai Municipality, 2001). The prevailing style of housing was based upon the culture of extended families in proximate dwellings, and made mostly from gypsum, mud and palm fronds. Families lived close together for reasons of security. The residential areas were connected internally by narrow passages, some of which were pedestrian passages and some were for animals and the transport of commodities.

The importance of the creek meant that the first project implemented in the city was the deepening of the creek and removal of sand and silt deposits by an Austrian company. It cost 400 thousand pounds in 1956. Efforts were made to improve the banks of the creek and to construct wharfs and shops to meet the growing demands of trade. Projects were financed by revenue from land sales following re-structuring of the banks. The city developed on the three areas around the creek, each expanding towards the land side. This was mainly on the southern and eastern sides, but within limits. In 1945, the city expanded to the north, with a large market, Al Bateen in Deira. A wider neighbourhood was developed in Al Ghabibah and Al Wasl. Cement for construction was first imported from India in 1948 (Doxiadis Associates, 1985). By 1955, the urban area

had increased to three square kilometres, expanding around the old central areas of Naif, Sikkat al Kail and Al Sabkah on the Deira side and to Al Bastikiyh District and Al Shandagah on the Bur Dubai side (Institute of Research and Arabic Studies, 1978).

This period saw the arrival of foreign banks and companies due to the growing commercial importance of the city, especially in the trade and re-export of gold. Major financial companies, such as the British Bank of the Middle East, had established small branches in Dubai by 1946. In 1957, the decision was taken to establish the municipal council under the chairmanship of Sheikh Rashid bin Saeed at its first meeting, a municipality and a regulatory scheme for the city of Dubai (in 1959).

5.3.4 Between 1960-1975

A new phase began at the start of the sixties, as a result of increasing business returns on gold from banks in Switzerland and Britain for export to India[2] (ibid). The government, which attached special importance to business, reduced customs duties and opened the doors for people to earn profits in hard currency without tax. This encouraged a large number of businessmen from the Gulf, India, Pakistan, Iran and other international business organisations, to choose Dubai as a place for business and as a place to distribute their products. The creek of Dubai was no longer able to accommodate the increasing requirements of businessmen and big ships coming to the city. In the following period, business activities grew and the big ships anchored at sea and unloaded their goods onto smaller ships for transport ashore. In 1968, the government initiated the construction of a deep port that 30-foot ships could access (Municipality of Dubai, 1974). The official inauguration of Port Rashid was on the 5th of October, 1972.

The city of Dubai experienced a dramatic change at this time. Cement and building blocks came into use, and the first asphalt road between the Palace at Zabeel and Al Diwan in Bur Dubai was built (Institute of Research and Arabic Studies, 1978). Dubai covered 6.5 square kilometres by the end of 1960. There was nothing to hinder the

---

[2] Gold smuggling played a key role in Dubai's trade boom in this period. The metal could be imported and exported legally from Dubai, on account of its liberal trade policy, but entered other countries illegally.

expansion of the city. Only the cemetery in Deira was preserved. Housing styles started to change gradually as the government invested in residential buildings. It constructed complexes for limited income groups (nationals and expatriates), such as the Al Qusais, Karama, Rashidya, Najma and Safiya residential complexes (Ghnaim, 1993). The main driving forces behind this was the discovery of oil in June, 1966, and the truck loading the first shipment of oil on the 9th of September 1969 was a key moment. The establishment of a new international passenger terminal and airport in 1971 was also a key turning point. The Civil Aviation Service was founded in the same year (Doxiadis Associates, 1985:2-167). The number of journeys reached 156 per week, organised by twenty different airline companies (see Table 5.2).

Table 5.2 Aircraft movements at Dubai international airport from 1974-1984

Year	Regular flights	Other flights	Military Planes	Total
1974	15,260	8,314	5,874	29,448
1975	18,233	11,411	7,624	37,268
1976	23,218	13,580	9,455	46,253
1977	26,822	20,539	7,956	55,317
1978	27,806	22,446	7,740	57,992
1979	30,517	20,796	8,383	59,696
1980	33,596	19,674	7,610	60,880
1981	33,690	16,016	9,455	59,161
1982	34,216	14,530	12,414	61,160
1983	36,006	14,424	15,974	66,404
1984	34,868	13,849	15,361	64,078
Average annual growth	8.6%	5.2%	10.1%	8.1%

Source: Doxiadis Associates, (1985)

To the south of the airport, the government built the Al Rashidiya residential area. The expansion of the airport led to the construction of new roads to different destinations, and the Dubai to Abu Dhabi road was also built. A bridge was constructed in 1963 to connect the two main parts of the city, Diera and Bur Dubai. Swing bridge technology was used to allow ships to pass through the creeks. Another bridge construction was started to meet the increasing demands of transportation in 1974.

Even though there were two connecting bridges, it was felt that traffic circulation could improve further, and work on a tunnel under the mouth of the creek was started.

The re-organisation plan for the city was to include two new roads to shift port and dry dock traffic around other parts of the city and neighbouring towns so as to not disrupt the central area. Following this work, the urban area expanded to 47 square kilometres in 1975, including the revival of Port Saeed and Al Hamriyah in Deira, and the expansion in Jumierah, Umm Sqaim in the south.

Figure 5.4 The Main Streets in Dubai, 1974.
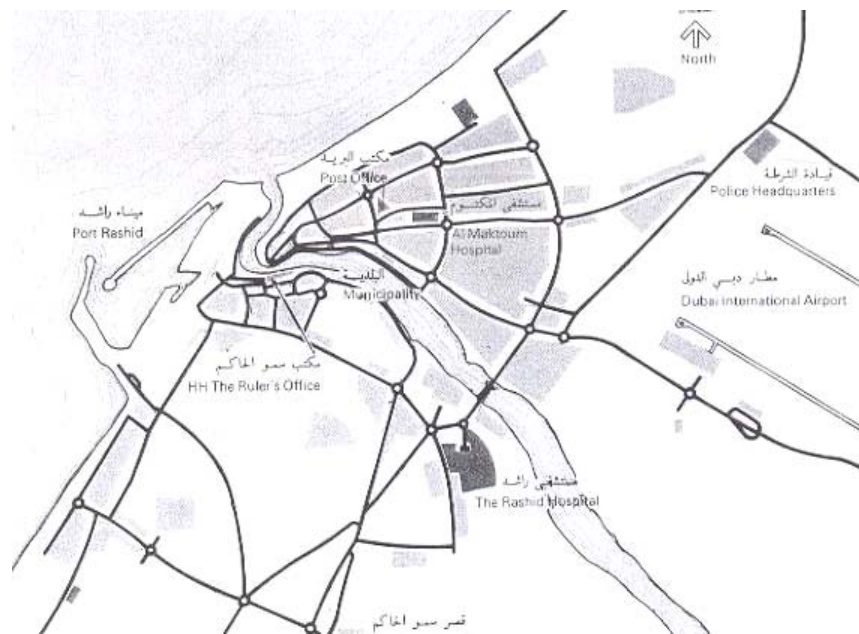
Source: Municipality of Dubai.

5.3.5 Between 1975-1985

Land development during 1975-1985 was four times greater than in the period 1960-1975. This was the result of a massive economic growth during those years. In this period, urbanization became a prominent manifestation. The city population accounted for 95.4% of the total population of the Principality in 1985. Urban growth accelerated commercial activity alongside flow of liquid oil. Expenditure increased on the infrastructure and manpower needed for the implementation of projects that emerged in large numbers after 1975. As Table 5.3 shows, the volume of growth in trade increased fourfold in less than ten years, raising total imports from AED 4.8bn in 1974 to AED 19.5bn in 1983. Among the indicators that show the economic growth of Dubai in that

period is the high rate of re-export after 1974, rising from AED 282 million to AED 5,195 million in 1983, an annual growth rate of 46.1% (Chamber of Commerce and Industry, Dubai, 1984, No. 102, Volume 9, p. 18).

The national income of Dubai from oil and natural gas doubled 36 times during the period from 1969-1983 (Statistical Year book, 1984). The urban areas also expanded threefold in less than ten years. Dubai's urban area was estimated at 110 sq km in 1985. The city included the area north of Jebel Ali, Al Najma, Chicago Beach and Umm Sqaim, Jumeirah, Zabeel, Bader City, Rashidia, Al Romul Al Qarhoud, Al Metinha and Hamriyah and Hor Al Anz.

Table 5.3 Import Development, 1974-1983

Year	Consumer goods	Intermediate goods	Capital goods	Total in Million AED
1974	2646	690	1480	4816
1976	4473	1288	3737	9498
1978	6418	1306	4983	12707
1980	9990	3909	5752	19550
1983	11092	3110	5355	19558

Source: Ghunaim, (1993:173)

The main feature of Dubai's urban growth was un-clear planning, subject to decisions dominated by the interests of elite groups and some socio-cultural considerations. In the mid 1980s, the development of commercial activity and the proceeds of oil imposed the need to develop planning programs in line with the population and economic growth. Although officials understood that they had to work on the implementation of new schemes, the city witnessed unanticipated urban growth, causing housing problems, the absorption of immigrants in unhealthy conditions and transport troubles. The southern area was in an early developmental stage. Figure 5.5 shows the Sheik Zayed Road along the southern area in 1980 (see also Figure 5.6, the road in 2006, which reflects a dramatic shift in Dubai's urban development in two and half decades).

Figure 5.5 Sheikh Zayed Road in 1980

Source: Dubai World, http://www.dubaiworld.ae/en/index.html

Figure 5.6 Sheik Zayed Road in 2006

Source: Dubai World, http://www.dubaiworld.ae/en/index.html

In this period, accelerated urban growth left many negative impacts on the compact, organic, traditional areas of Dubai, with modern building types and urban grid systems, developed under the increasing influence of external forces, but not related to the culture or architectural tradition. The pressure of globalisation outpaced the ability of designers to develop traditional urban forms of architecture to meet the growing needs of a transformed population. The same dilemmas are shared by many cities in the Gulf. The arrival of foreign experts and labour, lack of local expertise, and misunderstanding of the potential and value of traditional settlements led to the rapid disappearance of cultural buildings and settlements in this period.

5.3.6 Between 1985-2000

The change in global economic activities, increasing technological changes and the liberation of trade have all contributed to the increase in multi-national production, trade and services. This has led to the quickening roll of the wheel of growth in the city, especially after the pouring in of oil returns. The main driving force for this period's urban development was the establishment of the Emirates airline and the Jebel Ali Free Zone, both in 1985, now the largest free zone in the entire region. The airport expanded to become the main regional transport hub, handling more than 12 million passengers in 2000. The most recent initiative has been the launch of the Dubai Technology, Electronic Commerce and Media Free Zone (TECOM), comprising Dubai Internet City (DIC), the Dubai Ideas Oasis and Dubai Media City (DMC). The aim was to make Dubai the e-commerce, internet and media capital of the Middle East, boosted by economic growth, increases in individual average incomes and heavy investment in public utilities, along with the continuing shopping mall phenomenon; for example, the Deira centre and the Al Ghurair centre, which created sub-centres or satellite central business districts (CBD's) (Municipality of Dubai, 1998). These have had a big impact on the morphology of the city for many reasons, one of which was lack of planning, though certain aspects were planned more sensibly. The styles of residential areas changed as a result of demand and a larger population. The increase in demand for land on the outskirts of the city was followed by lower population density following the adoption of residential policies since the beginning of 1985.

5.3.7 Between 2000-2007

This era shows a picture of urban growth in the transitional globalised Dubai. It emphasizes the use of urban development to guide the city's economic growth from an oil-dependent to an entrepreneurial and tourist-based economy. Along with that shift is the changing role of the emirate itself, from a resource base to a market actor. Dubai's urban development entered a new phase of globalisation with the encouragement of tourism and knowledge-based trades, which led to the growth of urban mega projects. Urban forms started to be influenced by FDI flows. Amidst its relentless drive to join the club of global cities, Dubai has embarked on a major transformation of its urban landscape. The contemporary urban scene of Dubai is characterised by the infusion of new privately-owned, controlled and accessed urban fragments: shopping malls, gated housing communities, leisure destinations, theme parks, office facilities and the headquarters of multinational and transnational corporations. Table 5.4 shows the main urban mega projects development initiatives taken place in Dubai since 1985 when Emirates airline was established.

Figure 5.7 The Growth of the City of Dubai before 1822 until 2007
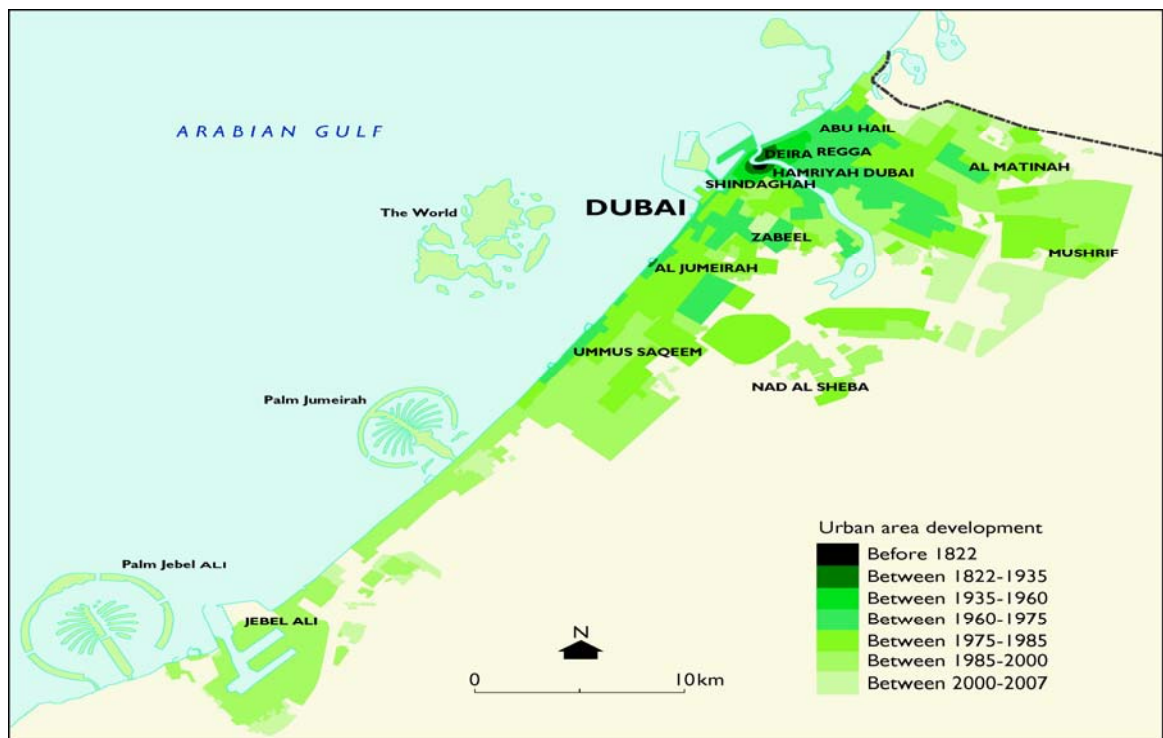
Source: Constructed by the author.

Table 5.4 The development of urban mega projects initiatives in Dubai 1985-2005

Emirates Airlines were established in 1985, to become the best airline company in the world.
The airport was later widened and modernized. Its capacity will reach 70 million passengers in 2010 and 100 million between 2020 and 2025.
- Dubai Shopping Festival was launched in 1995, aiming at the tourist and economic promotion of the city.
- After that, *Borg Al Arab* (the Arabs tower), which is the highest and the most splendid hotel in the world, was built.
- In a daring step, Dubai Internet City, the first free zone for electronic trade in the world, was announced in October, 2000.
- After that, the Dubai Media City was built at a cost of AED 3bn (about USD 815 million) it was opened in January, 2001.
- The *electronic government* was established in October, 2001 to turn traditional administrations into electronic ones. Thus Dubai has a developed infrastructure and advanced means of communications which keep pace with those of developed countries.
In February, 2002 the Dubai Monetary Centre was opened to speed up economic activity.
- By 2002, *freehold property rights* were established in Dubai, allowing foreigners to buy property for the first time.
-In October, 2003 work started on the *Village of Knowledge*, a technical centre for providing educational services. The cost of its preliminary structure was about AED 300 million (USD 82 million)
- *The Palm Jumeirah Project*: Construction began in June, 2001. The second palm was in Jebel Ali, work on which started in October, 2002. Later came Deira Palm, which is the biggest of the three.
- Subsequently, the *Waterfront Project* was designed in front of the Jebel Ali Palm, and is the biggest one in the world.
- *Dubai Navigational City*: It is an artificial island whose area is 25 million cubic foot. It is characterized by a number of maritime cargo services. It will accommodate shipbuilding companies and supply ships in ports and at sea.
- *Jumeirah Beach Residence*: Consists of 120 towers with unique designs. Each block has three towers overlooking extremely beautiful lakes and streams.
-*The World Project*: A great project which aims at enhancing the tourist sector. It includes an archipelago of 250 artificial islands which take the shape of the world and its countries. The reclamation phase was completed in late, 2006.
- *Dubai Land Project*: Announced in 2004, it is the biggest and most modern tourist project in the region. The first stage infrastructure cost USD 200 million in 2006. It includes high-level attractions. The project, which extends over 2 billion cubic feet, contains 45 main projects and 200 secondary projects.
- *Burj Dubai Project*: A plan was made to build the highest tower in world in 2003 (800 metres), costing over USD 1bn.
- Another tower is planned at the maritime front in front of Jebel Ali palm, and it will be higher than the Burj Dubai.
- *Dubai Mall Project*: The biggest shopping centre in the world. The centre, whose area is about 5 million cubic feet (equivalent to fifty football grounds) will break all records in the field of shopping centres. It is bigger than Edmund Town in Canada and the Mall of America in Minnesota.
- *Dubai Train Project*: The gross cost is expected to reach USD 11bn. Railways will open in the next few years. The first stage operation will be in 2009, the others to follow in 2012.

Source: Author's survey.

The landscape consists of a series of privileged spatial zones, with powerful connections to other valued spaces across the city, as well as with like zones within national, international, or even global spheres. Such zones are significant locations for the

perpetual flux of network-mediated flows, movement and exchange, which mark the global scene (Sadik, 2005). From 2000 until now, the urban changes were the result of massive foreign labour influx. In the traditional areas, there had been a shift of local communities to modern housing areas, encouraged by many factors: deteriorating traditional areas offered cheaper accommodation for foreign labour.

A shift has occurred around the Sheikh Zayed road and the Emirates road, which has become a main growth and population centre, and is expected to continue to spread in the future. The expansion was completed in the industrial zones outside the residential blocks, away from the central business areas of the city, in order to reduce the negative impacts resulting from those areas. In addition to this, it also made available public land at a low price, which was important. This period has seen huge expansion in the development of urban land. The total urban area reached 17, 841 hectares in 1993, an average annual growth of 486 hectares (Gunaim, 1993).

The development of the southern coast of Dubai is the result of a decision by Sheikh Rashid bin Said, a former ruler of Dubai, to meet the need for movement of commercial ships. The decision, taken in conjunction with the trend towards the south, had been taken in 1979 when Sheikh Rashid was convinced of the importance of the Jebel Ali port alternative to Port Rashid. In the same thrust of policy, to ensure the role of Dubai as a centre of money, business and tourism at regional and global level, the government planned the development of the Jebel Ali Zone. This is a strategically important zone, as it is the last coastal area acquired for development. Later on, new recommendations were made, particularly post-2001, to develop the zone as a complete urban and tourist centre, where, besides residential usage, business and tourist activities are included. The latest project, Dubai Waterfront, will not only add 375 km of new beachfront, but will include the largest man-made canal, carved out of the desert. It could be considered as an independent population entity in the future, accommodating approximately 3-6 million people. The government also considered expanding the present Dubai Airport for air cargo, and constructing a large airport in Jebel Ali for passengers, which would push the built-up area to 604.7 sq km (Municipality of Dubai, 2003).

Since 2001 Nakheel has become synonymous with The Palm, Jumeirah. Another two Palm islands involved 'transplanting' the desert into the sea. Emaar developed the 3.5 km long Dubai Marina, behind the existing Jumeirah beachfront hotels. A high-rise city-within-a-city, home to more than 60,000 residents, is set to become the focus of the New Dubai. The stage was set for a real estate boom (Figure 5.8).

Figure 5.8 The booming real estate sector

Source: Dubai World, http://www.dubaiworld.ae/en/index.html

5.4 City Planning

Several constraints can be identified from reading about the development of urban planning in Dubai. The first constraint is the reliance of development on foreign expertise and labour, despite the fact that this situation has improved because of the ongoing nationalisation process, and the increasing number of qualified local architects and urban planners. In this regard, the local government has developed a programme of higher study to address the issue of lack of human resources. Over the last decade, there has been an increase in the number of home grown architects and urban planners.

However, there is still a need for more local professionals to deal with the dynamically increasing needs for different urban planning skills. The second constraint is the lack of public participation in the development of urban planning (to be considered in greater detail in Chapter 8). The third constraint is the lack of co-ordination between local government institutions, and within each institution. Fourthly, another constraint is that the urban areas have to respond to various pressures, such as the forces of globalisation, the growing demand for housing, services and urban rehabilitation projects, as well as the ability to take advantage of managerial and technological advancements. Figure 5.9 shows the pressures on urban planning in Dubai.

Figure 5.9 Pressures on Urban Planning in Dubai.
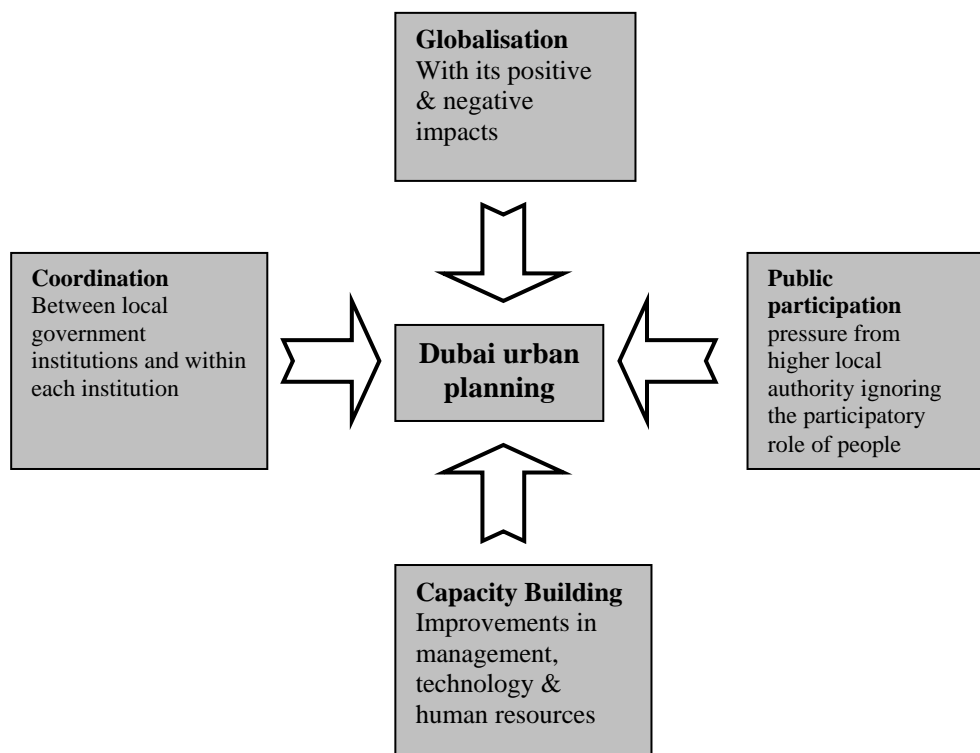
Source: Devised by the Author

It is important to recognise that Dubai has passed through various stages in the process of its urban planning system. According to the Director of the Planning Section, Dubai Municipality: "The city of Dubai in the olden days used to follow traditional planning, but that was based on inadequate data and material resources" (Ahwal, issue 92,

August 30.2005: 32). Over nearly five decades, Dubai has witnessed several urban planning phases. Each one reflects the characteristics of the time. With that in mind, this section will analyse in detail the key elements of those plans and look closely at how Dubai's urban environment has developed.

5.4.1 The First Plan (1959)

The first attempt at urban planning was made in 1959, when Sheikh Rashid agreed for John Harris[3] to establish systematic planning in the city. The planning strategy was aimed at increasing business activities in the central business district (CBD), after the construction of a number of high rise or medium-sized buildings, to achieve more efficiency in land use (Harris, 1971). Prior to this plan, the city did not suffer planning difficulties, as the population was smaller and economic activity was limited. The project plan served the needs of the city at that time, as it was beginning to suffer shortages in many respects.

During the preparation of the plan, no governmental office had been set up, except that of the Land Authority. The officer of the Ruler was the sole designer and executor of the development plans to meet expansion in Dubai. The plan had dealt with only limited areas, on both sides of Dubai Creek, with a small expansion towards the south in the Jumeirah quarter and to the north, in the quarters of Port Saeed, Hur al Anz and Al Baraha. For example, Umm Sqaim, Al Rashidiya and Hamriya were not at first included in the city's re-organisation plan. They were only included in the third plan (Ghunaim, 1993).

The plan did not pay attention to the potential expansion of business by deepening the creek, constructing platforms and ports to reduce the pressure on trade movement in Dubai Creek, or adapting to the unexpected economic growth which the city had just started to witness. It focused on the internal structure of the business centre and, hence, suggested shifting some shops to new locations. However, the key features of this

---

[3] A member of the British Royal Engineers Association who worked in a municipality of Dubai as a planning consultant.

planning were its flexibility and establishing connectivity among different parts of the city, road networks and industrial, commercial and residential sectors that afforded suitable sites for schools and parks. However, it was very difficult to maintain the plans for re-organisation, in the sense that the city was undergoing continuous rapid growth and also quickly gaining in prosperity. The plan was drawn up on the basis of hypothesis, and lacked detailed information and an appropriate ground survey. Thus, a plan was drawn up recommending the conduct of a general census of the population, properties, the usage of land and traffic movements. This caused the Dubai Municipality to review and modify the plan before its 1971 expiry, due to the expansion process the city had witnessed being many more times what had been expected.

5.4.2 The Second Plan (1971)

The unexpected growth of Dubai in social, economic and population aspects also necessitated a review of the 1971 plan by John Harris, to make the necessary changes for the new urban environment of Dubai. Fast growth coincided with the fact that oil had begun to contribute to the national revenue. The 1971 plan focused solely on finding solutions to the problems experienced and the need for quick fixes, mainly:

- The creek was a barrier hampering communication between two sections of the city, with passenger boat traffic causing congestion in the creek (ibid).
- There was no land route connecting the two sections of the city close to the city centre, except for the Al Maktoum bridge eight kilometres away. This bridge was known to have high-density traffic on it, and also had to be closed at intervals for the passage of ships (Doxiadis, 1985).
- There was failure in the methods of solving the congestion problem, due to the increase in the number of private cars in the inadequacy of public transport, such as buses.

John Harris's second plan focused on resolving immediate problems, and making some suggestions in line with the expansion of urban Dubai. Modifications had been made to the road system, traffic circulation, car parking, identified residential areas and

allocated land for future purposes, such as squares, playgrounds, schools, central markets and hospitals. Amongst the most prominent proposals in the plan were (Ghunaim, 1993):

- Looking at the observations on the road network, the digging of a tunnel to solve the problem in the mouth of the Dubai Creek, linking Al Shandaga with the head of Deira to cut short the distance between the two parts of the city, and also to reduce the pressure on the Al Maktoum Bridge. There was also a proposal to construct another bridge (Al Qarhoud Bridge) to form a link road between the city of Sharjah and Abu Dhabi, without needing to pass through the centre of the city. Recommendations were made to further develop Dubai's airport and the sea ports, in anticipation of economic prosperity and population growth.

These plans seemed to carry advantages, as they benefited larger areas more so than the first plan, and presented practical suggestions to solve the immediate and future difficulties of the city. However, they were not able to completely solve all the problems. The plans were still focusing on the existing difficulties in the city, and neglected regional planning and other neighbourhoods, such as Rashidiya, Al Quisais, Al Hamriya and Al Khawanij, which had been incorporated into the city and had become important parts of it within a few years (Ghunaim, 1993).

As a result of expected growth, the fast urban expansion of Dubai in the mid-seventies led to more complex difficulties in the allocation of living quarters, traffic and industrial areas, and confusion in the use of land in some places in the city. This, therefore, paved the way for the implementation of the new plan in 1985.

5.4.3 The Third Plan 1985

This period demanded new re-organisation plans to face new requirements and unexpected difficulties. Attention was focused on a more comprehensive plan. This plan was put forward by Doxiadis Associates in 1985; the plan considered a deep and comprehensive study of all the natural and human elements in the city. In addition, a survey of the prevailing conditions in Dubai's rural and urban environment was based on

information, reports, aerial photographs and detailed maps, to ensure the evaluation of the present condition of the human and natural resources of the emirate. The survey also estimated the possibility of acquiring resources for the purpose of industrial, agricultural and urban development over the next twenty years, with the intention of using them in an ideal way (Doxiadis, 1985).

The survey was comprehensive. In the end, it presented a primary report on immediate work and recommendations to deal with the existing difficulties that hindered the urban expansion process in the future. Among them were the following:

- Residential projects for expatriate workers living in temporary overcrowed shelters, lacking proper hygiene, for instance, Al Satwa, Al Kharton and Hur Al Anz.
- Protection of Jumeirah Beach from waste pollution from Port Rashid and Port Jebel Ali, it being the best recreation facility in the city.
- Development of industrial areas and shifting industries harmful to public health away from the areas of Al Kharton and Port Saeed, whilst developing suggested areas to accommodate industries, such as Al Uwir, Jebel Ali and Al Quze.

5.4.4 The Structure Plan for the Period 1993-2012

This plan has been considered as a strategic base for the growth and development of the Dubai Urban Zone, containing a complete policy for its development. The plan was presented by the Municipality of Dubai, which divided Dubai into nine major sections, five of which were in the city of Dubai.

One of the most important factors since the structural plan was approved is the encouragement of the private sector to participate in the process of urban development on a large scale, allowing investment companies to have shares. These companies can own large areas of land in the urban belt of the city, through government grants. This has been considered as a positive move, involving continuous co-ordination between planning and execution, coupled with commitment to achieving goals. Types of development, usage of land, population density and impacts on traffic flow are all considered (Interview with

Assistant Director of Planning & Buildings, Dubai Municipality, and 4.12.2005). Commitment to environmental protection is undertaken, while the trend for a free economy and active real estate business is not lost.

The principal aims of the structural plan were the preparation of a strategy, and practical programmes to execute the plan in the city. The plan helped the Municipality to gain control over urban growth and development in an organised manner, and preserved the remaining land inside the urban belt for future usage, as well as to develop the areas according to a time programme that reflects economic and population growth. The plan tried to achieve the competent use of investments earmarked for the development of infrastructure and services, and to end sprawling urban growth. The plan was framed for re-organisation within the municipal authority system responsible for the administration of urban development, and gives possibilities to review and follow up the varying phases of execution. Studies for the structural plan were designed according to estimates of required investment and land to be allocated.

Nakheel, Emaar and Dubai Holding, supported by several private firms have been responsible for the design of city zones in Dubai during the last decade. Cutting the city into zones partly with specific functions attached has helped to attracted foreign investment for specially marketed city areas and has increased the pace of city development through parallel planning approaches.

5.4.5 The Strategic Plan for urban growth of the Emirate of Dubai (1998-2050)

The strategic plan, proposing a 52-year timetable for development, did not concentrate just on the city of Dubai; it was a comprehensive strategy for the whole emirate, under the auspices of the Office of Planning and Survey in Dubai Municipality. The aim was to manage urban growth across the country, including the rural areas, rural centres and surrounding lands. The study looked at future requirements, efficient use of lands and resources and service networks (Dubai Municipality, 2001). The strategy also helped to identify the future of the city of Dubai outside the remit of the structural plan

for 1993-2012. It estimated the growth of the emirate as a whole, according to population projections up to the year 2050. The size of the airport is a factor, while certain areas need to be protected.

Figure 5.10 Dubai Structural Plan 2002
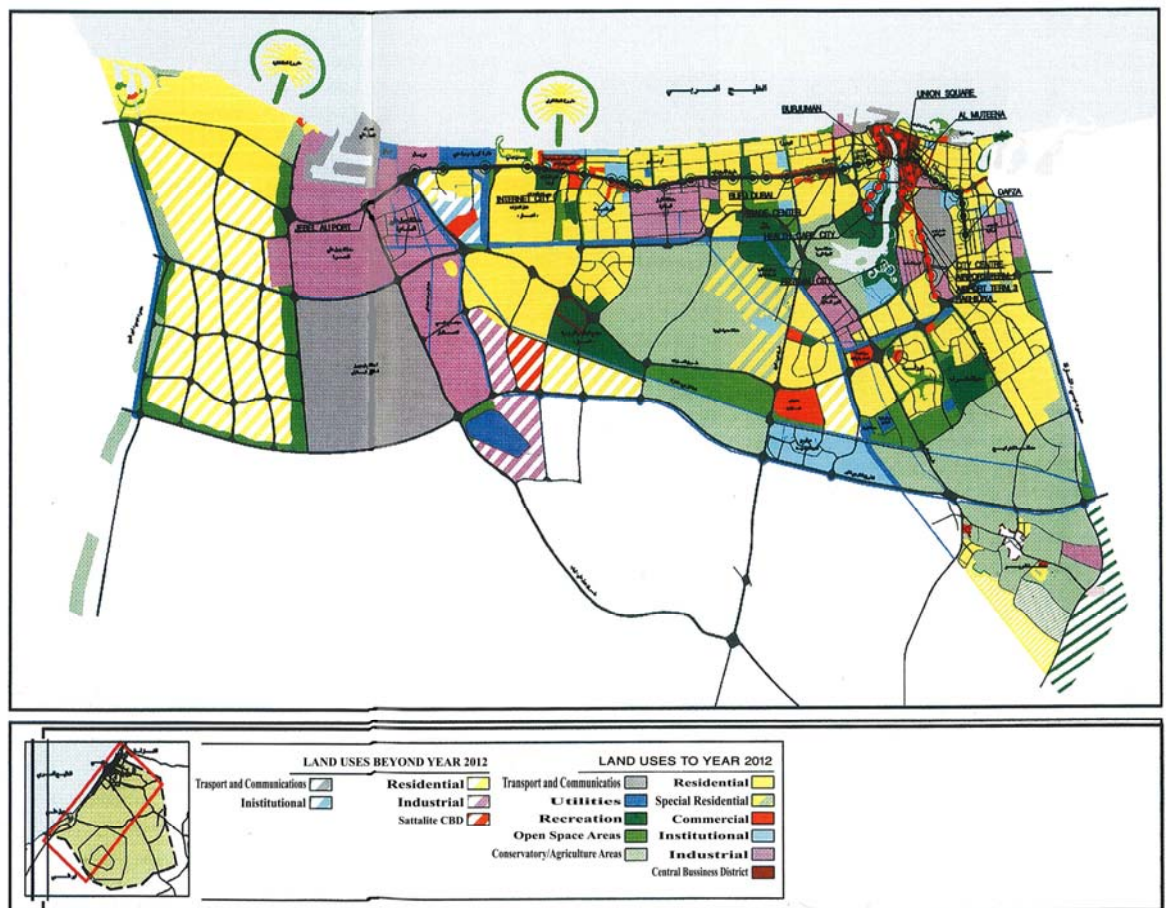
Source: Municipality of Dubai

The key aim of the plan related to the city of Dubai was to stop a senseless spread of projects outside the structural plan (see Figure 5.10), and to ensure long-term future urban growth through redistributing the use of key land outside the structural plan. It recognised urban growth outside the structural plan, in support of building a suggested sub-central work area to include a structural plan phase for the years after 2012. The last two plans (the Structure Plan, 1993-2012, and the Strategic Plan for Urban growth, 1998-2050) show that new ideas have been developed by planners in the city, such as improving coastal areas, like the Jebel Ali zone, and creating a new tourist sector, which

developed into unique ideas for urban mega projects. Analysis of urban growth and urban planning were required in order to illustrate the specific urban mega projects of Dubai's new urban policy paradigm. The case study of Jumeirah Palm Island is the best reflection of that policy. It aims to provide an understanding of how new urban plans have depended on the creation of a new urban district and marketable products, such as artificial islands, shopping centres, offices and a new housing community, which can be sold on to finance the costs of transformation.

After having analysed urban development mechanisms and city planning in Dubai since its earlier stages, it is clear that the city has boosted its built environment development, particularly mega projects. The notion of mega projects is important in that it opens the way to the use of the new urban strategy of Dubai, in the context of globalisation. Next, it is important to examine a case study mega project as an example of Dubai's dozens of urban mega projects, in order to explore why Dubai adopted such a strategy, and to see how the city comes under the influence of globalisation.

5.5 The Case Study of Jumeirah Palm Island (JPI) Mega Project

The chapter now turns to the specific case study in which Dubai develops its entrepreneurial projects. The emergence of the mega projects strategy is part of broad and profound changes in the political and economic systems in Middle Eastern cities. This suggests that the mega project initiatives should not be seen as a result of a flood of petrodollars flowing to these cities. Dubai is making every effort to discover a new economic foundation. In other words, the strategy for mega project development has been adopted to expand the urban economy, promote larger scale development, and to strive for global city status. The establishment of mega global projects has given Dubai global attention and status as a place which attracts visitors from different parts of the world. In doing this, the city started to construct large national real estate companies, adopting a mega projects dominated policy, focusing on financial flows from government, the GCC and global investors. This has led to the creation of a huge transformation in the economy and population of Dubai. This, in reality, is the result of an impact of the four dimensions of globalisation, which will be analysed in the next four chapters. This section provides analysis of the case of Jumeirah Palm Island (JPI) mega project, discussing the ways in

which the project was planned and implemented, how Jumeirah Palm was created, the proposed land uses and activities, and the infrastructure and utilities that will support the development.

Dubai is a portal city, like Hong Kong, Singapore, Miami, Baltimore and Vancouver, concentrating into its streets all the best on offer in this post-industrial, post-national world. The essential component in portal cities is the luxury housing industry (Trevor, 2005). The primary characteristics of the city's infrastructure have changed with the development and growth of the population that has taken place. This change was connected on the one hand with globalisation factors, and on the other hand with local policies characterised by the adoption of an open policy. Up until 1995, the city had been moving towards development and urban growth at a relatively low pace. However, when the traditional philosophies were changing at such an incredible speed, this led to the creation of a general feeling of danger and a re-evaluation of what was happening in Dubai, as well as the loss of competitive advantage due to the simultaneous adoption of many urban mega projects.

From the late 1990s, in response to economic globalisation, the government of Dubai has developed links with property developers through public–private partnerships. For the public sector, the aim was to encourage private investment and to direct it towards the development of the city's waterfront areas. This strategy was not incompatible with massive public sector support, for it involved the creation of conditions which were more favourable for private investment, in situations where the boom of urban property markets and the prospect of high returns made spontaneous private sector involvement likely. A similar approach was adopted from US urban entrepreneurialism. The most famous example of this type of urban regeneration was Baltimore. Similar developments of this type were launched in Europe in the 1980s, and imitated in the UK from the mid 1980s, and then in continental Europe (Levine, 1989).

The Urban Development Corporation (UDC) had the objective of developing an urban zone, and developing its own projects as well as attracting private investors. To do this, the UDC had the power to acquire land and to control its development. The key

UDC in Dubai was Nakheel, an urban development company whose objective was the regeneration of Dubai. It started up in 1999 in the Sea Port and Custom Authority in the Port of Jebel Ali. Many other UDC's have been created since then. Nakheel is a government corporation, the one difference being that public resources (land and money) are used to bear the risk of speculative development in order to permit later profitable development by the private sector. Amongst the works carried out by Nakheel was the development of fourteen residential and recreational mega projects on a waterfront site in the southern area of Dubai.

The development of JPI was considered not just as an event, but as a catalyst for urban restructuring. This embodies more general trends in urban development and planning. It is also a good illustration of how urban development strategies have been influenced from globalisation flows of space. It is a clear example of a large flagship development project intended to strengthen the image and the competitiveness of Dubai. It comes from the same desire to strengthen the global role of the city. However, it was therefore much more of a project for economic upgrading than for community development, as will be identified in Chapter 8.

The coastline of Dubai is one of the few man-made features on Earth to be visible from space, because of which it has been dubbed 'the Eighth wonder of the world'. The development of the JPI remains probably the largest urban operation to be carried out in the last few years, in the world. It reveals all of the characteristics of the large flagship projects that have increasingly been produced from a process of globalisation from the 1990s onwards, throughout the world. It involves re-imaging, to make it attractive globally, restructuring the entire urban area through the development of sites which have become obsolete after technical and economic change, and the involvement of private investment through new types of partnerships.

Figure 5.11 The Coastline of Dubai 2000

Source: Nakheel.

Figure 5.12 Recreational Mega Waterfront Projects, Planned and Under Construction in Dubai Until 2025

Source: Nakheel

Figure 5.13 Location of JPI on the Southern Coast of Dubai

Source: Nakheel.

The three palm islands developments will increase Dubai's shoreline by a total of 520 km. The Palm Jumeirah development is a mixed of offshore residential, retail and resort development on an artificial island reclaimed from the sea, in the shape of a palm tree. It consists of a trunk, fronds connected to a central spine, and a surrounding crescent island forming a breakwater. The total area of land that has been created is approximately 5.6 km^2, connected to the mainland by a 300 metre bridge, which extends approximately 5.1 kilometres into the sea, and is approximately 5.3 kilometres wide. The Island is located just off the coast, approximately 23 km southwest of the centre of Dubai (Figure 5.13). It is surrounded by a resort style development along the beach edge, with more commercial development, such as Internet City, Media City, and Knowledge City, which are located inland from The Palm.

The emphasis on the creation of new beaches as part of the strategic plan gives it a citywide significance. The development of the waterfront projects aims to add new recreational waterfront spaces to the city (Interview with Sales Executive in Nakheel,

12.6.2006). The proposed new area was therefore partly about establishing a new spatial balance in the city. This issue is important for the City of Dubai because it has used all its coastal area. Table 5.5 shows the key features of the JPI mega project.

Table 5.5 Some Key Features of the JPI Mega Project

Area	5.6km2
The breakwater	11.5km
Construction Started	2001
Completion First phase	2006
Client	Nakheel
Total coast until 2007	USD 6.5bn
Consultant	Hill International (USA)
Coastline added	78.6km to the country's 72km
Employees working on the project each day	40,000
Reclamation	94 million cubic metres of sand and seven million tonnes of rock.
Hotels	40 five-star
Guests	Expected to become 30,000
Visitors a day	Predicted to become 20,000, with 15 million visitors by 2010.
Residents	60,000 from more than 70 nations round the globe.

Source: Author's survey

5.5.1 How JPI was planned, designed and implemented

In early 2000, the local government and Nakheel signed an agreement for the creation of JPI. The first ideas were initiated by the Sea Port and Custom Authority in the Port of Jebel Ali, which crystallised the reclamation of land as a simple idea to accomplish small tourism projects. After reclamation of some parts of the sea, the view of the authority changed, from the mere idea of reclaiming the shore in a simple and limited way, to starting to construct artificial islands offshore. Then the government-owned Nakheel Co. Was established to execute the Jumeirah Palm Island project (Interview with Head, Dept of Studies and Research, Municipality of Dubai, 25.10.05).

The announcement for work to begin was received a mixed reception. The local, regional and global business communities supported it enthusiastically. Locally, others

had different points of view about the project's social impact, and the economic and environmental consequences upon the whole country.

By 2001, planning was guided by Nakheel's specifications (master planning process). It involved studying aspects related to the project, and environmental considerations as well as financial and economic issues within the community. The project went through a series of stages. All schemes incorporated elements such as project identification, design, evaluation and implementation. The actual relationship between a project and any such scheme, however, is more complex than the idealized scheme suggests. According to a PR senior in Nakeel (Interview, on 25.10. 2005), the actual historical events related to the JPI developed in three stages: (1) Identiffication of the strategic goals of the project; (2) Project Formulation and Design; (3) Project Implementation.

The need for more coastal recreational areas, in other words, more beaches, was very clear in the 1993 strategy for the city. Tourist development was experiencing an extraordinary boom, creating demand for hotels and furnished flats. It seems that the following rush affected the planners' thinking, to such an extent that no attention was paid to the possibility that such massive projects could cause damage in the future. The development of the Palm Island was part of a massive project directed to achieve the following goals:

1. Achieving pioneer status.
2. Setting up an economy based on the tourist sector.
3. Setting up new coastal areas in the few remaining areas.

Property-led development strategy was the major motivation; it depended upon reaching goals. The local authority showed greater effectiveness in carrying out the massive projects than traditionally. The government and Nakheel agreed upon a strategy of attracting hundreds of companies, financed by leading banks, and international hotel companies, to carry out their investment projects. This subsequently led to the appearance of construction designs which were influenced by modern European and

American styles, distinguished by concrete banded by rows of glass. Property designers from both Europe and South East Asia added touches of their own local environment (Interview with Sales Executive, Nakheel on 12.6.2006).

The island was intended to have the shape of a shell; later on other forms were considered (eagle and falcon). The palm was the personal preference of Sheikh Mohammed. The form of the tree was seen to offer the most potential, maximising beachfront areas. The local community was very supportive of the idea. The palm tree is a powerful cultural symbol amongst all Arabs.

The next stage was the selection of the exact site and the preparation of specific plans for each aspect of the palm island. These included the following elements: site analysis/evaluation; palm design program; street scope network; landscape elements; the palm trunk; the palm crown; environmental procedures and analysis; implementation and development; cost estimation; cost benefit analysis. These elements were in a sequential process. Each received detailed attention and involved numerous consultants, architects, designers, engineers, and other technical experts.

Nakheel designed the island on the basis of special consumption considerations, because of the great demand for property in the city. That consumption focus was right, since the buyers' waiting list was increasing after the city had experienced a swift increase in new buyers in the middle of 2002. The development was observed by the project's planners and consultants. As a result, they started to consider the establishment of other islands.

The plan was well studied and discussed before going ahead, and was dependent upon the initiatives and projects of the private sector. The project's cost expectation was much higher than expected, because of a price overrun in the materials needed for construction. Also, the villas' hand-over was delayed by more than twenty-four months (Interview with property consultant, 30.10.2005). Another factor to be considered was the island' ground structure, as it was unlikely be able to support skyscrapers because of fear of slippage. Therefore, several high towers projects were cancelled in the Trunk area of

the Palm Island. Indeed, uncertainty surrounding the solidity of the island led some of the early and ambitious architectural designs to be withdrawn.

The government had a leading role in the development of the artificial island, mainly in financing the infrastructure. The government looked after other elements of the island, for example, the basic foundations. In fact, rather than putting a lot of money into carrying out the projects on the island, the local government instead managed to offer competitive and easy investments for the private sector, relaxing taxation and cancelling out-dated regulations. Foreign companies were the central and major players in carrying out those projects. Many organizations played prominent roles in government. Personalities and individuals also greatly influenced the process. For instance, Sheik Mohammad's decision to reconsider existing plans and to keep the project on a fast track was crucial. Sultan Bin Sulayem, head manager of Nakheel, dedicated support to the project.

The implementation of the Palm Jumeirah involved three broad phases:
- The reclamation phase.
- The infrastructure and utilities phase.
- The building development phase.

Phase 1: Reclamation and Ground Improvement

The reclamation phase took 27 months, and involved sand transfer and rock placement to create the land foundations. During this period approximately 100 million cubic metres of sand and rock were put in place (Interview with Director of Van Oord Gulf FZE, 30.11.2005). Van Oord started construction in August, 2001, and completed its work four months ahead of schedule, in October, 2003. The sand used during the reclamation phase was dredged locally. The sand was suctioned via a trailer suction hopper dredge or a cutter suction dredge, and then transported to the location of the island, where it was placed directly onto the (typically) 10.5m deep seabed. Above sea level, the top four metres (approximately) of reclamation was achieved using a dredging technique known as 'rainbowing', where the sand fill was sprayed over the surface of the

emerging island. The loose fill was then compacted by means of vibrocompaction to form the ground surface. Vibrocompaction is a ground improvement process used to increase the density of loose sands, and to create stable foundations soils. Vibrocompaction involves a combination of vibration and water saturation by jetting, whereby loose sand grains are re-arranged into a more compact state. This process minimises the potential for differential land settlement across the reclaimed area.

Phase 2: Infrastructure and Utilities

The second phase of development involved the construction of the network of infrastructure and utilities required to support development on the Palm. This included: roads, public transport, water supply, sewerage, electricity, district cooling and communications. The construction of the infrastructure, including services plots, the gateway bridge and several roads, commenced in early 2004.

Phase 3: Building Development

The third phase, the construction of the proposed buildings, occurred progressively, as the infrastructure was provided to various sections of The Palm. Fully developed, Palm Jumeirah supports around 40 hotels, 1,800 residential beachfront villas and 2,400 apartments. The construction of villas on the first frond commenced in March, 2004. It includes marinas, a water theme park, restaurants, shopping malls, sports facilities and commercial land use. Palm Jumeirah will support an ultimate population of approximately 60,000 residents, 30,000 guests/transitory visitors and 20,000 employees. It is anticipated that the majority of Phase 3 will be completed by the end of 2006, which was not completely finished until the writing of this thesis.

The Palm Jumeirah was broadly divided into four main zones: the trunk, fronds, spine and crescent. The main elements of the Palm are shown in Figure 5.14.

1. Trunk

The trunk, which is made up of six islands connected by road bridges, is 1.9 km long and 500 m wide. It is considered to be the 'hub' of the Palm. It is broadly divided in half by a canal, which extends for 1.5 km along the length of the trunk. The southern end of the trunk is connected to the mainland by a bridge. The village centre is in the northern tip of the trunk. The trunk will be accessed by road from the mainland via the Gateway Bridge, by boat or by monorail. Land uses on the trunk include hotels, residential apartment buildings, retail outlets, restaurants and related uses, marinas, a mosque that can accommodate approximately 1,000 people, and commercial sectors. Figure 5.15 shows the major land uses for Palm Jumeirah.

Figure 5.14 shows the main elements of Jumeirah Palm Island. The trunk will be accessed by road from the mainland via the Gateway Bridge, Boat, or Monorail extending from the mainland, along the trunk and spine, terminating at the crescent.
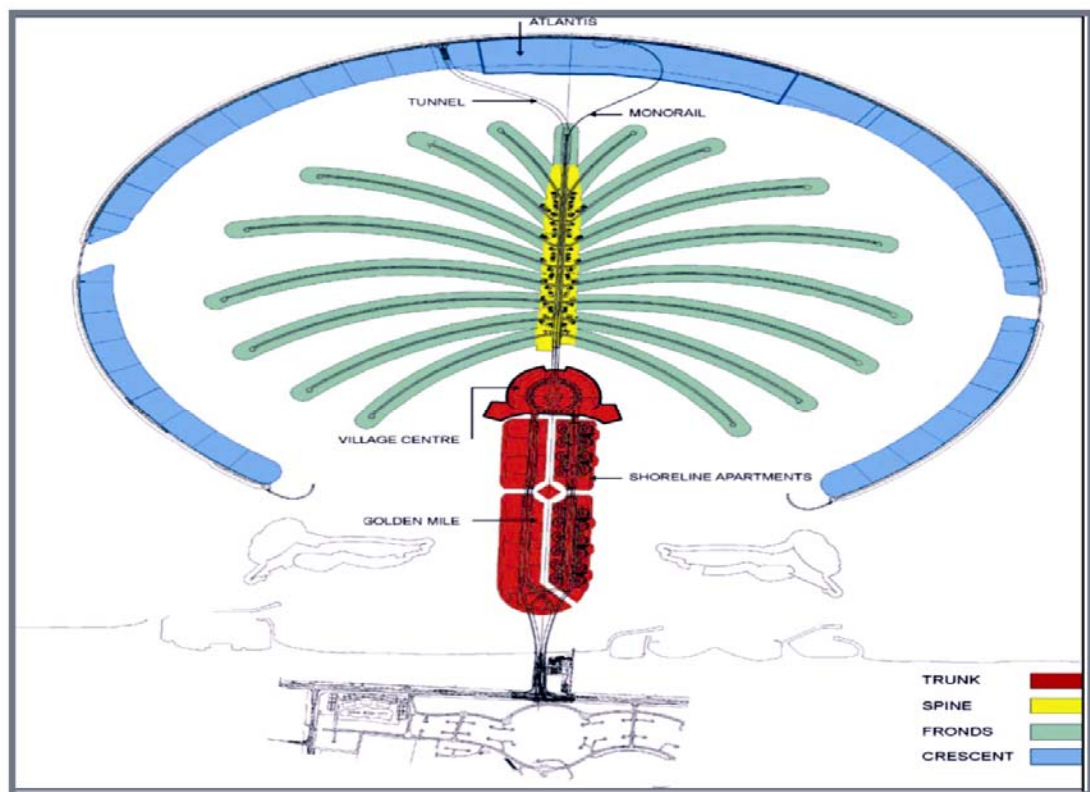
Source: Nakheel.

2. Fronds

The fronds and the spine are attached to the trunk by means of a road bridge linking the village centre to the bottom of the spine. The fronds are a series of crescent-shaped 'branches' extending off the central spine. They are 130 m wide, with lengths ranging from 600 m to 2 km. The fronds are mainly residential, with attached and detached beachfront villas in a variety of styles located along their length. A road at the centre of each frond provides access to the villas (Field study, visit to JPI on 9.7.2006).

LEGEND:

- ■ RESIDENTIAL - VILLAS
- ■ RESIDENTIAL - APARTMENTS
- ■ HOTELS/RESORTS
- ■ MIXED USE (RETAIL, RESIDENTIAL, COMMERCIAL)
- ■ OPEN SPACE/SERVICES
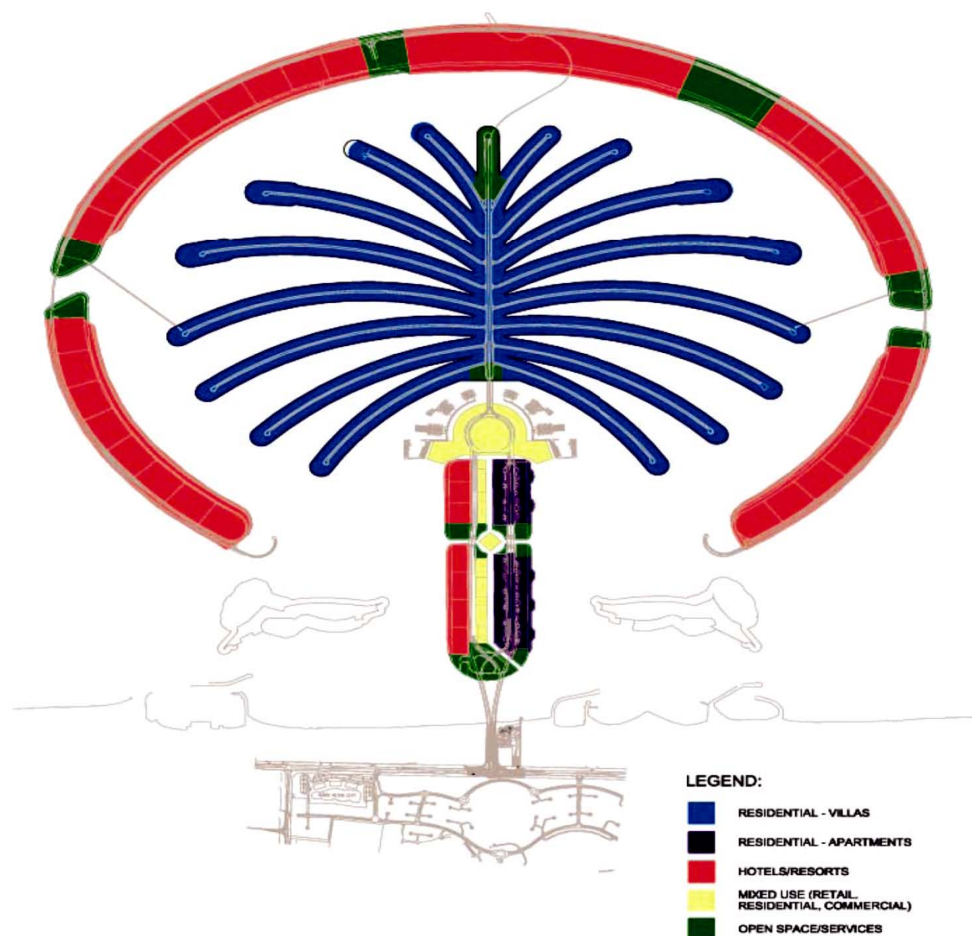
Figure 5.15 Jumeirah Palm Island Land uses: it shows that the fronds are mainly residential, with a variety of styles of attached and detached beachfront villas located along their length. Most of the Hotel/resorts located on the crescent (Source: Nakheel).

3. Spine

The 2 km long spine provides access to the fronds, and the link between the trunk and the crescent. A number of residential villas are also located along the spine at the base of the fronds. It is also proposed that a mosque will be located at the top of the spine. The main road and monorail is located along the spine. No monorail stops are proposed for the spine.

4. Crescent

The crescent is an elliptical shaped breakwater, with a beach on its inner side and shore protection on the outer seaside. It is 11 km long and 300 m wide. Land uses on the crescent include 32 upmarket hotels, The Atlantis Resort, landscaped areas, and a seaside promenade. The main access to the crescent is provided by means of a road tunnel and monorail connecting to the spine. The monorail will link directly to the Atlantis Resort. It is also proposed that a series of jetties will be located along the inner side of the crescent, to provide ferry/boat access to hotels.

5.6 Conclusion

This chapter has outlined the development of Dubai through highlighting its different planning stages and processes. The aim of this chapter was to gain a better understanding of the contemporary urban development of Dubai, and to see to how these urban developmental mechanisms led the city to adopt the urban mega projects. A case study of the Jumeirah Palm Island mega project is discussed as an example of the new urban development phase in urban policy in the context of globalisation. Globalisation is changing Dubai and its planning. Dubai has passed through a phase of radical changes since the nineties. The increased impact of globalisation powers, and its economic influence, has created drastic spatial change.

From the period of 2000-2007, Dubai entered a new phase of globalisation with the encouragement of tourism and knowledge-based trades. It emphasized the use of urban development to guide the city's economic growth from an oil-dependent economy, to an entrepreneurial and tourist-based economy. Urban forms started to be influenced by

FDI flows. Amidst its relentless drive to join the club of global cities, Dubai has embarked on a major transformation of its urban landscape. The urban scene in this period is characterised by the infusion of new privately-owned, controlled and accessed urban fragments, such as shopping malls, gated housing communities, leisure destinations, theme parks, office facilities and the headquarters of trans-national corporations. In the same thrust of policy, the government planned the development of the southern areas from Jumeirah to Jebel Ali, a strategically important zone, as it is the last coastal area acquired for development. The development of JPI is considered as a catalyst for urban restructuring, which embodies more general trends in urban development and planning. This is a good illustration of how urban development strategies have been influenced from globalisation flows of space. It comes from the same desire to strengthen the global role of the city.

From a historical prospective, it appears that the tolerance policy reduced customs duties, and an openness to exchange profits in hard currency, without any tax, has resulted in the escalation of development in Dubai. The development of the Jebel Ali Zone and the Emirates airlines has provided motivations for mega projects. Such development, however, would not have been possible without the open attitude of the government towards foreign investment. It would not have been possible either without the geographical and historical advantages that Dubai has, and the substantial investment in urban and tourism infrastructures.

The JPI case seems to be a paradigm for the new urban strategy in Dubai. With this in mind, it is important to identify the different dimensions of globalisation on the development process in Dubai. The explanation developed in the next four chapters reveals an intertwined process during which the economic, technical, social and political dimensions of globalisation induce each other, and act together to constitute Dubai's urban pattern. The next chapter will examine the economic dimension of globalisation on the JPI mega project.

CHAPTER SIX

THE ECONOMIC DIMENSION OF GLOBALISATION

6.1 Introduction

The previous chapters have suggested that several forces shape the characteristics of global mega projects, and that economic restructuring is the main factor influencing them. For this reason, an analysis is required to understand the actual functions and evolution of the JPI. This is in order to assess to what extent the JPI is a global phenomenon. This chapter details the economic conditions that fix the project within globalisation. The main aspects that I consider are: FDI, TNCs and UMPs, which are the main forces in globalisation. Using the economic dimension helps to identify whether there has been an impact on global or regional development in Dubai. Details will be given concerning the sources of financial flows which took place to finance the JPI. The investigation of FDIs is essential, to check the ways in which global flows support the JPI mega project. Analyzing the investment flow shows how Dubai adopted its FDI policy. This chapter also questions whether Dubai is a global city. Before examining the economic dimension of globalisation, it is worth assessing whether Dubai is a global or globalising city. The chapter will trace the processes that the city has undertaken in the race to become a global city, and it will examine the nature of its economic policy as well as its influence on the transformation of urban policy. The analysis is based on scrutiny of both published and unpublished secondary statistical sources together with 29 interviews conducted with key personnel involved in the economic development of Dubai, the planning of the local municipality and the management of the JPI (through Nakheel).

6.2 The Race to be a Global City

Over the past several years Dubai has burst upon the global scene with much display. It has exerted significant effort in order to play on the global stage, and it is now

taken seriously locally, regionally and globally. For some, Dubai has a promising future for global trade and as a financial centre:

> *"Is Dubai, in fact, the fulcrum of the future global trading and financial system? Is it what London was to the 19th century and Manhattan to the 20th? Not the modern centre of the Arab world but, more than that, the Arab centre of the modern world"* (Nicolson, 2006).

For others Dubai is on its way to be the capital of the 21st century:

> *"On the main street of the global like free trade, immigrants, open borders, closed borders, mass tourism and the jetliner intersect - and there stands a city-state that is being promoted as the capital of the 21st century. Some projects are so patently unbelievable at first mention that even their promoters resort to using incredulous disclaimers"* (Global Envision, 2006).

What is the strategy driving this experiment? How do the seemingly disparate parts of Dubai's urban landscape fit? How do the political, economic and social policies work together? Undoubtedly, we can consider Dubai as a globalising city, which means that it is under the influence of global forces of foreign direct investment, global elites and global images flows. Since Dubai adopted a global city strategy over the past seven years, it has appeared as a formal economic hub. Due to its strategic and frontier location, globalisation has had a tremendous impact on Dubai.

Now Dubai is insistent on "going global". The leaders of Dubai are planning to make it the centre of a global strategic network of port facilities to compete with the massive Hutchison-Whampoa Corporation based in Singapore and Hong Kong[1]. The latter is developing even further, and at great speed, and now has control over huge

---

[1] Whampoa's principal activities include property holdings, investment, management and development (Haila, 2000, p. 2234, in *Source:* World Investment Report (1995).

.

facilities in China, Hong Kong, Australia, South Korea, India, Yemen, Djibouti, Saudi Arabia, Romania, Germany and Latin America (Nicolson, 2006).

Any global observer can see clearly that, in striving to become a global centre, Dubai has embarked on a series of high profile projects, meant to signify its arrival on the world stage as a first rate "global" or "world" city. Hagel (2005) discusses Dubai's strategy of attracting talent from around the world, to help build global leadership in key business sectors, starting with port management and tourism. Dubai World Ports (DWP) started by developing highly productive management techniques in Dubai's own port of Jebel Ali, which has emerged as a major global transhipment centre.

Dubai's economy is moving into tertiary production, as opposed to manufacturing production. The Dubai International Financial Centre (DIFC) is a new business hub, which opened in 2004. Its main function is to link existing financial centres in London, New York, Tokyo and Hong Kong, and to act as a medium for regional economic growth, development and diversification. Its operations have caught the attention of prominent international firms such as Merrill Lynch, Mellon Global Investments, Barclays Capital, Lloyds TSB, Credit Suisse and Deutsche Bank, who have all applied for licences to operate from DIFC. Dubai Internet City is home to companies aiming at emerging markets across the Middle East, the Indian subcontinent and Africa, covering populations of two billion people with GDP of 6.7 trillion dollars (Stensgaard, 2005). The global ICT giants are all in Dubai Internet City (DIC): IBM, Microsoft, Oracle, Siemens, Sony Ericsson, Dell and Canon. Programs are available to investigate development opportunities (ibid).

Since early 2001, Dubai has strived to re-shape its urban form and join the list of top global cites. Its unique mega projects are a driving force. However, the pathway is not an easy one. At a national and regional scale, Dubai competes with many other cities for resources. Its pursuit of global status has generated problems and challenges, such as skyrocketing real estate prices, traffic congestion, costly urban mega development projects, and hasty construction. "Sheik Mohammed wants to see this become one of the

major capitals of the world, like London, like New York," said Hamza Mustafa, General Manager of The World Islands mega project (Mackinnon, 2005).

It is very clear, from different indicators, that urban mega projects are the driving force of the next economy, not just of the UAE cities, but for all the GCC states as well. Governments of the Gulf are irreversibly committed to the mega projects, which constitute the core of its development strategy. According to IMF estimates, the plans for public and private investment in the GCC states (2006-2010) totalled more than USD 700bn in oil and gas, infrastructure and real estate (Finn Biz Newsletter, 2006). 70% of real estate "mega projects" in the Gulf are undertaken in the UAE. Dubai alone has 51% of them, as shown in Figure 6.1. The dynamic real estate market in the UAE, which, over the past five years, has attracted more than USD 300bn in local, regional and international investment commitments in the country, has resulted in the UAE achieving the highest ranking of all Gulf Cooperation Council (GCC) countries in real estate investments (Pollard *et al*., 2006).

Another example of Dubai's desire for global status is its competitive bid for P&O combined British ports and shipping, which would allow it a powerful European presence. Singapore's bid drove up the price, adding 80% to the value of P&O's shares. The company's value reached USD 6.8bn, which was 40 times more than P&O's profits in 2006. Singapore showed signs of pulling out, leaving Dubai's offer as the favourite. USD 2.8bn was needed to buy P&O, but Arab subscribers backed the bid with about four times the required amount (Nicolson, 2006).

On the other hand, some may have doubts, and therefore question: Is Dubai truly a global city? To answer this we must have an understanding of what a global city is. We may refer back to Castells' definition on page 20, in which he describes networks of global cities as hubs and nods. He also states that global cities will have leading corporations in key sectors, like low and accountancy.

Figure 6.1 Mega Project Distribution across Gulf Coorperation Council
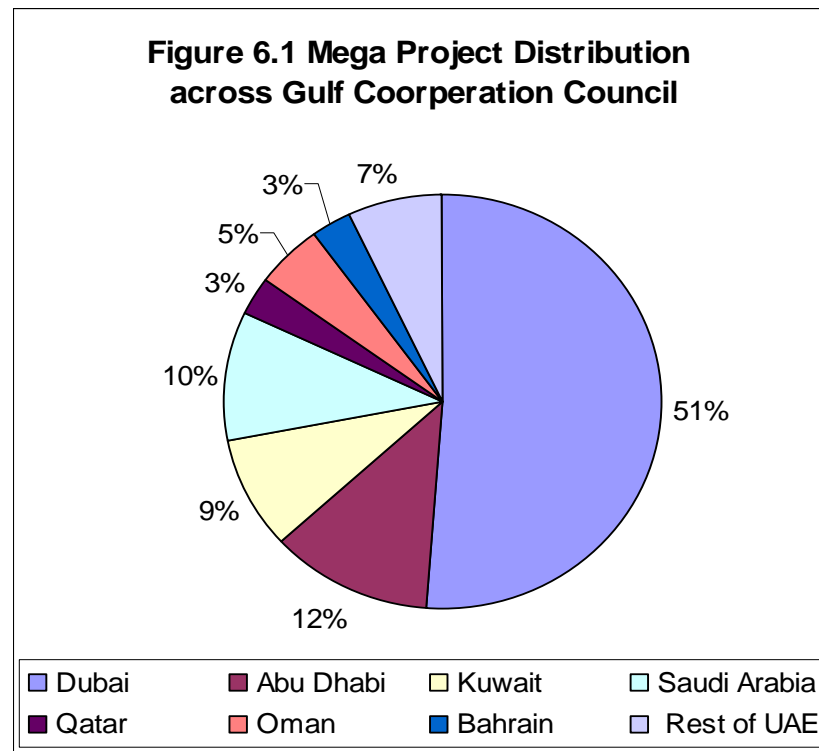
Source: Pollard *et al.* (2006)

Dubai is globally networked and determined to attain an esteemed position in Friedmann's 'world city' framework. Obviously, Dubai has fulfilled some of the criteria that has to be satisfied before a city can be identified as a world city of a particular rank (Stanley, 2003). However, if we relate Dubai to the frameworks of Friedmann and Sassen's global city ideas, it emerges that the Middle East and North Africa (MENA) region have no global cities, and most of its cities and city systems are not ranked in the global capitalist system. Their findings show that, among 122 world cities, MENA cities have low rankings in the list (Beaverstock *et al.*, 1999). As Table 6.1 shows, UAE's two main cities, Abu Dhabi and Dubai are in the category of "evidence of world city formation". With regard to global banking service centres, Abu Dhabi and Dubai are designated minor global banking centres with 2 to 4 significant presences. As regards global legal service centres, Abu Dhabi and Dubai are designated to having 2 or 3 global law firm headquarters or 2 to 4 foreign branches (ibid). Consequently, Dubai cannot be regarded as a top ranking 'world city', nor a global region.

However, Dubai might be classified as a global city according to a number of criteria. First of all it has the highest status in the Middle East and the most mega projects which are the highest quality. Secondly, it is a centre of culture, and attracts workers and experts from all around the world. Finally, it has excellent trade connections, is a leading re-export centre, with technological infrastructure and a busy international airport. While revising "World Cities in Asia", Shin and Timberlake (2000:2273) assess modifications in airline travel, seeking to categorize "sets of cities" which are "equally and directly linked to each other". Their study puts Dubai in a group with Bombay, Colombo and Karachi. Their study also explains that Dubai has achieved a position among the top twenty cities in the world, on the basis of being a hub in the general system of global cities since 1991, when it appeared on the list for the first time. It was the first Middle Eastern city to do so. All this data suggests that, whilst it has not reached the top rank, Dubai is a rapidly globalising city. In the list below, cities are ordered in terms of world city-ness with values ranging from 12 (highest) to 1 (lowest).

Table 6.1 The GaWC Inventory of World Cities

A. ALPHA WORLD CITIES
12: London, Paris, New York, Tokyo
10: Chicago, Frankfurt, Hong Kong, Los Angeles, Milan, Singapore

B. BETA WORLD CITIES
9: San Francisco, Sydney, Toronto, Zurich
8: Brussels, Madrid, Mexico City, Sao Paulo
7: Moscow, Seoul

C. GAMMA WORLD CITIES
6: Amsterdam, Boston, Caracas, Dallas, Dusseldorf, Geneva, Houston, Jakarta, Johannesburg, Melbourne, Osaka, Prague, Santiago, Taipei, Washington
5: Bangkok, Beijing, Montreal, Rome, Stockholm, Warsaw
4: Atlanta, Barcelona, Berlin, Buenos Aires, Budapest, Copenhagen, Hamburg, Istanbul, Kuala Lumpur, Manila, Miami, Minneapolis, Munich, Shanghai

D. EVIDENCE OF WORLD CITY FORMATION
Di Relatively strong evidence
3: Athens, Auckland, Dublin, Helsinki, Luxembourg, Lyon, Mumbai, New Delhi, Philadelphia, Rio de Janeiro, Tel Aviv, Vienna

Dii Some evidence

2: **Abu Dhabi**, Almaty, Birmingham, Bogota, Bratislava, Brisbane, Bucharest, Cairo, Cleveland, Cologne, Detroit, **Dubai**, Ho Chi Minh City, Kiev, Lima, Lisbon, Manchester, Montevideo, Oslo, Rotterdam, Riyadh, Seattle, Stuttgart, The Hague, Vancouver

Diii Minimal evidence
1: Adelaide, Antwerp, Arhus, Baltimore, Bangalore, Bologna, Brazilia, Calgary, Cape Town, Colombo, Columbus, Dresden, Edinburgh, Genoa, Glasgow, Gothenburg, Guangzhou, Hanoi, Kansas City, Leeds, Lille, Marseille, Richmond, St Petersburg, Tashkent, Tehran, Tijuana, Turin, Utrecht, Wellington
_____
Source: J.V. Beaverstock, R.G. Smith and P.J. Taylor, (1999) A Roster of World Cities, Globalisation and World Cities Study Group and Network.

6.3 Analysing the Economic Situation in Dubai

Domestic economic conditions can explain the different strategies adopted by Dubai's government, but they cannot be seen as being independent from the international context. External structures are seen as crucial to Dubai's development. However, some factors may explain policy changes. In particular, they can explain why the UAE became committed to openness, after some countries had gone down the road of protectionism. In fact, the UAE economy was already relatively open, compared to other GCC states. Generally speaking, the economic elites in Dubai put together a mega project investment system, a system that became clear in the economic arena of the Arab Gulf in the early 1990s, predominantly due to the fluctuations in oil prices in the 1980s. Consequently, according to the Head of Studies and Statistics Section in the Economic Development Department of Sharjah, economic elites in Dubai worked to deal with crises in petroleum exporting countries through new mechanisms, which were successful in the face of the crisis. The oil price crisis was not serious in itself, the main problem being in the future, when the resource runs out completely (Interview on 18.10.2005).

In 1985, oil revenues started to decline to 33% and reached 25% in 1995. Expectations were that, with the continuation of oil production at the present rate, oil reserves would be exhausted in about 10 years. In response, Dubai's government made great efforts to diversify the economy, in order to reduce dependency on oil. One senior economist in the Department of Economic Development argued that, in the late 1990s,

warnings appeared, based on traditional economic ideas relating to trade and re-export associated with the historical environment of Dubai. Tourism, finance, and the service sectors have since considerably strengthened (Interview on 23.10.2005). Another economist argued: "Dubai seeks to recruit the riches of the region to become a global financial market after establishing the Dubai International Financial Centre" (Interview, Quantity Surveyor, Emmar, 16.102005).

It was natural for Dubai to enter the new phase of economic thinking concerning 'successful experience'. One of the most important features in the region's cities was the "along the line of Dubai" policy, which created a climate of confidence in the validity of many of the theories and policies adopted by Dubai, which were the subject of controversy and hesitation a few years before. For example, the Project Manager Client Representative of Palm Jumeirah pointed out that the role of specific facilities has attracted investors:

> *"Officials put the question on what is needed for investors to convert their investments to Dubai. The answers came out that they need to provide security and absolute freedom and the removal of barriers to private transfer of funds for their activities and work to increase the incentives for them to invest through creation of unusual economic, tourist and technological environment"* (Interview on 16.11.2005).

At the beginning of 2001, the strategic plan of Dubai was based upon transforming the city into a financial and services centre, not just in the Middle East, but also in order to gain and achieve an outstanding and advanced position in the world economy. These ideas generally confirm that elite administrative, economic and political innovations are regulated by one intellectual ideology. The emphasis here is that this ideological approach was developed by Dubai, as a means to find alternative sources of trade. It was also found that this was the best formula for economic growth in the Middle East. It is important to note that all these policies were later introduced in neighbouring countries to reform their economies.

In analysing the economic situation, it is clear that, since the 1990s, Dubai's GDP has grown considerably. The highest nominal growth was registered in 2005 (around

27%), and represents a considerable share of the UAE's total GDP (29% in 2005). The mining and quarrying sector (mainly oil) represents a diminishing share in Dubai's economy.

Table 6.2 GDP for Oil Sector 1995-2004

% GDP	Annual Growth %	Year
25.5	-	1995
21.5	-11.15	1996
14.1	-32.80	1997
14.1	5.36	1998
10.2	-21.29	1999
10.2	4.69	2000
9.4	-3.00	2001
7.9	-1.62	2002
6.6	-2.03	2003
5.4	-3.73	2004

Source: Department of Economic Development

Table 6.2 shows annual information (total percentage and net production) for the oil sector, which is now considered a small sector. During 1995-2004, the percentage decreased sharply. Oil provided a little over a quarter of total local revenue in the mid 1990s. The percentage drop reflects the flourishing of other sectors, as shown in Figure 6.2. The figures issued by the Port and Customs Authority and the Free Zone showed that trade, excluding oil, had increased by an average of 25% in the past four years, and was expected to grow by 64% in 2005. In the words of one senior member of the economic department:

> *"This growth can be attributed to three factors: first, activity in the share markets, which has witnessed during the past few months a chain of profiting primary issues; secondly, the increase in the number of international companies opening regional offices in Dubai, which means that Dubai is benefiting from the advantages of development in new communication systems in the city; thirdly, means of services and the promotion of tourist activity"* (Interview on 23.10.2005).

From 2001, the government paid great attention to the importance of commercial activity, which is dependent on knowledge and modern communications. For instance, after having successfully established Dubai Internet City and Dubai Media City, the launch of the Dubai International Financial Centre (DIFC) was the next logical step and an indispensable second pillar in making Dubai one of the major hubs of the global economy (International Reports. Nets, 2003). Blue-chip companies and financial institutions from all over the world are now established in Dubai.

Figure 6.2 Dubai Sectoral Contribution to GDP, 2005
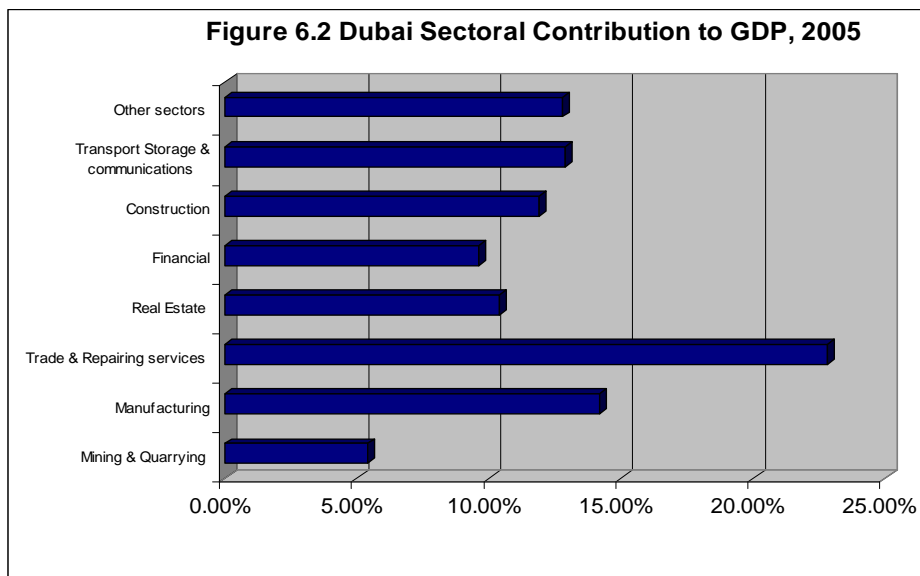
Source: Port and Customs Authority and the Free Zone (2004)

Dubai's outstanding economic performance in 2005 was driven by notable growth in non-oil economic sectors, which have dominated since 2004. In comparison to the situation in 2004, the trade and repair services sector represented the largest share in Dubai's economy (around 22.8%), which underlines Dubai's position as a trade centre in the region. This sector represented around 45% of UAE trade in 2005. The manufacturing sector, with a share of 14.2%, occupied second place in terms of contribution to nominal Dubai GDP. In third place came the transport, storage and communication sector, with a 12.9% contribution. The sector share of the UAE transport, storage and communication sector in 2005 was almost equal to 2004 (around 55%) mainly attributable to Dubai's vast trade sector. The construction and real estate sectors are ranked in fourth and fifth places with 11.9% and 10.4%, respectively. The construction and real estate sectors constitute

48% and 40% of all sectors, respectively. According to the General Manager of the Etqan Construction Company, the reason behind this high share is the continuous infrastructural and building growth witnessed in Dubai (Interview, on 21.12.2005).

Figure 6.3 Growth of Selected Dubai Sectors 2004-2005
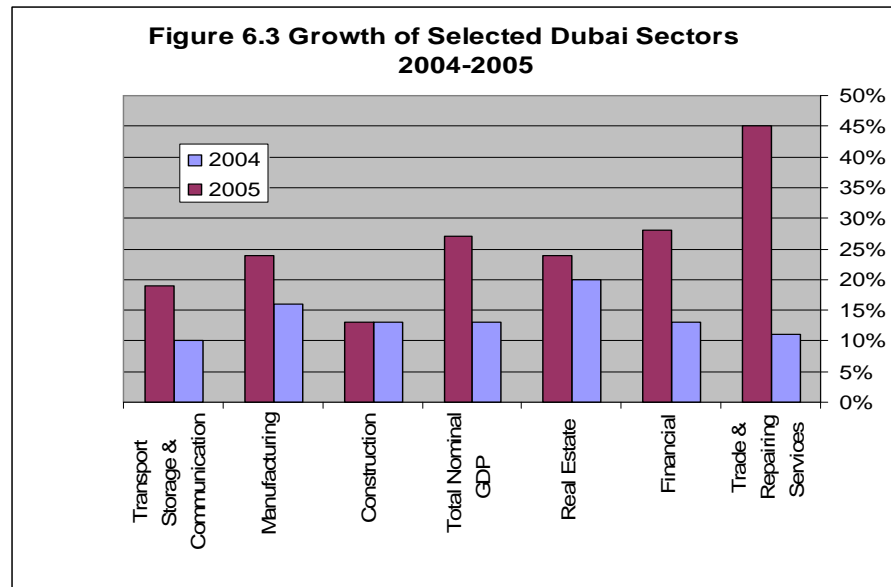
The 27% growth in Dubai's GDP in 2005 was mostly caused by the remarkable growth in major non-oil sectors, such as trade and repair services (45%), manufacturing (24%), construction (24%), real estate (24%), financial (28%) and transport, storage and communication (19%). As shown in Figure 6.3, the growth of all Dubai sectors in 2005 outstripped the growth rate for 2004 considerably. This could be explained by the fact that Dubai embarked on multi-billion dollar services, leisure and real estate mega projects. The Palm Islands, the Burj Al-Arab Hotel, the Dubai Marina, and the twin Emirates Towers were flagship projects. The tremendous growth in information technology led to a concentration of financial services and knowledge-based projects, essentially ones at the heart of global cities (Sassen, 1991). Such projects are geared to the development of the global economic infrastructures of the media and the Internet (Dubai Media City, Dubai Internet City and Dubai Inter-national Financial Center. Other 'cities' are in the making: Healthcare City, Textile City and International City (initially called Chinatown) (Elsheshtawy, 2004).

Table 6.3 Average annual growth rate of gross fixed capital formation, Dubai 1996-2003.

Sector	The average annual growth rate (%)
Total Emirate	7.93
Non-oil sectors	8.59
Farming and Fisheries	21.25
Mining	2.63
Manufacturing	16.37
Electricity and Water	1.02
Construction	10.70
Trade	10.88
Hotels & restaurants	13.13
Transport, Storage, Communications	3.50
Finance & Insurance	17.28
Real estate	11.38
Government Services	5.15
Social, Personal services	28.29
Oil Sector	-3.46

Source: Economic Development Department, (2004) 'Concentration of investment in economic sectors in Dubai 1996-2003:18.

By analyzing the data of table 6.3, it is clear that total fixed non-oil capital continued to increase, by about 96%, during 1996 to 2003 (Economic Development Department). The average annual growth rate shows that total investment (fixed capital) grew during the period 1996-2003, at a rate of 7.93% per annum. It reached an annual rate of 8.59% for the oil sector, which indicates that the composition of the non-oil sectors grew faster than the oil sector.

The building and construction sector was almost constant in total fixed capital during the period referred to, hitting 4.47% in 1996, 4.27% in 1999 and 4.92% in 2003. The average annual growth rate reached approximately 10.70%. The growth in this sector was related to the proliferation of urban mega projects, undertaken in the southern districts of Dubai. The rate of fixed investment in real estate, 18.93% of the total fixed investment of the non-oil sector in 1996, rose to 26.65% in 1999, and then declined after reaching 21.43% in 2003 and a growth rate of 11.38% per annum on average. Nevertheless, longer investment ratios and annual growth rates are high, and reflect the importance of this sector in cornering fixed investment in Dubai. The Project Management in Skidmore, Owings & Merrill (SOM), agreed that the reasons for this are as follows (Interview on 24.5.2006):

-Increase in the rate of return on investment in real estate.

-Government involvement in many real estate mega projects, and the establishment of new towns.

-Significant growth in tourist services in various forms, as well as increased demand for housing, hotels and shopping centres.

-The reluctance of investors to enter into alternative investments, because of the low risk in investing in real estate.

-The dramatic increase in tourism.

Several government and non-governmental organizations have carried out studies that predict lower investment in real estate in the future. However, the facts have not supported these predictions so far. Table 6.4 below presents data on the share of tourism and restaurants in Dubai's GDP for the period 1999-2003, as well as the percentage of non-oil GDP and average annual growth rates. The data shows that the contribution of the sector increased 1.4 times between 1999 and 2003, from AED 2,543 million in 1999 to AED 3,475 million in 2003, at a rate of a little over 8.1% per annum, almost the same growth rate at which total non-oil GDP grew during the period (8.6%). It is also worth noting that the sector's contribution in GDP constituted 5.0% of total non-oil GDP in 1999 and 4.9% thereafter.

Table 6.4 Contribution of Dubai's Hotels and Restaurants in GDP Compared with Total Dubai Non-oil GDP (1999-2003)

Year	Total Non-oil GDP	Contribution of Hotels & restaurants in GDP	
		Amount	**%**
1999	51,068	2,543	5.0
2000	55,970	2,713	4.9
2001	60,960	2,977	4.9
2002	65,821	3,243	4.9
2003	71,073	3,475	4.9
Growth rate %	8.3	8.1	

Source: Statistical Year Book, (2003), Dubai Municipality

Table 6.5 below shows the actual number of hotel guests during the period 1999-2003 and the predicted number for 2004-2008. The annual growth rate for the period

Table 6.5 Actual Number of Hotel Guests (1999-2008)

Actual number of Hotel Guests					Predicted Number of Hotel Guests				
1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
2,480,821	2,835,638	3,067,701	4,107,236	4,342,341	5,448,238	6,007,683	6,567,082	7,126,482	7,685,881

Source: Department of Economic Development (2003: 69)

This economic analysis of Dubai leads to a comparison with other 'going global' cities such as Singapore. It came up in a number of interviews. For example, one senior member of Tameer Holding Investment argued that:

> *"Dubai shares many likenesses with Singapore. Many initiatives taken by the government of Dubai were taken, to some extent, from Singapore's experiences. For example, the famous Dubai Shopping Festival was started in 2003. Local traders wanted to offer sales at the same time as European markets"* (Interview on 19.7.2006).

As with Singapore, the local government of Dubai is in control. The authority of Singapore nationalized its port in 1905 and organised the labour market (Marchal, 2004). As with Singapore, Dubai benefits, in particular, from FDIs (Jebel Ali and other duty free zones). Dubai involves transnational companies, but not as many as do Singapore. In both cases, the port economy is considered a major factor in expanding and developing the market. Both Dubai's and Singapore's ports are important centres for container movements worldwide, which helps develop commerce.

Although there are comparisons with Singapore, there are also major differences that may play a significant role in years to come. Firstly, Singapore is an industrial market in general, whereas Dubai is not. The export and re-export level is 30% in Singapore, whereas it is just 17% in Dubai. Secondly, Singapore has a very strong financial and

banking sector, whereas Dubai, despite all its banks (154 local and international banks in 2005, with assets of USD 32 billion), is still far behind Singapore. In 2000, Dubai's stock market opened, but success is not yet as great as had been expected, and in any case remains far below that of Singapore. However, Dubai might enjoy success in the light of international and regional political and economic conditions, in terms of attracting FDIs.

A number of interviewees agreed that there are basically two ways of interpreting the factors that have contributed to the economic success of Dubai. At one extreme, it has been argued that it is because of the *laissez-faire* attitude of the so called positive non-interventionist policy, adopted by the UAE federal government, which possesses virtually no control over the market. In the words of one interviewee: "The economy of Dubai is almost an ideal model of a perfect market with minimum state intervention" (Interview with Property Consultant, on 8.11.2007). At the other extreme, the economic success of Dubai is interpreted as being due to active state intervention, which, as a whole, provides the necessary condition for the development of a capitalist economy (capital accumulation and labour).

A financial expert was interviewed locally by the author in June, 2006. He spoke of the Department for Economic Development's first strategic plan for economic development (1996/2000) and a vision for Dubai in 2030. The plan focused on providing an attractive investment environment, the development of an institutional framework and a package of necessary policies, to support economic growth and private sector development. A second plan was formulated in 2003-2007, which took into account the effects of globalisation and the influence of the World Trade Organization. The slogan at the time was "New Dubai in the New Economy" (Interview on 9.6.2006). The economic development programs at this stage were along two axes. The first linked the main components of the economy (trade, tourism, industry and the real estate sector) with one another. The second was to strengthen the new economy on the basis of information technology, multimedia, electronic commerce, and active, capital-intensive, industrial and service high-tech. Thus, as one Economic Consultant in the Department of Economic Development outlined: "These policies are shaped in a new model of economic development adopted in Dubai, based on competitive advantage, e.g. creating unique

images of landscape" (Interview on 23.7.2006). The new model focused on four new trends developed from previous ones, as shown in Table 6.6, below.

Table 6.6 Premises in the New Model of Economic Revitalization for Dubai

Traditional Model	New Model
Reduce poverty	Create jobs and wealth
Focus on deficiencies and social needs	Focus on competitive advantages and investment
Economic space: neighbourhood	Economic space: global
Lead: government	Lead: private sector

Source: Own construction based on interview data.

Deregulation became evident when the Authority of Dubai allowed foreign banks to open branches in the city. Such measures became increasingly important in order to take the city to a new stage of market development. The city's sound economic base has made Dubai a major city in the Middle East (Keivani *et al.*, 2003). Although many authors emphasise the role of the state in the UAE's economic development (Davis, 2006), there is a contention that sustainability will be questionable, as there is no real control over multinational corporations. However, there is vulnerability in the face of changing flows of global capital.

In summary, the major impact of the acceleration of economic globalisation on the local environment has been the beginning of diversified economic activities in the city. As one very senior person in the Public Relations and Organisation Department of Dubai Municipality recalls:

> *"Dubai dealt with globalisation not on the basis of its threat, but rather the opposite. The economic community of Dubai adopted the characteristics of globalisation and applied them. The city at this stage is fit to deal with the global economy"* (Interview on 13.6.2006).

In conclusion, although oil contributed only 5.4% to Dubai's GDP in 2004, the construction boom owes much to the flow of oil revenues from neighbouring countries, and the current oil boom in the region underpins trade and the domestic economy. Thus,

some argue that the future direction of Dubai's economy lies in the property market, linked to the price of oil. If prices go down, then Dubai's economic activities as a whole will weaken; if oil maintains its price or goes higher, Dubai will flourish (Cooper, 2005). There are several factors explaining the reasons behind financial global flows towards Dubai. The next section takes into consideration several local, regional and global circumstances that affect FDI flows to Dubai.

6.4 Understanding the Motivation to Attract FDIs

The UAE has undertaken a number of initiatives in recent years to attract larger FDI inflows. This section highlights them and presents a brief review of the UAE investment agenda. Although the UAE offers an attractive business environment, there is no official investment policy at federal or local level. Until January 2004, there were no published figures, or even reliable estimates of FDI inflows.

At this point, it is worth looking at the limitations in the relationships between foreign investors and the UAE government. UAE Trade Agencies law stipulates that the distribution agent must be an indigenous UAE national, and if the agent is a corporate body (e.g. a company), all partners must be UAE nationals. Such conditions cause hesitancy in TNCs wishing to access the market.

During the course of semi-structured interviews with high dignitaries in Dubai, some interviewees told the author that TNCs view these requirements as an obstacle that hinders local distribution. Another TNC concern is that principals cannot terminate an agency agreement from their side, even if there is a stipulated expiry date (Interview with Project Manager Client Representative, The Palm Jumeirah on 16.11.2005).

The UAE is basically a net capital exporter because of its wealth of oil reserves (UNCTAD, 1995). This is part of the reason why foreign capital flows or FDI are so essential. Local entrepreneurs seek participation in non-equity contracts or joint ventures with foreign companies, short-term projects or the transfer of technology. This is more attractive than long-term participation in equity joint ventures with foreign investors

(ibid). However, the key contribution is from the 12 Free Trade Zones (FTZs) in the UAE, which attract TNCs to re-locate their operations, and help develop a range of new activities and services, for example: assembling, packaging, storing, cleaning, exhibiting, re-packing, distributing, combining with foreign or domestic content, or processing. Another attraction for TNCs is Dubai's status as a tax haven with state-of-the-art facilities. Incoming goods can await re-export without going through customs. This may provide some advantages (Qasrawi, 2004).

In the political dimension, several factors explain the reasons behind financial flows. Several regional and global circumstances must be taken into consideration to understand these reasons. Neighbours have suffered political and economic crises, but global and regional political circumstances have helped Dubai to emerge as a flourishing city. It has outstripped other countries and states in the Middle East and Southeast Asia. At the beginning of the 1990s, the strategic plan of Dubai was based upon transforming the city into an outstanding, advanced financial and services centre, not just in the Middle East, but also in the world economy. In interviews, these ideas were seen as important in shaping the policy agenda in Dubai (Interview with the manager of Research and Development, Nakheel, 12.6.2006).

A review of the international and regional economic and political circumstances can help to determine new moves and indicate their degree of success. Similarly, an economic researcher in the Department of Economic Development defined several economic and political circumstances that have helped Dubai to become a flourishing city. In terms of local crises, the Lebanese civil war in the 1970s caused businessmen and highly skilled labour to move out of Lebanon to Dubai. The Iraq-Iran war in the 1980s had a very strong impact, causing many wealthy Iranians to immigrate to Dubai for work or business. In the 1990s, many businessmen and financial experts, as well as companies based in Kuwait, moved to Dubai after the Iraqi invasion (Interview with Economic Researcher, Department of Economic Development, on 22.11.2005). The financial crisis in Asia in 1997 also played a role in attracting FDI towards Dubai.

During the time when the city was experiencing a great economic boom, other factors like the Chechen and Afghanistan wars, the natural disasters in South East Asia

The end of the Cold War also led to an increase in communications between Dubai and former Soviet countries. In a dramatic and sudden way, it opened the door for many tourists and visitors to come over and spend approximately USD 1bn annually in Dubai (Interview with Economic Researcher, Department of Economic Development, on 29.11.2005). These are the circumstances surrounding Dubai. In addition to this, efforts, including policy change, strongly influenced development strategy in Dubai, especially after the UAE joined the World Trade Organisation (WTO) in 1994. These effects included the establishment of basic infrastructure (seaports, airports, highways, communication services) to a very high standard.

The Emirates Airlines and the shopping festival can be considered as characteristic of the emergence of the modern Dubai. Jumeirah Palm Island is seen as the greatest opportunity to achieve economic boom in a series of interactions with economic globalisation processes. This project, radically and in a concrete way, transformed government policy to give Dubai a global brand name and make it a global city for the near future. The government managed to create relative calm in an otherwise turbulent region, attracting a range of international investors, ranging from banks to real estate and recreational developers. The buzz around Dubai over the past few years has attracted foreign capital and expatriates from around the Middle East and the world. Many foreign companies have been attracted by tax incentives in Dubai's free-trade zone clusters, which bear names like Media City and Internet City.

The demography of Dubai, whose major populations are, Indians, Arabs, Iranians and Europeans, allows visiting traders easy access to markets and opportunities to enlarge commercial contacts beyond the region. In 1999, re-exports from Dubai reached 120 countries over all continents. Labour is inexpensive to foreign companies, and there are no complications with trade unions, as they do not exist. Despite all of this, the UAE is under pressure concerning the foreign workforce and their living conditions (chapter 8 analysis this issue in greater depth).

It was easy for companies to set up in Dubai, whereas restrictive bureaucratic laws and environmental laws applied in their home countries. Also, there was no fixed limit to immigrant workers, or laws on minimum wages. Therefore, the city has become a favourite location for transnational companies. Despite some negatives, the city insisted on moving into a more advanced stage, to become a major regional centre for business, tourism and financial services by the end of the 20th century.

Over the past six years, Dubai has shown clear flexibility with regards to fulfilling its economic policy, while foreign investment has played an important role in keeping Dubai's economy competitive, as it develops its outstanding and ambitious projects. The vital role here is the positive participation of the government, which continually reviewed the advantages and disadvantages of having foreign companies and changed policies relating to foreign investment. Following economic change, Dubai flourished as a major exporter, using foreign investment. Since the second half of 2003, the government has started investing outside Dubai. For example, in its first year of operation, Dubai International Capital (DIC), a member of Dubai Holdings, invested USD 1bn in Daimler Chrysler, making DIC the company's 3rd largest shareholder, committing over USD 300m to private equity funds, and made a USD 1.4bn acquisition of The Tussauds Group in the UK, the largest operator of visitor attractions in Europe. The total outward investment of Dubai reached USD 7.2bn in 2005.

6.5 The Input of Foreign Investments in Dubai

In the wake of September 11th and the war on terror, and with a rise in oil prices to over 70 US dollars a barrel, Dubai began to enjoy an unparalleled business bonanza. According to data from the HSBC, the Gulf States profited from cash flows of over 300bn US dollars in recent years. This level of liquidity also fuelled booms in Egypt and Turkey and on the Lebanese property market. It also supports Western equity markets and the US national debt. Unlike the 1970s, when 'petrodollars' ended up in Anglo-American banks, huge amounts of cash returned to Dubai in the form of FDI. Money that might once have been invested in Florida or Knightsbridge is now being spent on the Palm Island development in Dubai, or on apartments overlooking the Emirates Golf Club (Pepe, 2006).

This section looks at the economic direction of modern Dubai in relation to globalisation and FDI flows. In 2008, the UAE reached eighth place on the AT Kearney global FDI Confidence Index, climbing above Bahrain and Qatar. FDI in the UAE amounted to USD 8.4bn in 2006, which, according to an AT Kearney report, represents more than one eighth of the total for the Middle East (based on analysis of 2006 IMF and UNCTAD statistics). This still puts Dubai behind Singapore, which has around three times the amount of FDI, and behind Saudi Arabia, which has more than double the amount, and Egypt, which is slightly ahead (Dore, 2008).

According to the Chamber of Commerce & Industry (2006), two FDI performance indicators are used to compare the UAE to India and China. The first is inward FDI, which ranks countries by FDI received relative to GDP. The second is inward FDI relative to other factors. Table 6.7 shows a matrix of FDI performance and the potential of the UAE, India and China, based on these FDI indicators. The ranking is based on consistent results for three time periods: 1999-2001, 2000-2002 and 2001-2003. As the table shows, China emerges as a front runner, with both high FDI potential and performance. UAE is classified as below potential, with high FDI but low performance. India is classified as an under-performer, with both low FDI potential and performance.

Figure 6.4 shows inward FDI stock as a percentage of gross domestic product (GDP) for India, the UAE and China. This is an average for 1994-2004. The figure shows the same pattern as that of Table 6.7 below. China again ranks first, the UAE is second and India is third. FDI stock is measured at a given point in time, and it is the value of investments at the end of a given period. When inward FDI flows are measured as a percentage of gross fixed capital formation, the calculations indicate about 2 per cent for the UAE, 3 per cent for India and 12 per cent for China (average for 1994-2004). FDI flows are investments made over a period of time. The factors that favour FDI inward flows into the UAE economy are tax incentives, the availability of infrastructure, a stable political environment and conditions that support physical and personal security, as well as the investment regime and environment for business, and the law and the consistency of the legal system, which respects the sanctity of contracts. On the other hand, the factors

that favour FDI inward flows into India and China are their relatively large market sizes, the growth prospects of their economies, and the rising productivity of their labour.

Table 6.7 FDI Performance and the Matrix of Potential in the UAE, China and India

	High FDI Performance	**Low FDI Performance**
High FDI Potential	China (front runner)	UAE (lower potential)
Low FDI Potential	(higher potential)	India (underperformer)

Source: (UNCTAD, 1995)
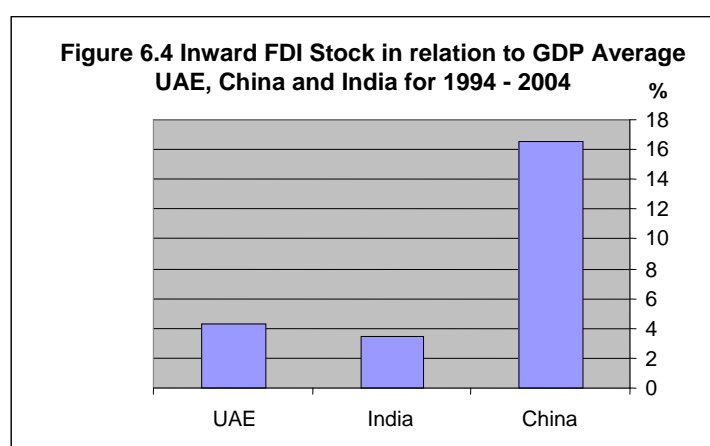
Source: Chamber of Commerce and Industry (2006),
The Economic bulletin, vol. 3, issue 19.

Analysis of the development of FDI can be used as a means to understanding the dynamic course of FDI in Dubai. Three decades earlier, the small desert emirate had been an undesirable place, lacking natural resources and this was even the case two decades after the unification of the seven emirates, of which Dubai is one. Its advantages were neither quite clear, nor encouraging. Since the beginning of the 1990s, Dubai changed its policy and poured huge financial resources into very expensive investment operations (both human resources and material infrastructure). A unique idea by the government changed Dubai, enabling it to find substitutes for strategic resources and benefits, using the advantages of a global economy. Dubai was in a race with regional and global competitors, looking for substitutes to develop its economic activities. At the beginning of the third millennium, city policy changed towards concentration on developing the tourist sector and services. Despite limited natural tourist resorts and government control of

economic decisions, it was relatively successful. Since 2001, investment systems have become more liberal, and can improve tourist operations. FDIs mainly come into the branches of foreign companies. There were 3,500 foreign company branches in Dubai in 2002-2003, distributed amongst the tourist and property sectors.

One economic adviser stated: "The key issue going forward, I think, for the economy, is the whole issue of the property and tourist investments in Dubai" (Interview, with a consultant in the Department of Economic Development, 23.7.2006). According to official estimates, the value of property and tourist investments was about USD 100bn (Statistical Year book, UAE, 2005). Investment sources in Dubai can be classified into different categories. They are mainly foreign, secondly government, then Arab and Gulf investments. However, there are problems, according to the Properties Department Director on the Development Board, who argues that the balance between the workforce and the local population has been lost. Foreign labour is in the vast majority in the work market, and they transfer huge amounts of currency to their home countries (Interview, on 17.10.2005).

Foreign investment in the information technology sector became active as a result of foreign companies being permitted to participate in the economic boom and bring new ideas to the city. Dubai's Internet City offers interesting opportunities to foreign companies. For example, by the end of May 2000, Hewlett-Packard and a Middle Eastern corporate advisory firm, Chescor, declared that they were going to invest USD100 million in Internet City. These types of foreign company investments are increasing dramatically at the present time. One aspect that developed understanding of foreign investment flows is that Dubai is now a base for 2,000 different sized Chinese companies working in the UAE. The commercial exchange between the two countries reached USD10 billion in 2003 (Statistical Year book, UAE, 2004).

Several American companies gained huge profits as a result of the flourishing economy in the city, among them Sun Microsystems, IBM and construction companies such as HOK, Trump, Parsons, Bechtel and Turner and architectural companies such as Skidmore Owings and Merill. There are increasing numbers of European companies that also have economic activities in Dubai. For example, there are 150 Belgium companies and 111 Italian companies. The number of Australian companies operating in Dubai

increased to 139 in 2005 (Department of Statistics). From these facts, it can be realised that the city is heading towards attracting more and more foreign companies to Dubai as their regional headquarters. FDIs were and still are the major power behind the present economic boom.

A Saudi financial consultant, Motasher Al Murshed, speaking before the opening of the Jeddah Economic Forum, revealed to Arab News that capital flow from Saudi Arabia to Dubai in 2004 was as high as USD 7bn, with a further USD 480 million in cash going on the UAE stock market. Figures from the UAE Central Bank showed that total bank loans grew from around USD 52bn to USD 56bn in 2004. This in itself did not fuel the real estate boom after 2001 in Dubai. Other Gulf States such as Kuwait and Qatar, also with large oil surpluses, have been investing in Dubai - and they have been rather more public about it than the Saudis. To conclude, this rise in FDI should not be conflated with globalisation, as flows of investment to Dubai are becoming more, rather than less, concentrated, as noted earlier. The bulk of investment to Dubai is regional in nature.

6.6 FDI and the Development of JPI

This section uses the JPI development project as a basis on which to discuss recent FDI flows in Dubai. A case study can explore a number of related questions, such as: to what extent is JPI a global project, and how do global, regional and local development companies become involved in it? This section therefore provides context and background analysis, concerning the role of global FDI flows in the project. Interviews with key actors reveal particular dimensions of the project.

The construction of the JPI in 2001 was the most prestigious project, attracting foreign companies and developing the tourist industry. As mentioned earlier, there was an obvious need to carry out major policy reforms to attract investment in the tourist, real estate and finance sectors. Investment regulations were further liberalised in an attempt to upgrade tourism operations. The local government changed its policy as regards FDI and invested capital more extensively in the tourist sector. Nakheel, Emmar and Dubai Holding were created to achieve the vision. Liquidity, as well as changes in market regulations, contributed to development within an open forum. Sheikh Mohammed Bin

Rashid had the idea of turning Dubai into a global tourist and commercial leader, and instigated the establishment of the big three government and semi-government companies:

- Nakheel, under the slogan *'Where the vision of Dubai gets built'*
- Emmar, under the slogan *'Shaping the future. Today'*
- Dubai Holdings, under the slogan *'For the good of Tomorrow'*

Nakheel had already started the work and the government handed over the project administration fully to the company. This led to Nakheel designing other mega projects, estimated at USD 30bn, mostly from foreign investments (Interview, with PR administrator, Nakheel, 25.10.2005). Investments in property, hotels and the leisure sector were made easier after 1990. Policies directed towards tourist development in 2001 included positive directions towards activating the role of foreign investment, especially targeted at developing leisure facilities (hotels and malls). New tourist spaces were created by adding new sea shores alongside the three palms. The transnational corporations carried out some important projects that required huge finance, such as JPI.

According to the General Manager Planning Infrastructure & Utilities, Nakheel, at the beginning of planning, and setting up the infrastructure and utilities, the local government was cautious about ratifying investments, and did not allow too many companies to finance or invest in the project. The government realised the importance of its participation in the reclamation of land from the sea area, constructing the island and setting up all the basic requirements of transport, electricity and water services (Interview, 19.12.2005). As soon as the project was launched, transnational corporations asked Nakheel for more details regarding possible environmental side effects of the JPI (Interview, with Senior Environmental Engineer, Nakheel on 19.6.2006). They asked about the risks on their investments in the artificial island, such as from earthquakes and storms. Nakheel had already contracted several global companies to consider all the possible environmental effects. Since 1999, the various preparatory studies for the project included wave and water level studies. As the General Manager Planning Infrastructure & Utilities, Nakheel noted: "The theoretical studies were undertaken by a large team, under the direction of Nakheel, to provide a comprehensive study of the project and its

environmental implications". He added: "Issues considered included the hydrodynamic flow model and its application to the existing situation, the water quality and flushing studies, and the near shore wave climate modelling" (Interview 19.12.2005).

Transnational corporations decided to take part in the project so that they could use it as a new international base in the tourist and leisure industry. This resulted in a competitive strategy promoting these companies on the world market, and political decisions were able to move towards more economic liberalism (Interview with General manger-VIP Sales, Nakheel, 9.7.2006). In this context, the transnational corporations pursued significant projects on the island that required enormous amounts of finance, involving 40 five-star hotels, four harbours for yachts and ships, 20 tower blocks, 1,800 villas along the fronds and 2,400 apartments. The advantage of the project was its wonderful location in the Arabian Gulf, enabling it to attract competitive investment. However, the announcement of two further palm Islands (Palm Jabel Ali and Palm Deira) decreased investments flow to JPI. There were also speculative indications of a possible property market bubble as a result of too many residential units being available (Interview, Director of Marketing, Nakheel, 14.6.2006).

Despite this concern, and after launching the project in 2001, Dubai's economy became the most open economy in the Middle East. Foreign systems were imported for some departments in association with private and foreign investments and property ownership in the city. The new systems were not complicated as such, and mainly concentrated on attracting foreign investment. Project management was run by a consortium of American consultants (Hill International and Parsons Co). Hill International was chosen to provide the project with administrative services during the planning and design of the island. Hill International, project manager for The Palm, was amongst the first outside consultants to be approached, due to its extensive experience of mega projects, approaching the scale of the Palm, including numerous air and sea port developments around the world. Hill was also familiar with Dubai's coastline, having worked on the redevelopment of Al Hamriyah Port and the government-sponsored Deira Creek Waterfront (Interview, Director Marketing, Nakheel, 14.6.2006).

In July, 2001the contract for the creation of the crescent breakwater was issued to Archirodon Construction (multinational company) and, in August, the contract for the crown and trunk of the "palm tree" went to Van Oord (Netherlands) (Interview, Director Van Oord, 30.11.2005). Van Oord had been a key player in some of the Netherlands largest land reclamation projects. The adopted strategy was based upon flows of FDI to finance two thirds of the projects expected to be carried out on the island. Pre-sales of villas have already covered a large slice of the expenses of the island's construction. Shoreline villa sales took only some three days, and buyers have been attracted from 72 different countries worldwide. The general trend has been that a high proportion of buyers are from GCC countries, including the UAE, the UK, Russia, the Commonwealth of Independent States (CIS) and the USA. Nakheel wanted to attract more buyers from the USA for a number of reasons, primarily because Americans increasingly look to invest in property abroad. A concerted Dubai marketing and PR campaign was launched to coincide with the Emirates twice daily flights to New York, and publicity was gained from Nakheel's exclusive partnership with The Trump Organization.

Staff at Nakheel were reluctant to provide the researcher with precise data regarding property owners in JPI or their nationalities. Some estimates could be gained from a field study of the sales of real estate companies who deal with JPI properties. This was a useful way to obtain this data. From this, it was found that just over one eighth of all housing units in the JPI belonged to UAE locals, around a quarter to other GCC nationals, and about a fifth to Europeans. Locals were often tempted to sell their property, because of the dramatic increases in prices over the last three years.

Land and apartments in residential towers in JPI were sold and re-sold many times, even before construction began. Real estate projects saw short-term and fast benefits, with sales and financing through loans from banks and finance companies, and commercial capital from large developers. In a 2002 newspaper article, the Marketing Manager of Al Khayat Real Estate noted: 'There is so much demand from buyers, it is hard to meet the requirement with one island. Palm office currently has a waiting list of over 800 firm orders'. With almost 90 per cent of the units put on sale already sold, it was believed that the 1,100 units on the nine fronds would be sold out in 10 days. Buyers are mostly Arab nationals, Europeans and people from the Indian subcontinent who

apparently 'prefer the Palm Island to other beachfront properties in Cyprus and Greece. Some 70 per cent of the buyers are UAE nationals'. However, one Sales Executive in Nakheel told the researcher that the UAE's property owners on JPI would not rise any further, and indeed many of them had already sold on when prices rose in 2005 (Interview on 12.6.2006).

Table 6.8 Ownership of JPI Properties by Country in 2007

Buyers' Nationalities	%
UAE	13
GCC	25
Europe	20
USA	4
Other Arab Countries	8
India	13
Pakistan	4
Russia,	4
CIS	3
African Countries	1
Other countries	5
Total	100

Source: Author's survey of real estate agents and interviews with several brokers.

In the words of the Director of Marketing and Brand Management in Nakheel, globalisation is a "highly powerful force here that we have turned to our advantage; foreign projects were estimated to represent 60% of the total value of the projects achieved on the island" (Interview, 15.6.2006). They were mainly in the leisure and tourist sectors, rather than housing and property development. There are 18 construction companies building villas on the palm fronds. The most supportive are the four transnational corporations: Trump, Kerzner, IGY and IFA. It is important to highlight the main transnational corporations' influence on the JPI project. On the one hand, FDI constitutes about 85% of total project investment, but on the other hand, conceptualising links can be made between the local and global forces involved in the project. For these purposes, the Trump organisation may be taken as an illustration of how foreign companies played a major role in the development of JPI.

Trump is the largest privately held company in New York. It is one of the world's leading real estate developers, with an estimated revenue of USD 10.4bn in 2004, and 22,000 employees. The Trump Organization was established in 1980, concentrating on luxury residential buildings and hotels. The Trump International Hotel and Tower in New York was one of only three hotels in the USA to have received a double Mobil Five-Star rating for both the hotel and its restaurant, Jean-Georges (Gulf News, October 6, 2005). Trump is a global investor with already USD 200 million invested in the U.S. golf industry, and it is in the preliminary stages of planning an application to build a multi-million-dollar project in Aberdeenshire, Scotland (Stephen, 2006).

The Trump projects seem to use the same purpose and type of investment in differing proportions or amounts of capital and labour. The vast majority of Trump investments in JPI were undertaken only as part of a group of recreational projects. At AED 2.2 bn (USD 600 million), The Palm Trump International Hotel and Tower was the first joint venture between Nakheel and Trump (see Figure 6.5). A senior official interviewee suggests: "One core result of partnerships between Nakheel and Trump is the application of global designs for Trump projects in JPI. Trump's designers and architects were engaged closely with Nakheel on the design and interior finishing of the building, to ensure that quality is of the highest global standard (Interview on 4.7.2006).

Another senior marketing and PR officer at Nakheel talked about Trump's investment in JPI. There are seven property project activities: Trump Tower, Trump Plaza, Trump International Hotel and Tower, Trump Palace, Trump Grande Ocean Resort & Residences, the Mare-lago Club, and Estates at Trump National Golf Club. The projects share several common characteristics and make them good opportunities for developing ideas in the booming property market in Dubai (Interview on 20.6.2006).

The Trump Organisation reflects a conceptual framework of the increasingly complex relations between actors and organisations at local and global levels. Most Trump investments are similar in various ways, with a core orientation towards recreational and property projects. It seems that Trump seeks out strategic locations in new global economies. As Donald Trump (President and Chairman) said:

"I am delighted to invest, manage and sell this project on what is clearly the best location in Dubai. When I look at the potential sites for real estate investment, I concentrate on 'location, location, location' - and this is not only the best location in Dubai, but the whole of the Middle East." (Gulf News, October 6, 2005).

Figure 6.5 The Palm Trump International Hotel and Tower. Initially the tower was shaped like an opening golden tulip, but in April 2006, W.S. Atkins changed the design of the tower to make it into a razor-sharp

arch. It is a split linked tower with an innovative open core design. The Palm Trump International Hotel and Tower will be a 48-storey mixed-use hotel and residence, with 300 five-star hotel rooms and 360 freehold residential apartments. It will be the luxury centre piece building of the Palm Golden Mile, located on the trunk. Source: http://realestate.theemiratesnetwork.com

There are three other prominent transnational companies who have been involved in the project: the International Financial Advisors Company (IFA), Island Global Yachting (IGY) and Kerzner International Limited. IFA is a leading Kuwaiti company, working on tourist projects in Europe, the Middle East, India, and Africa. The company develops hotels, parks, apartments, commercial and housing blocks on the JPI. Island Global Yachting (IGY) is a leading developer and manager of luxury mega-yacht marina facilities, in first class yachting locations. This American company develops yachts and harbour services in 25 countries worldwide. IGY and Nakheel have formed an exclusive partnership, whereby IGY will provide comprehensive design, development and

management consultancy services to all of Nakheel's visionary marina developments. This includes four marinas on Palm Jumeirah. Kerzner International Limited is another leading international developer and operator of premier resorts and luxury hotels. Nakheel and Kerzner International Limited have formed a joint venture to develop Atlantis, which has a total site area of approximately 48 hectares (Figure 6.6), and extends for approximately 1.7 km. The development includes two hotels, with a total of 2,000 rooms and conference/convention facilities, an aquarium, and a water theme park which will occupy half of the site. This will include one of the world's largest man-made marine habitats, a snorkel trail, a swim-with-the-dolphins encounter program, and an array of water slides. The estimated cost of the development is USD 1.1bn.

Figure 6.6 Atlantis Hotel will be two tower blocks with a total of 2,000 rooms, and two monorail stations linking it to the main stalk of the Palm Jumeirah. The design was based on the mythical lost continent of Atlantis, along with traditional Arabic design themes. It was expected to be completed in late 2007, but the work was delayed and the new estimated finish date is now November 2008. (Source: TEN real estate, http://realestate.theemiratesnetwork.com/developments/dubai/atlantis_hotel.php).

The Jumeirah Palm project therefore produced an interesting form of foreign investment flow - joint ventures between foreign companies and Nakheel. These strategic joint ventures helped develop the property and the tourist sector, as it created investment outside the city, and particularly in Arab countries like Jordan, Egypt and Syria. As

shown in Table 6.9, the total costs of the JPI were USD 6.5 bn. The government's share was USD 600 million, the private local sector USD 420 million, the Gulf States USD 1.9 bn, while the rest was made up from FDIs of USD 3,580 million and of foreign investments, which constituted about 85% of total project investment. The most important investors were from the United States (44 per cent) and GCC companies (30 per cent). The GCC companies, mostly from Kuwait and Saudi Arabia, were driven mainly by economic considerations, but also had political and security motives: investing in Dubai showed a tendency to place funds closer to home following September 11th. The US firms were primarily active in recreational property development, management and architectural design. For the GCC, recreational property development was the most important sector.

Table 6.9 Total Investments of Global, Regional and Local Companies in JPI

Country	Number of Companies	%	Value of investment (USD Millions)	%
USA	8	15.7	2550	39.2
UK	4	7.8	200	3.1
Germany	3	5.9	70	1.1
Netherlands	2	3.9	150	2.3
Japan	4	7.8	230	3.5
GCC	7	13.7	1800	27.7
UAE	11	21.6	420	6.5
Singapore	5	9.8	160	2.5
Local Govt	1	2	600	9.2
Other countries	6	11.8	320	4.9
Total	51	100	6500	100

Source: Nakheel.

According to the Manager of Research and Development at Nakheel, at the beginning of 2000, Nakheel tendered its Palm Island project to Gulf Co-operation Council corporations. It managed to attract some companies, especially in property led development. The Kuwaiti company, IFA, was to develop IFA Hotels to join other projects such as the Vermont Palm Hotel, the Vermont Palm apartments, and the Jumeirah Vermont Hotel (Figure 6.7). IFA is also investing USD 400 million in developing the Golden Mile (more than 1000 apartments, 220 commercial shops and restaurants) (Interview on 12.6.2006).

Figure 6.7 The Fairmont Palm Residence will be located on the trunk of the island and will contain 558 deluxe apartments, townhouses, and penthouses, directly linked to the five-star Fairmont Palm Hotel and Resort. The Fairmont Palm Residence has North and South Wing apartment buildings and is being developed by IFA Hotels & Resorts.
Source: TEN Real Estate.
http://realestate.theemiratesnetwork.com/developments/dubai/palm_fairmont_residence.php

Several factors clarify the dimensions of the financial flows from the Gulf corporations towards Dubai. According to the General Manager Planning Infrastructure & Utilities of Nakheel:

"We have to take into consideration the relative recession that hit the Gulf States, particularly Kuwait and Saudi Arabia, after the Iraqi invasion of Kuwait, and also the stock market collapse in both countries, as well as the September 11 events" (Interview on 19.12.2005).

As shown in Table 6.9, the number of local companies working on the project has increased to 13, contributing 6% of total investment in the project. However, these property development companies are small; government investment covered the land reclamation to construct the island and lay the basic foundations, while 29 foreign companies constituted 58% of the total companies investing in the project. The USA share was 18%, followed by Singapore 12%, then Japan 10%. A lack of government participation in the project may also be noted, compared to foreign or GCC investment.

Such limited participation aroused some criticism and caution, as it might limit government control over the project. The project was deprived of local institutional involvement. This is the main challenge Dubai has faced in recent years. In addition, there is the issue of the lack of indigenous contribution to the labour force, since 98% of the 40,000 workers were foreigners (Interview, Administration Officer, Department of Economic Development, 15.6.2006). The majority of administrative and technical specialists in other small positions were also foreigners. This leads us to explore another major problem (which will be discussed in chapter 8) concerning the regulation of mega project decision-making, which is the difficulty of keeping pace with the fast changing requirements of the local community, along with economic and social development.

Most of the interviewees who were not citizens of Dubai claimed that the liberation of FDI would benefit the businesses of Dubai's real estate and commercial agents. This suggests that foreign investors believe that liberalisation of FDI inflows typically does not harm the local activity of UAE nationals' commercial agents. Local companies, however, would view the liberalisation of FDI as a potential threat, because it could result in waiving the exclusivity that privileges them, and eventually adversely affect their businesses. Dubai nationals' fears of TNCs domination of the market were expressed at length during the interviews. A Quantity Surveyor, Emmar, who has operates in different urban mega projects, stated in an interview with the author:

> *"Globalisation under the WTO is aimed at manipulating domestic laws, which were established to protect the interests of UAE nationals. I believe it will probably put an end to my agency's contracts, and harm the UAE national businesses, because TNCs will have the upper hand, and decision making power, in all commercial deals and transactions."* (Interview, 23.10.2005).

Another businessman claimed: "It is the duty of the government to educate and guide the private sector to benefit from the WTO agreements, which is not the case". He stated that:

> *"The UAE is a small economy with a competitive market, we are not qualified enough to survive the competition with TNCs, unless the government protects domestic industries' interests from globalisation, promulgates and adapts the laws to the benefit of the UAE*

economy under the UAE commitments in the WTO, definitely, TNCs will easily smash our business." (Interview on 1.11.2005).

The economic dimension considers the effects of FDI and global involvement in the JPI project. Foreign corporations are key players in capital flows. The JPI has attracted many real estate investors and developers, aided by large global bankers and hoteliers, who benefit from tourist interest. The participation of transnational corporations involved in JPI is analysed next. The USA and the East Far concentrated efforts on architectural design and consultancy. Table 6.10 shows the global participation in JPI projects. This table illustrates that the JPI is dependent on foreign inputs for key tasks.

Table 6.10 Type of Participation for Countries on JPI Project

Far East	EU	USA	GCC	UAE	Project work
		✓		✓	Project Administration
	✓				Land Reclamation
✓	✓	✓		✓	Infrastructure
	✓	✓	✓	✓	Construction
✓		✓	✓	✓	Recreational
		✓	✓	✓	Residential
		✓	✓	✓	Mixed
✓		✓		✓	Architectural & Design
✓		✓			Consultancy
✓	✓	✓	✓	✓	Exploiters

Source: Researcher's survey

Both the USA and some EU countries are involved in most aspects of the project. However, the USA plays the most prominent role, as it contributes to most aspects of the project, starting with Project Administration through to project construction and exploitation, whereas the EU companies focused primarily on land reclamation and infrastructure. The JPI had extensive support from American companies. Companies from the USA, the UAE, the GCC, and some of the European and Far Eastern countries have all been involved in funding the JPI at different levels. All corporations were involved in the construction stage.

Analysis of the economic dimension of globalisation shows that, through the impact of FDI on mega projects, investors obtain profits from these creative projects.

However, casual observers of Dubai's real estate sector could be confused: rents are rocketing and re-sale property is in short supply. At the same time, huge building projects make it appear that a large supply of property is about to flood the market. As with many other property markets, Dubai has its own unique features, and many of these features have been created over the last three years. FDI flows have affected real estate prices in Dubai and in the other Emirates. Inflation is an issue, alongside spatial, economic, political and socio-cultural transformations. The city is creating a niche in new architectural forms with a local dynamic inside a deregulated global economic system. Dubai's transformations are a result of globalisation forces and regional processes as well. The policy of urban production fixes the local economy to the global market.

6.7 Conclusion

In this chapter, I have outlined the development of Dubai's policy regarding globalisation. I have devoted this chapter to exploring the economic context in which the development of Dubai's policy has been situated. In particular, I have considered the role of domestic conditions which led to attracting FDI. In doing so, I have made two central claims. Firstly, I have argued that these economic conditions should not be conflated with globalisation. Rather, they are characterized by highly specific geographics. Secondly, I have argued that the economic context explains the character of urban policy change in Dubai. It serves to shape, but not determine policy change. This has implications for the wider literature on globalisation, for it suggests that political outcomes are contingent as opposed to pre-determined. With this in mind, I will explore the role of discursive dimensions in the following chapters.

This chapter has analyzed the economic dimensions of globalisation as they impact upon the JPI in Dubai. It has shown that, whilst Dubai is not a global city, it is rapidly acquiring global status. It has also shown that, since the late 1980s, foreign direct investment has been a major force underlying Dubai's emergence as a globalizing city. Whilst the investment is global in character, the bulk has come from neighbouring Arab states. Such development, however, would not have been possible without the open attitude of the state towards foreign investment. It also would not have been possible

without the geographical and historical advantages Dubai possesses, and the substantial investment in urban and tourism infrastructures. The inflow of foreign investment has led to significant spatial and economic transformations in the city. It has reinstated Dubai's potential as the most important regional headquarters for Transnational corporations and the most important banking and financial centre in the Middle East.

Several factors explain the reasons behind financial global flows towards Dubai. Several political circumstances helped Dubai to appear as a flourishing city. Its neighbours have suffered political and economic crises. Despite the inflow of foreign investment and the growth of the economy, Dubai is still in the very early stages of becoming a global city. The remaking of Dubai into a global city in the future will enable further growth and globalisation of the economy.

The UAE have succeeded in attracting more than two-thirds (70%) of the real estate "mega projects" in the Gulf region. Dubai alone is home to 51% of them. The dynamic real estate market in the UAE, over the past five years, has attracted more than USD 300bn in local, regional and international investment commitments in the country, resulting in the UAE achieving the highest investment ranking of all the GCC countries in real estate investments (Pollard *et al.*, 2006). JPI in particular gives more focus to the socio-economic side through the development of the urban market as a new strategy on which it is completely dependent.

This chapter has argued that a study of JPI can provide a basis from which to explore it as a global project. The economic dimension identifies that there is an impact from both global and regional economic development in Dubai. The analysis presented in this chapter suggests that an upsurge in tourism was fostered by the mega project orientation, with Nakheel at the centre of Dubai's vision. Analysing the sources of investment flow to the JPI, it appeared that Dubai adopted a policy to attract FDI. The JPI project is based on global FDI investment. Transnational corporations lead the key projects on the island. I emphasize the role of the FDI and how corporate taxation affects Dubai's economic development. Dubai's participation in the global economy is rather more favourable, and a number of local academics argue against demonizing or fearing these processes, which may actually be viewed as highly beneficial to the country. Thus,

globalisation is ultimately seen as a challenge and an opportunity. It is also possible to explain the mechanisms of change and attribute them to globalisation. This is partly for empirical reasons, and there is evidence to suggest that the mechanisms of policy change in Dubai are actually global.

CHAPTER SEVEN

THE TECHNOLOGICAL DIMENSION OF GLOBALISATION

7.1 Introduction

The analysis of global dimensions is essential to the understanding of the technological features of JPI. The perspective of technology, offers an approach to study globalisation and its impacts on Dubai's mega projects. The corporations involved in the projects have embraced new technology. This section does not detail the technical programmes and processes used in JPI, but concentrates instead on the effects of architectural aspects and types of design through a series of interviews conducted in Dubai in 2006 with architects in direct contact with developers, urban planners and critics. This chapter, in critically assessing the technological dimensions of Dubai's mega projects, places the city within the current globalisation discourse, and emphasizes the architectural outcomes as a part of technological derivers. Two projects stand out in relation to this. The Jumeirah Palm Island will be the main case study for exploring the technological dimensions of Dubai's mega projects, and to some extent Burj Al-Arab (Tower of the Arabs) will also be used as an example. These two projects in particular, are being used as symbols to represent the new Dubai. Their semantic value, particularly in their use of architectural symbols, offers some interesting insights. It will be shown how, through architectural devices, images are directed at a global audience and this is done intentionally to further highlight the fact that Dubai is 'going global'.

This chapter first considers the effects of technology on Dubai's mega projects, and looks at the ways in which architecture can reflect different aspects of globalisation. Analyzing the architectural art is vital in order to clarify these aspects. Secondly, more refined statistics are produced to identify the global arenas in which architectural firms ply their trade. Focusing on transnational architectural corporations, which are seen as the

central actor in the projects, there is special emphasis on the role of iconic architectural designs. Thirdly, I will evaluate, using examples from the city, how local architecture has been affected in the global context.

One might question whether it is appropriate to consider architecture as a technological dimension. However, within the globalisation dimension, there are relevant relationships between technology and architecture. Technological models are relevant to common architectural systems and the development of architectural principles is typically influenced by current technology, the sets of information deployable, including documentation, equipment inventories, network configuration diagrams, policies and procedures. Architectural principles are typically developed by leading computer industry trends, with predictions about usage, availability, and costs of computer and communication technologies referenced from credible sources, along with associated best practices presently in use.

Information and communication technologies (ICT) have been one of the driving forces behind globalisation (ILO's, 2001). It is argued that technology is at the root of globalisation, in what Castells (1998) described as the "information age". The central players in technological innovations are telecommunications, the internet and e-commerce. Olds (2001) is of the view that flows of money, capital, information and technology have effectively become deterritorialized. Sklair (2006) believes that capitalist globalisation results in a transformation in the production, marketing and reception of iconic architecture. Recent progressive architectural projects have generated new forms in response to new global realities, cultural fascinations and technological advances. Contemporary culture is powered by digital imaging technology, which has transformed the way we visualize and see the world. Accordingly, global corporations and financial institutions have been able to operate with a scale, speed and power unimaginable only a decade ago.

7.2 The Effects of Technology on Dubai's Mega Projects

7.2.1 Upgrading the Technological Basis

Importing the latest modes of technology is the new issue, towards which many GCC countries in urban planning and policy making are now turning to. The UAE has the potential to become a top knowledge-based economy. This is largely because the UAE has become caught up in a mass of pioneering initiatives and projects, and have been inspired by these. Entities have started becoming more innovative, and this new attitude has been a driving force for further development and growth in the UAE's economy. This 'innovation turn' has been supported by market policies. The Moutamarat-INSEAD, and Price Water House Coopers survey rates the UAE as the country most likely to become the region's hub of innovation. The survey's respondents rated the UAE as four times more likely than its closest rival, Egypt, to become the dominating innovative influence in the Arab world (Dutta and Samuels, 2007).

The main concerns, in respect to Dubai's vision, were that certain institutional levels were seen to be limiting the city's capacities to achieve its final objectives, in terms of establishing a regional world city or commercial hub with high technology research and development activity. A comparison Parsa *et al.* (2003) between Singapore and UAE cities shows that, concurrent to the aggressive promotion of high tech sectors, there is a highly pragmatic and stepped approach in terms of attaining the city's final objectives. The study concluded with the words of one top public official, who said that Dubai at present excels at the lower end of the value chain.

Imported technology has had a big impact on the mega project phenomenon in Dubai. Since the 1990s, Dubai has put major efforts into upgrading its technological infrastructure as the basis for supporting complex and multilayered economic, social, and cultural networks conducted simultaneously across space and time barriers. Encouraged by the success in managing Free Trade Zones, the Government of Dubai launched the pioneering initiative of Dubai Technology, Electronic Commerce, and the Media Free-Trade Zone (TECOM), comprising Dubai Internet City (DIC), Dubai Ideas Oasis, and Dubai Media City (DMC).

As it is of rapidly growing importance for Dubai, many global corporations are establishing "innovation centres". The IT market was estimated to be worth USD1.46bn as of the end of 2005, and is expected to top the USD 2.2bn mark in 2009 (Dutta and Samuels, 2007). Building on the national framework, Dubai has pursued an imaginative and aggressive Information Communication Technology-based development policy to maximize its potential gains in terms of international investment, while fostering a knowledge-based development policy. The crowning achievement of the city in this area was the development of Dubai Internet and Media Cities. Former aims were to convert Dubai into an e-commerce and software development hub for the Arab world. Dubai has the first complete Information Technology and Telecommunications centre in the world, inside a free trade zone. It offers modern, ready-to-operate, serviced office space, with Sun Microsystems providing the server platforms and Lucent the cabling. Dubai Internet City (DIC) has succeeded in attracting some major names including IBM, Hewlett-Packard, Microsoft, Oracle, Compaq, Sun Microsystems, Visa International, and many smaller ICT service providers, particularly from the Indian subcontinent. Overall, by September 2000, over one hundred IT companies were registered at DIC, with a further 350 awaiting approval. At the same time, after an initial USD 270 million investment by the Dubai government, DIC attracted an additional USD 450 million from international firms operating at the centre. The authorities acknowledge, however, that, at present, the scale of operations is largely limited to regional IT, e-commerce, and Internet service functions (Interview, Journalist in Albyan newspaper, 17.7.2006).

Dubai Media City (DMC) on the other hand, launched in January 2001, emerged as the focal point of media activity in the region, with organizations such as Reuters and CNN as tenants. The success of both DIC and DMC, particularly in attracting regional and international ICT firms, is largely due to attractive business environments, combining excellent infrastructure facilities with clear and transparent rules and free-trade zone incentives. Building on these activities, Dubai then announced plans for the development of a free-zone, Technology Park, with the objective of attracting technology-specific foreign investment, facilitating innovation and developing general local technological capacity for the regional market. The key role of the DMC, DIC, and Knowledge Village

complex is to create a cluster of innovation, involving educators, incubators, logistic companies, multimedia businesses, telecommunications companies, remote service providers, software developers, and venture capitalists in one place (Dutta and Samuels, 2007).

DIC and other property-led initiatives in Dubai have undoubtedly been influenced by the regional high-technology policies of the 1980s and 1990s, most prominently in the United States, Europe, Japan, and Singapore. These primarily relied on the development of technopoles and science parks to re-create the dynamics found in leading high technology locations such as Silicon Valley, by bringing together high technology industries and research development. They operate on various geographical scales, including entire regions, cities, or smaller property developments. Dubai's initiatives differ from the mainstream experience in one crucial manner - the city lacks an established academic or industrial research tradition that could be tied to such property and technology initiatives. Indeed, its most established higher education institution, the American University in Dubai (AUD), was founded only in 1997.

Another focus in the high-tech corridor is Knowledge Village. This is designed to create a wired community to help build the region's talent pool and advance its move to the knowledge economy. Currently, Knowledge Village has more than 70 educational and research institutions as partners (Dutta and Samuels, 2007). Dubai Silicon Oasis (DSO) was also intended to be one of the world's leading high-technology parks for the semiconductor and microelectronics industry. DSO is an innovation-driven technology community, housing microelectronics and optoelectronics-related enterprises, a state-of-the-art microelectronics innovation centre (MIC), fabrication plants, research and development centres, and specialized academic institutions and residential areas.

It is only now that Dubai is moving towards creating links through the establishment of a Knowledge Village as part of the DIC complex, and within the vicinity of related developments (such as DMC and AUD). In addition to housing the British University in Dubai, and with the prospect of also housing the international campus of the Birla Institute of Technology and Science, the scheme relies on state-of-the-art facilities

to attract to Dubai a range of research, teaching, and training courses from industry and universities across the world. With its emphasis on ICT and engineering-related courses, this initiative is certainly the right step towards filling the gap in research capacity in Dubai (Interview with Journalist in Al Aqarria, Internet City, 21.11.2005).

In addition to these high-profile, property-led initiatives for fostering innovation, research and development, Dubai has also led the way in providing the necessary institutional and legal support for e-commerce and ICT-led development. This was manifested in the royal decree issued by Sheikh Mohammed in April 2000, mandating the wholesale adoption of e-government in the emirate, giving the departments and ministries 18 months to have e-government up and running by October 2001. The project was launched on time under the umbrella site of www.Dubai.ae The Dubai e-government initiative is an integral component of Dubai Vision 2010, which aims to establish Dubai as a knowledge-based economy by leveraging tourism, IT, media, trade, and services as pivotal industries in an effort to move away from dependence on oil related products. The Dubai e-government initiative aims to improve and innovate government services by using technology as a key enabler for a customer-centric approach to providing government services. To achieve these goals, Dubai's e-government has developed and successfully completed a number of projects in the past six years. Examples of these projects are: *ePay*, *askDubai*, *mDubai*, *eIntegrate*, *eHost*, *eJob*, *eSurvey*, and *eCitizens*. The eService was recently launched between Tejari and the Department of Economic Development (in January 2006); all 50,000 organizations licensed by the department have automatic access to Tejari LINK. Tejari LINK is the service that enables online market-making for businesses of all sizes, and is facilitated through a quick and affordable one time registration on the Tejari trading community. Through the server of Tejari LINK, organizations automatically receive a designated website to ensure a significant Web presence for each company (Dutta and Samuels, 2007).

7.2.2 The Growth of Technology and the Construction Market

Significant efforts have been taken to link global communications networks. For instance, E-government has been developed in Dubai not only to ease investors'

interactions with official departments, but also to make access to the global markets easy. This led to greater competitiveness in Dubai's enterprises, as its business transactions are conducted increasingly by electronic means. This is not just a technical issue, but demands a full-scale change in enterprise culture. Developments in this sector are being driven primarily by the municipality of Dubai. This strategy was part of an overall goal of new urban policy that also includes developing conventional communications and government linkages globally, helping transform Dubai functionally as a rendezvous for business and FDI flows.

Dubai's government noted that there is also a need to overcome the notion that existing administrative structures are no longer adequate for the demands of modern government. Therefore, the government has embraced modern technology. Dubai, which continues to be a hub of construction activity in the Middle East, has experienced an increase in real estate investment from USD 3bn in 2000 to USD 45bn in 2006 (Mathews, 2007). The construction and tourism industries are the two major sectors of the local economy that have generated a high demand for new building investments. The UAE construction market is dominated by foreign investment, estimated at USD 7.5 bn in 2004, an increase of 5% over 2006 (Department of Economic Development, 2006). It is one of the most active sectors in the UAE economy. The machinery sector is one of the up-and-coming industries in Dubai. About 30,000, or 24% of the world's 125,000 construction cranes, are currently operating in Dubai, according to the organizers of the Conmex construction machinery exhibition (Mathews, 2007). The market for building and construction products in Dubai alone was dominated by imports of materials worth about USD 5bn in 2005. Average annual growth over the next 3 years is estimated at 15%. Imports come mainly from Turkey, South Korea, Indonesia, and China and, to a lesser extent, from Italy, Great Britain, Malaysia and the USA.

According to an economics researcher in the Department of Economic Development, Dubai has been given steadily expanding access to advanced Western technologies, through a relaxation of import controls. Dubai's technology-oriented projects reflect the concerns of individual companies regarding falling behind in the global technological race (Interview on 22.11.2005). The process of globalisation is being

driven by several forces, all of which have served to foster greater intraregional trade and technological exchange. The imports of technical equipment play a vital role in attracting flows of technology. It is quite important to reflect that the Middle East, East Africa, and to some extent North Africa, benefit from the re-export services that Dubai undertakes. Therefore, Dubai can also be considered as a distributive market, not just a consumptive one. This is reflected in the flourishing of international technical exhibitions held in the city. Such a role has an influence and impact on the direction of foreign investment. Development of the information and technology sectors encourages more foreign investments, and leads to new directions in the establishment of technology complexes that will become mega ones in the future (as such Dubai Technology Park, Silicon City, the industrial area in the free zone at Jabal Ali).

Figure 7.1 The Value of Technical Materials 1988-2006 (USD million)
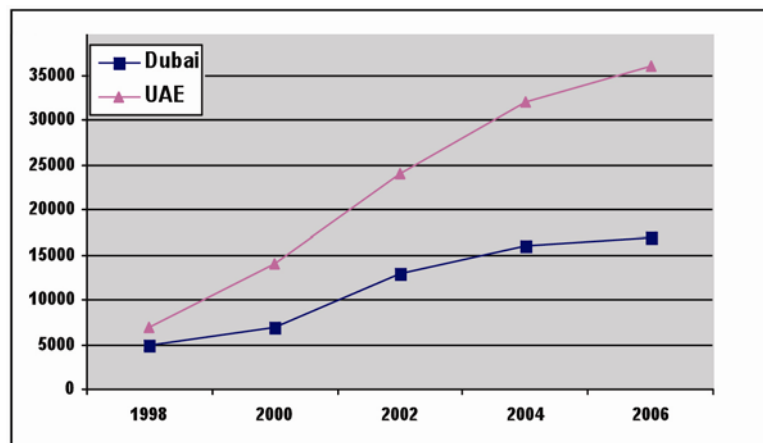
Figure 7.1 shows the rise in total foreign trade in technical goods in the Emirates (from USD 7bn in 1998 to USD 32bn in 2004). That constituted 22% of total imports. Dubai's share of that business was 53%. Most of the goods were from the U.S., European countries, China and Taiwan. The goods included computer equipment, construction materials, means of transport and communication, and medical equipment. The total value of Dubai's imports of technical equipment in 1998 was USD 5bn, which dramatically increased to USD 17bn in 2006 (Department of Economic Development, 2006). The value of technological goods rose subsequent to the announcement of the JPI project in 2001. The following subsection discusses the impact of technology on JPI.

7.2.3 Technology and its Effects on the Dubai mega projects

The development of the Dubai mega projects is intimately linked with the development of new technologies, and the mobility afforded by these inventions. For example, the largest airport in the world is planned for the Jebel Ali area, which is central for future development plans. In community terms, this means that almost 88% of the population of Dubai are temporary guest workers, who are constantly arriving and departing from the country in order to sustain overseas relationships. This shows the centrality of technology, and indicates how Dubai is embracing new conditions of mobility and interconnectivity. Dubai has been built from the foundations of the employees that flow through the place. It is a trans-local city where resources for development are not just found within Dubai, where even oil has lost its importance. Therefore, resources for development are also derived from Dubai's capability to attract resources, such as a highly skilled labour force and technical equipment, by drawing on sources from outside the city. Dubai's view of its function as a state is as a facilitator and a regulator of the flows, as well as to provide the necessary infrastructure to co-ordinate and manage these resources (Urry, 2000).

As the Palm Island project exemplified, the visual aspects of Dubai are as important as the technological and the economic aspects. Across Dubai, the urban space is being made aesthetically appealing. The façades have spectacular designs and whole areas are thematically co-ordinated. JPI is only one example of this. Other projects are already completed, such as the Burj al Arab, the Emirates towers, the Emirates Hills and Springs, the World islands and the Burj Dubai: they operate primarily on a global level, because globalisation constitutes an important vehicle for technological infrastructure. Increasingly TNCs are profiting from innovation by bringing technological processes and products to their projects. Joint ventures between Nakheel and several TNCs have been particularly effective, because Nakheel's projects have taken advantage of global knowledge and embraced technology (Interview, Manager Research and developments, Nakheel, on 12.6.2006). For instance, special ships, (barges) are being used to dredge sand from the sea using satellite GPS technology. Sand was thus deposited to create the island. Another technological example is the construction of an artificial canal more than

Figure 7.2 Barge Dredging Sand from the Sea Reclamation Stage of JPI in 2004.

Source: Van Oord.

The tower (Burj Al Arab) was to become a landmark for the developing Dubai, as an equivalent to attractions such as the opera house in Sydney and the Eiffel Tower in

---

[1] It has establishments in over 50 countries and projects in over 100 countries.

Paris. It was soon realised that to create such an iconic building would require the employment of a difficult conceptual design. This process is outlined in the next section.

7.3 The Compulsion of the Iconic, the New and the Big in Architecture

Recent developments have made Dubai become more recognisable as a place with iconic projects, real estate prospects, and dream holiday destinations. It is useful at this point to describe what is meant by the term 'iconic architecture'. Sklair (2006) defined its products (buildings and spaces in terms of their reputation for having been designed by architects of high standing, and which the public at large have grown to love for their special symbolism or aesthetic significance. They thrive on their novelty and physical proportion, in an act of ongoing self-stylization and fantasy.

This section looks at how, through architectural devices, images are created and directed at a global audience, to highlight Dubai's intent to 'go global'. As Katodrytis, (2005) stated:

> *Dubai is an extreme example of fantasy architectural speculative design. It represents the epitome of sprawling, as a prototype of the new post-global city. Within it, large numbers of fantasy urban projects are constantly in flux. The explosion of mega-scale structures and satellite cities provides opportunities for the study of new typologies of building programs and forms. Within the urban grid, and the spectacular urban condition, the generation of prosthetic geometries and new morphologies acts as a catalyst for innovation* (Katodrytis, 2005).

Hundreds of architects are coming to Dubai, a city that is experiencing a profusion of building works as a result of new Dubai's economic strategy. One senior architect says:

> *"In Dubai, there are hundreds of architectural offices which employ thousands of architects. We bring them from all over the world. Yet, they are not enough to meet the need." He added, "Those who are in charge of urban development are expecting innovation, a fantasy*

> *beyond what already exists anywhere in the world. They expect every*
> *project to be different from the rest of the world"* (Interview, on
> 2.7.06).

Just a word from one of the Gulf or foreign investors is enough for any architect
in Dubai to start designing the impossible; buildings which are beyond anybody's
imagination. Western designers and architects are coming to achieve their dreams and
turn them into reality. Dubai will become one of the most attractive and impressive cities
in the world. "I want to be Number One in the world", said Sheik Mohammad (Davis,
2006). The hotel, Burj Al Arab, was designed by a British firm - W.S. Atkins - and its
chief architect Tom Wright. In describing the design process, the architect notes that his
main aim was to find an 'iconic form' (Elsheshtawy, 2004). The aim was to be 'Arabic,
extravagant and super-luxurious and most importantly a symbol for Dubai'.

Nowadays, Dubai has the highest skyscrapers in the world, such as the Babylon
Tower, the Grand Pyramid of Giza, and very soon to be added to these will be a unique,
new skyscraper that contains separate rolling blocks that can rotate separately. One daring
and unique building design is the "Al Bawaba", which is where Dubai's financial
headquarters are located. It looks like a Slice computer giant or an old citadel over the
Gulf. One new high building is supposed to depict a computer keyboard, and one housing
complex is in the form of a huge cake, and contains a mixture of Malaysian, Turkish and
Egyptian designs. Hazel Wong, a Canadian architect of Chinese origin, who has worked
in Dubai for more than ten years said:

> *"It is the paradise of architects". She adds, "For me as an architect,*
> *Dubai is the paradise for designers. We are asked to design unique and*
> *distinguished buildings. They have the resources to achieve them. There*
> *is an architectural revolution in Dubai."* (Libyan Architects, 2005).

Wong was the head architect when the Emirates Towers were opened in 1997.
There are two towers, each triangular in shape (Figure 7.3). The intention of the Emirates
Towers project was to create a landmark development comprising twin office towers at

least twice the height of the 149-metre Dubai World Trade Centre - the latter already a focal point of the City, built over twenty years ago. Thus, the project is distinctly set apart from standard commercial developments, and the twin towers are positioned to create meaningful visual compositions from every viewpoint (Wong, 2001). The image is directed towards the global media, thus affirming what some have described as being 'the most globalised of all Arab societies' (Abdullah, 2001).

Wong added, "Abroad, we have to follow certain procedures and protect others rights, but over here, there is a pushing force, enthusiasm. Clients want everything to be done and achieved so quick, it is something pleasant to such a degree". However, Arabic architects, some of whom obtained contracts for designs in Dubai, criticised the construction rush, referring to the lack of distinguished typologies to influence the architects and designers (Interview, an architect, 2.7.2006).

Some of the project owners are trying to give the outer appearance of their projects a local style. For example, a group of hotels and a housing complex adopted a local style, but globalisation and space prevailed in a city that once was a Bedouin settlement. Despite that, many residents find it difficult to recognise some of the strange and unique designs. Some architects in Dubai reduce design to an exercise in combining shapes, forms and materials, with little regard for the people who inhabit the buildings. Problems can occur when a client acquires a new building and finds that it makes a statement but does not offer a practical setting, to support the type of activity housed within that space.

Other architects have criticised the extensive number of skyscrapers and hurried projects. They claim that foreign and unique architectural designs are the reason behind the lack of local or national heritage sites (Interview, Architect, Khatib & Alami Co., on 10.7.2006). Complete or whole commercial complexes, malls, hotels and housing projects were built in an attempt to restore some historical style. As one Civil Engineer in Mazaya Co says: "usually those who make such designs have had experience in designing sets for movies" (Interview, on 27.6.2006).

Figure 7.3 The Emirates towers; both towers feature equilateral triangular cross sections, evocative of the Islamic cultural vocabulary, representing the three heavenly bodies - earth, sun and moon. There is a circular base and tower has a half pyramid top.

One of these architectural fantasies is the work of David Fisher, Fabio Behazzi and Marco Sala, in co-operation with Leslie Robertson, the American architect who designed the World Trade Centre in New York City. They planned a spectacular project in the city of Florence. It consists of a skyscraper with rolling blocks, separated from one another, so each can rotate independently (Figure 7.4). Each of the 59 storeys can rotate so slowly that the neighbouring storey is not disturbed. Sunrise and sunset can be observed at will. Another advantage of the building lies in its elasticity, which provides protection against earthquakes. The construction will be completed in 2010, at a cost of about USD 500 million. The foundation will be concrete. The storeys are pre-fabricated and will be mounted one on top of another with electricity and water connections (Interview, senior in public relation, Nakheel, 20.6.2006).

In the next two to three years, Dubai will be the site for the some of the most iconic buildings in terms of size. It will include the first and the second highest buildings in the world, as listed in Table 7.1. The world's largest two malls; with areas of 12

million sq ft for the Dubai Mall and 10 million sq ft for the Mall of Arabia, Table 7.2. In its desire to join the *Guinness Encyclopedia of Architectural Buildings*, the city is marketing itself wisely to obtain a brand name in the global market. As one developer told the *Financial Times*, 'If there was no Burj Dubai, no Palm, no World, would anyone be speaking of Dubai today? You shouldn't look at projects as crazy stand-alones. They are part of building the brand' (Financial Times, 12 July 2005).

Figure 7.4 Rotating Skyscraper, each floor independent. It is the first of its kind in the world
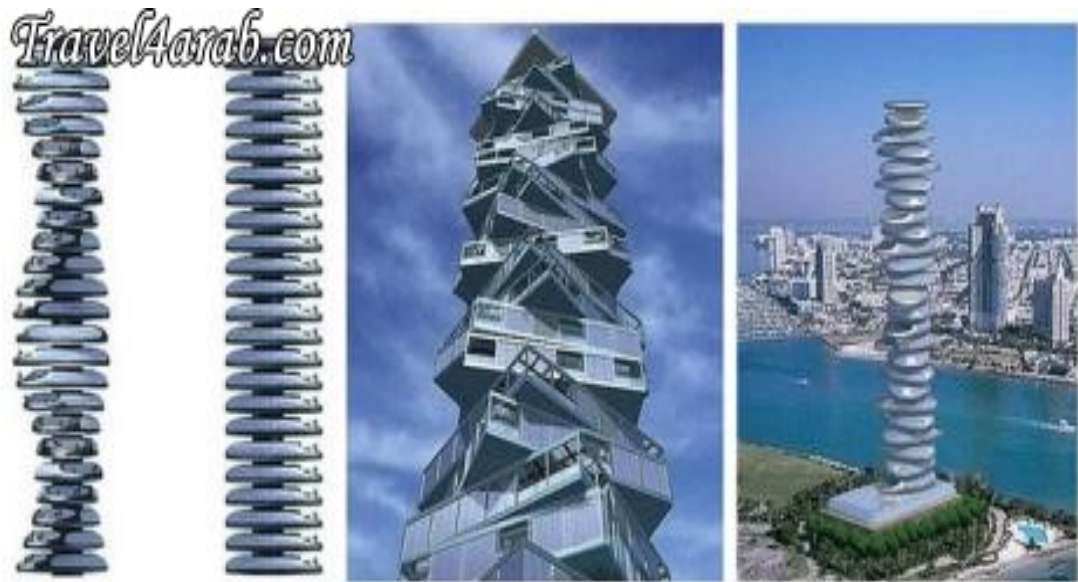
Table 7.1 World's Tallest Buildings

Building	Location	Height in feet	Completion year
1. Burj Dubai	Dubai	2600+	2008
2. Al Burj	Dubai	2300	?
3. Taipei	Taiwan	1667	2004
4. Shanghai World Financial Centre	China	1613	2008
5. Fordham Spire	Chicago	1550	2010
6. Petronas Tower	Malaysia	1483	1998
7. Sears Tower	Chicago	1451	1974
8. Jin Mao	China	1381	1999
9. Freedom Tower	Manhattan	1362	2012
10. Two international Finance Centres	Hong Kong	1362	2003
13. Emirates Tower one	Dubai	1140	1997
22. Burj Al Arab Hotel	Dubai	1053	1999

Source: Davis, (2006).

Table 7.2 World's Largest Shopping Malls

Building	Location	Area in million sq ft	Completion year
1. Dubai Mall	Dubai	12.0	2008
2. Mall of Arabia	Dubai	10.0	2010
3. Mall of China	China	10.0	?
4. Triple Five Mall	China	10.0	?
5. South China Mall	China	9.6	2005
6. Oriental Plaza	China	8.6	?
7. Golden Resources	China	7.3	2004
8. West Edmonton Mall	Canada	5.3	1981
9. Panda Mall	China	5.0	?
10. Grandview	China	4.0	?

Source: Davis, (2006).

The same phantasmagorical desire can be found in other aspiring Gulf cities these days (including Dubai's neighbours, the wealthy oil cities of Doha, Kuwait and Jeddah), but Dubai has a distinctive and inviolable criterion: everything must be 'world class'. Thus, Dubai is building the world's largest theme park, the biggest mall, the tallest building, the largest international airport, the first sunken hotel, the biggest artificial island and so on. Davis refers to the technological enthusiasm required to develop these mega projects with iconic features (Davis, 2006).

Although compared variously to Las Vegas, Manhattan, Monaco and Singapore, the city is more like "their collective summation and mythologization" (Davis, 2006). Iconic buildings in JPI has attracted global attention from specialists and mass media outside Dubai. JPI's special features, of course, are its iconic palm tree shape, with iconic buildings that are said to be responsible for turning Dubai into one of the leading weekend tourist destinations in the UAE (Interview, Tourism and VIP Delegations Executive, Nakheel, on 18.12.2005). Another interviewee added: "This is a site where major international architects are competing to generate the most innovative and eye-catching designs" (Interview, General Manager Planning Infrastructure & Utilities on 19.12.2005).

Table 7.3 shows the iconic buildings in JPI. Each of the buildings has a high level of aesthetic quality making the resort unique as a prestige residential building and relaxation destination. The project was planned as a luxury tourist residential area, and part of a larger

programme intended to turn Dubai into a leading global tourist destination. As Sklair (2006) has declared, in the pre-global era most iconic architecture was driven by the interests of the state and/or religion, while in the era of capitalist globalisation the leading force driving iconic architecture is transnational capitalism. Architecture used to favour a streamlined look and some technology, but became caught up in the world of style, and is now a combination of mannerism and art, because ultimately, modern architecture is based on stylistic devices not always totally integrated with the mainstream (Sklair, 2006).

A typical example of this iconic architecture is the Atlantis Hotel in JPI. The resort's design is based on the mythical lost continent of Atlantis, along with traditional Arabic design themes. It bears the icon of the Royal Towers in Atlantis, on Paradise Island in the Bahamas (see Chapter 6, Figure 6.6). There is a geometric layout of buildings derived from a simple Islamic decorative motif of rotated squares, which provides shade to the functional orthogonal building. The upsurge of global architectural firms in Dubai and the fierce competition between them turns Dubai into something like a bag of puzzle pieces, with no-one knowing what picture will finally emerge, according to Ullrich (2006).

Table 7.3 The Iconic Buildings in JPI

Iconic Buildings	Key architectural features
Trump international Hotel	A split linked tower with an innovative open core design that minimizes shadows. It will consist of stainless steel, glass and stone.
Atlantis Hotel	The resort design was based on the mythical lost continent of Atlantis, along with traditional Arabic design themes. It also maintains the icon of the Royal Towers in Atlantis, and Paradise Island located in the Bahamas
Fairmont Palm Hotel and Resort	It consists of five separate and unique elements, each strongly reflecting the history and grandeur of Yemeni architecture.
Tiara Residence and Anantara Resort	It consists of seven 15-storey low-rise buildings built in a V shape and themed after different gemstones.
Taj Exotica Resort & Spa and The Grandeur Residences	Both the Taj Exotica Resort & Spa and The Grandeur Residence are modelled as the archetypal palaces of Rajasthan.

Source: My survey of Nakheel, online, bulletins, magazines and newspapers.

The JPI mega project was conceptualized by Warren Pickering, a New Zealand architect based in Australia. A total of 30 consulting firms were used and more than 50 studies were commissioned to include key aspects such as marine ecology, the human population and the business development of the island, over three years time (Belbin, 2000:29). Twenty-two architectural styles were proposed to Nakheel for its residences on JPI, ranging from Islamic to Mediterranean, Caribbean and Scandinavian. External perspective images were shown to potential buyers, and each one signing up to buy a villa or beach house had the choice of different architectural themes. Following the sale, the owners would be able to change the interior design to suit their own tastes. According to the architect, the villas represent a new approach in residential architecture. Only three walls are built around the complex, as the fourth side faces the sea.

The architectural style for some of the elements of the JPI project has been described as 'Arab-Eclectic'. According to US-based architect Larry Ziebarth (whose clients include Disney, Universal Studios and Sea World), this style offers a 'sensitive blend of Islamic tradition with new architectural elements'. His company, HHCP Design International, was invited to contribute its style to some of the developments Palm. Describing this 'style', he notes: 'We have sought to create a building style that is deeply rooted and borrows from regional Islamic traditions, but with a strong dash of fantasy which will become synonymous with the entire project' (Belbin, 2002:30). This reflects a desire to connect with the past and to construct an identity *vis-à-vis* a predominantly migrant population. The Palm Island or Burj Al-Arab could be understood as a continuation of such thinking, albeit on an enormous global scale. In such a way the stage is set for Dubai as a global entity. Issues of large scale and symbolism are communicated quickly, and there is no time for abstract reflection (Elsheshtawy, 2004).

'Mythical environments' are a theme shared by the developments. The Palm has taken this concept to interesting levels. The residences are being sold on the basis of distinguished stylistic forms. They offer buyers a 'created' environment that can be modified according to taste. Furthermore, there are underwater mythical environments, with different coral reef seascapes created for those who enjoy diving (in the World Islands project, from the Red Sea, for example). Visitors may move from one underground environment to another (Elsheshtawy, 2004).

Figure 7.5 Burj Al Arab Seven Star Hotel, a landmark of the Dubai skyline, designed to represent a billowing sail. The Burj Al Arab is the tallest all-suite hotel in the world.

Source: www.chessbase.com/images2/2004/dubai28.jpg

Burj Al-Arab is a 56 storey (28 double height floors) seven star hotel with 202 suites, three restaurants, a conference centre and a health spa. The hotel is built 290 metres out to sea on a man-made landscaped island. The accommodation is comprised on two sides of a triangular atrium that runs the full height of the building. Its height is 321 metres, which makes it the tallest hotel in the world. The hotel contains a helipad at a height of 212 metres above sea level. Access is via a heavily controlled bridge. Only hotel guests and those who can afford the expensive entrance fee are allowed entry. The helipad is for those arriving from Dubai Airport - as an alternative, guests are whisked away in Bentleys.

Figure 7.6 The changeable outlook, sea view restaurant and the tennis concourse of Burj Al Arab

Source: www.chessbase.com/images2/2004/dubai28.jpg

When you step inside the hotel atrium you are confronted with gold coated pillars, extravagant fountains, and brightly coloured furniture pieces. Elsheshtawy (2004) describes it as "The atmosphere of 'A Thousand and One Nights'". The sheer extravagance and scale is unprecedented, this, perhaps, is to justify the steep price tag, which is between USD 2000-5000 per night.

7.4 The Influx of Global Architectural Firms

Technology is easily available to globalizing cities, where iconic architecture is an incitement to spend money (Sklair, 2006). A relationship exists between TNCs and the designers of new technology, as witnessed in Dubai. Funding from TNCs aided the initial influx of interactive technology to enhance connectivity and promote architectural communication. Real estate plays an important role as well. For instance, Nakheel and

Emmar describe themselves as a 'global real estate corporation', and they are the leaders in architectural decision making in Dubai.

I will focus on statistical evidence concerning transnational enterprises and technological spillovers in Dubai. Many TNCs, despite the diversity of their cultures and institutions, are sharing the experience of the iconic projects in Dubai. The data on the activities of these transnationals allows the systematic analysis of the impact of foreign presence on architecture. Practical evidence on the transfer and creation of productive and technological activities is available. Most transnational sources are European and American, with apparent control by American enterprises in terms of their number and size. Over the past seven years, a series of important technological projects have had a strong influence, not only in encouraging more transnational companies to create more projects in Dubai, but also in developing the technological industries that used Jebel Ali as a base for the production of goods and services. Changes in production location can, therefore, be connected with the increasing porosity of national borders. In the words of one property investor: "Dubai has capabilities and capacities in capital and technology, together with a highly skilled labour force and strategic location, which are highly attractive to direct foreign investors in the primary and secondary sectors" (Interview, 15.6.06). This constitutes a basis for the emergence of a global city in the Middle East.

A comparison of the period 1994-2000, and 2001-2006 shows the significant development in transnational projects economic and urban activities (mega projects) and the exploitation of network transport and communications. The computer assembly line is a good example of sectors run by transnational administration. Other traditional sectors (construction) have been updated, thanks to intense foreign direct investment helping the direct delivery of a full range of infrastructure products, especially communications and utilities, and art design technology. An important factor in this is the contribution of intermediate financial services in FDI. In 2004, for instance, 57% of the total FDI stock was in the tertiary sector. By 2006, the proportion of foreign investment, mostly represented by the building and construction sector, had risen to 61% of all services catered for, and slightly over one third of all activities of transnational companies.

If TNCs are thought to be the key to advance, then FDI may be used as a proxy for technological development. The growing role of TNC subsidiaries in Dubai makes it particularly important to isolate this dimension. Discussing the role of TNCs subsidiaries in indigenizing technological capabilities involves describing a process whereby intensive use of technology and proximity to technological frontiers contribute to attracting and applying more cutting edge technology (Interview, Administration Officer, Department of Economic Development 15.6.2006). A senior member of Marketing & Brand Management in Nakheel noted that: "At Nakheel, the upsurge and flow of technological change has been propelled by impressive increases in the amount of resources allocated to formally organized research and development (R&D) activities. Between 1999 and 2003, Nakheel conducted 50 research projects in different areas related to JPI projects" (Interview, 15.6.2006). Another Senior Marketing & PR Officer referred to this as 'coming on the back of overseas investment from transnational enterprises, and entering into countless technology licensing arrangements' (Interview, 20.6.2006).

Table 7.4 Architectural firms in Dubai by project, core position, country of origin and cost of project

Projects	Function	Estimated Cost (USD Million)	Architectural consultant & engineers	Head office
Jumeirah Palm Island	Tourism & residential	**6,500**	Group of US, UK, Far East consultants headed by Hill International and Parsons Corporation.	Different countries
Dubai International Air port expansions	Construction of a new terminal	4,500	Dar Al Handasah and Aéroport de Paris	UAE & France
Dubai Land	Tourism, commercial and residential	3,500	Von Gerkan Marg & Partner Group of US, Europe and Far East architects.	Germany, USA, EU, Far East
The World Islands	Tourism & residential complex of man-made islands in the shape of a world map.	4,000	Parsons Corporation	USA
International city	Residential apartments, a shopping mall, entertainment facilities, factory outlets.	1,900	DMJM International	USA
China Town (part of international city project)	Commercial buildings	650	Associated Consultants Engineers (ACE)	Lebanon
Dubai Waterfront/Arabian Canal	Tourism, commercial and residential complex	6,000	Group of US, Europe and Far East architects.	USA, EU, Far East

Jumeirah Beach Residence	Residential complexes	1,400	Mace International	USA
Dubai Festival City	Tourism and commercial complex	1,800	Group of US consultants	USA
Dubai Silicon Oasis	High-tech business park	1,000	Hill International	USA
Burj Dubai	Tourism and commercial complex	1,050	Skidmore, Owings & Merrill (SOM).	USA
Dubai Lost City	Hotel and recreational facilities	165	DP Architects PTE Ltd, Meinhardt PTE Ltd	Singapore
Gardens Shopping Mall	Shopping zones	200	Hill International	USA
Al Fattan Tower	Residential tower	75	Callision	USA
Al Murooj Commercial & Residential Complex	Residential Complex	90	Norr Group Consultants	UAE
Emirates Engineering Center	Construction of: eight maintenance hangars	272	Cox Group of Australia	Australia
Dubai International Financial Center (DIFC)	Financial district	150	DMJM International	USA
Green Community Development Project	Residential Complex	109	HOK	USA
Up Town Mirdiff	Residential Complex	95	Turner International	USA
Souk Al Nakheel	Shopping mall	100	Khatib & Alami and Dewan Al Emara	UAE
Arabian Ranches	Luxury residential complex	136	Khatib & Alami	UAE
Dubai Marina	Intelligent city (estimated 120 skyscrapers)	1500	HOK, F & A Associates and group of USA and European firms	USA & EU
Emirates Hills	Luxury residential complex	1,100	HOK, Mott MacDonald, and DG Jones and Italconsul	USA & UK
The Lakes	Luxury residential complex	500	Italconsul & Hyder	UK
Burj Al Arab	Seven star hotel	450	W.S. Atkins	UK
Dubai Mall	Retail facilities, the world's largest mall	800	DP Architects PTE Ltd, Meinhardt PTE Ltd,	Singapore
Mall of the Emirates	Retail facilities	500	F+A Architects and Holfords	USA & UK
Infinity Tower	Residential skyscraper	700	SOM	USA

Source: My survey of Nakheel, Emaar, the Department of Economic Development (online), bulletins, magazines and newspapers.

Project developers invited a group of international architects to project their architectural vision onto the city. Company names and nationalities, project names, characteristics and costs were presented in Table 7.4 above which shows the following:

The data shows quite clearly that Western companies (American and European), accomplish most of Dubai's mega projects. Dubai hosts a large group of 30 global architectural companies from 10 countries, 13 of which are from the USA and four from the UK. The total value is more than USD 46.5bn. Hotels and leisure buildings constitute 90% of the total projects. Some are multiple building projects involving a variety of architectural firms. For example, JPI, International City and Dubai's waterfront. There is a clear concentration of luxury housing projects for the higher income brackets such as at the Nakheel Villas, The Springs Villas, and the Dubai marina complex. It may be noted that Far East architectural corporations have low involvement. We can only speculate on the reasons for this. The Far East has been a region of extensive construction in the recent past, compared to Europe, the United States and the Middle East. Its focus is perhaps on its home development.

Table 7.5 Architectural Firms Involved in JPI Projects

Architect(s)	The projects	Head office
HHCP	Bilhole Medical Resort International	USA
Aldar	Fronds Villas	UAE
Dar Al Handasah	Fronds Villas	UAE
TGEC Bright	The Palm Jumeirah 'Show Villa'.	Switzerland
Wilson & Associates	Hilton Resort at the Palm	USA
Breuer, Marcel	The Fairmont Palm Hotel & Resort	USA
Goff, Bruce	Atlantis the Palm Jumeirah	USA
Khatib & Alami	Al Habtoor Hotel (Palm)	UAE
Gwynne, Patrick	Al Seef Resort & Spa	UK
Poznyakizhilstroy & PEBM	The Emerald Palace Residences	European & USA
Erskine, Ralph	Innpro Development	UK
RMJM	The Village Centre	UK

Source: My survey of Nakheel and Emaar, online reports, bulletins, magazines and newspapers.

Table 7.5 lists the transnational architectural corporations involved in JPI projects. The projects are managed by a group of USA, UK, and UAE architectural practices headed by USA corporations. Several architectural styles have been employed so far, ranging from traditional Arabian to modern European, from Mediterranean to oriental, reflecting the eclectic tastes of those that will live on The Palm.

The project manager, Hill International, in association with Parsons International (USA), is responsible for management of all programme elements, including planning and design consultant management, cost management, schedule management, technical co-ordination with other developers, government entities and all activities directed at the successful completion of The Palm. HHCP (Helman Hurley Charvat Peacock/Architects), a leading Florida-based design company, was retained by Parsons International for the concept design and initial overall master planning of The Palm. Foremost architectural companies are RMJM, Poznyakizhilstroy & PEBM, HHCP and Dar Al Handasah. It should be noted that local architectural companies did not quite have the same presence as European companies.

In the words of one senior architect, "architectural corporations from so many countries are involved in these projects. They have produced buildings that have attracted attention from specialized people and the mass media outside the UAE" (Interview, 2.7.2006). The most obvious conclusion from the data in Table 7.5 is that it is quite easy to declare that there have been strong effects of technological globalisation on urban performance in JPI mega project. Frequently, those whom I interviewed referred to the expansion of foreign companies in the city. They also note that the iconic buildings in Dubai are not necessarily made by large companies. Only three of the top 30 architectural firms definitely carried out their big project, namely HOK, which was classed third in the world in 2003, SOM, which was ranked seventh and Callision, ranked 24th in the same year.

The next paragraphs make a brief analysis concerning one of only companies that not only design projects but also carry them through to the end HOK is a good example of

a global company that has influenced Dubai's mega projects. The example of the American HOK Corporation is one that can help us understand the role of transnational corporations and technological flows. The United States was essentially exporting concepts and recognizably American spaces through its architects, builders and clients overseas. The American concepts in the background included 'citizens' workshops' the use of space for 'fantasy cities' in entertainment areas (Hannigan, 1998) and suburban subdivisions in cities (worldwide): the Corniche project in Dubai was built by the American firm 3D/I in 1978-79.

HOK was established in 1955, and is based in St. Louis. Its name is based on the initials (surnames) of its three founding partners, George Hellmuth, Gyo Obata and Gorge Kassabaum, who were all graduates of the School of Architecture at Washington University in St. Louis. By the late-1990s it had become the largest architectural/ engineering firm in the U.S., with 1,800 employees practising in twenty-four offices, linked by advanced technology, 13 of which were located in USA, the others worldwide. In the early-1970s, HOK helped plan and build the University of the West Indies. This was a project that was funded by the Agency for International Development (A.I.D.). This positive experience, prompted by a U.S. government 'public glove', helped inspire the firm to leap further a field in the mid-1970s, in particular to Saudi Arabia, where Gyo Obata designed, and HOK built, King Saud University in Riyadh, completed in 1984 (Jeffrey, 2002). As King Graf (HOK Vice Chairman) observed in 1990,

> *"The OPEC countries were booming then and American design firms were all over the Middle East, competing with the British, French, Japanese and others. The American firms, I believe, were quickly recognized for listening to clients, responding to their needs including budget and schedule control, and providing design solutions that were efficient and architecturally exciting"* (Graf, 1990).

They employed western technology and contemporary architecture reminiscent in its mass and detail to traditional Arabic architecture. In 1981 the firm designed the World Trade Centre in Taipei, which opened the door more widely to East Asian clients. HOK searched for a suitable regional base, making a number of trips to explore the Asian/Pacific region. HOK opened its Hong Kong branch in 1983, and, by 1997, it was

the largest American office in Asia, with nearly 100 employees. Among its remarkable global projects, HOK designed 40 Grosvenor Place, London, in the United Kingdom**,** the Federal Reserve Bank of Minneapolis, Minnesota, and the Passenger Terminal, Amsterdam (The Netherlands). Table 7.6 shows selected HOK projects over several decades.

HOK played an active role in designing many of the projects in the Arabian Gulf region, especially in Saudi Arabia. Although it designed some projects in Dubai, it did not participate in the JPI projects. A HOK and Jerde partnership designed the next phase in the development of Dubai Festival City's (DFC) 2.1-million-square-foot retail district. One element of DFC that the team has had to work around is the Festival Waterfront Centre, which is the retail backbone of the development.

Table 7.6 HOK's Selected Projects since 1975 until Present

1975: King Saud University, Riyadh, Saudi Arabia
1976: National Air and Space Museum, Washington, D.C., United States
1979: Cecil H. Green Library, Stanford University, Palo Alto, CA, United States
1982: Levi's Plaza, San Francisco, CA, United States
1983: One Oxford Centre, Pittsburgh, PA, United States
1984: King Khaled International Airport, Riyadh, Saudi Arabia
1988: Dunn Tire Park, Buffalo, New York, United States (first HOK designed baseball stadium - starting the revival in retro ballpark design in the U.S.)
1990: Albuquerque Plaza, the tallest building in the state of New Mexico, United States
1992: Oriole Park at Camden Yards, Baltimore, Maryland, United States
1994: Independence Temple, Independence, Missouri, United States
1995: Jacobs Field, Cleveland, Ohio, United States
1996: Tuntex Sky Tower, Kaohsiung, Taiwan (Republic of China)
1997: George Bush Presidential Library and Museum, College Station, Texas, United States (CRSS)
1999: Telstra Stadium, Sydney, Australia (co-designers)
2000: Thomas F. Eagleton Courthouse (co-designers)
2002: Darwin Centre at the Natural History Museum, London, England
2003: Steven F. Udvar-Hazy Center of the National Air and Space Museum, Chantilly, Virginia
2006: Natural History Museum of the Adirondacks (The Wild Center)
2007: Sprint Center, Kansas City, Missouri
2007: Doha City Centre, Doha, Qatar
In process: Sheikh Zayed Center Lahore, Pakistan

Source: http://en.wikipedia.org/wiki/Hellmuth,_Obata_and_Kassabaum,

In addition, HOK master planned Dubai Marina and is providing phase on architecture, retail programming, and landscape design. Carved along a two-mile stretch of Arabian Gulf shoreline, Dubai Marina is a mixed-use canal-city inspired by the Venetian tradition. In 2003 HOK become the third architectural firm ranked by fee-income.

7.5 Local Identity in Global Architecture: Global Design and Local Production

Accelerated urban growth has left many negative impacts on the compact, organic, traditional areas of Dubai. Modern building forms and urban grid systems, which do not fit with local culture or traditional architecture, have developed under the increasing influences of globalisation forces. The pressure for globalisation is combined with an inability to develop traditional urban forms and architecture, as Dubai seeks to keep pace with the growing needs of its own communities. This is a dilemma shared by many cities in the Gulf. Foreign experts and labour, lack of local expertise, a comprehensive conservation strategy, and misunderstanding of the potential and value of traditional settlements have led to the rapid disappearance of them. Zahran (1979:12) portrays the problem of cultural urban identity in the Middle East as follows:

> *In the Middle East the gashing new wealth fuelled massive construction developments enveloped in deceptive and contradictory architectural pronouncements of utter irrelevance and invalidity. Mushrooming forms, colours, textures, styles and fashions which can only undermine local values, threaten cultural continuity and isolate unquestionable validity* (in El-Masri and Mandeel, 2005).

However, Dubai has become a unique and interesting example of local identity in a global context. The city has reached a degree of maturity in learning how to reconcile being a global city whilst at the same time being distinctive. During the seventies and eighties, Dubai embarked on major planning efforts to modernize the built environment. At that time, the old and historical urban forms were either destroyed and/or obliterated both by public and private owners. The preference for rapid urban transformation

reflected the urge to modernize and replace the historical built environment, which was perceived to be incompatible with progress. The new emerging urban image is seen as a complement to the city's aspiring role in the global arena. Most new projects and developments in Dubai are now announced in terms of what they bring to the city and how they contribute to its urban identity.

Tremendous efforts have been initiated in order to restore historical city landmarks and rebuild 'portions' of the old fabric, which are now almost destroyed. These efforts of the local government, although not officially part of one integrated programme, seem to follow the same pattern of preserving the local identity in an increasingly globalizing city. All these efforts have started to show positive results, owing to public education and government initiatives. Renovations and rehabilitation projects are being carried out in Bastakia and Shandagha. At the same time new buildings and projects take their inspiration from the local context.

7.5.1 Local Identity as a Source of Dubai's Icons

"We are learning here how to use global mixed architecture and, even if people have lots of experience in other parts of the world, it could be applied locally (Interview, Manager Research and developments, Nakheel, on 12.6.2006).

Some scholars have argued that the new developments in Dubai have been created to respond to globalising tendencies (Elsheshtawy, 2004). Others argue that, for the visitor, Dubai might seem unusual. It lacks historical identity: few traditional buildings exist, and most of those are reconstructions (Interview, civil engineer, Mazaya, 27.6.2006). To resolve these issues, the government has attempted to find adequate solutions to continue to balance modernity, globalisation and local identity. The Jumeirah Beach Hotel, a luxurious facility, is a good example of how local identity becomes a source of iconic buildings. It is a modern building with a curved shape like a traditional dhow facing the seacoast. The second example, next to it, is another hotel, Burj Al-Arab. It is inspired by the city's long seafaring history, as it evokes the sail. The architect of Burj Al Arab looked at: Historical-Arabian themes like wind-towers before realizing the

potential of the seafaring theme. However, instead of picking up on the time-honoured shape of the dhow sail, as many expected, the designer fine-tuned the design to incorporate the profile of a J-Class Racing Yacht, itself a symbol of opulence and technology. Eventually he had a design which would be easily recognizable worldwide as Dubai's Burj Al-Arab, a balance of east and west. In describing the design process the architect notes that the main aim was to find an 'iconic form'. Regarding the issue of culture, the architect, after noting that initially he did not know the location of Dubai, he then argues that its people were forward looking and aiming at the future, which accounts for his decision to move away from the 'limiting' historical context. However, local people may not think in the same way; as one local inhabitant noted: "I do not think that the local government is really aware of the local identity, only of the economics''. Burj Al Arab is a very clear example of the deformation of the local identity. From the viewpoint of the city, the shape of the hotel clearly represents a traditional sail, but when viewed by new global residents from the Palm Island side, offshore, the mast and one cross beam turn the structure into what could be described as the largest cross, not just in Arabia, but in the whole world (Interview with architect on 2.7.2006).

Burj Al Arab's image is used extensively in the advertising industry. It is also used to replace the 'old' symbol of Dubai, which was the Fahidi fort and Sheikh Saeed house (one of the first built structures in the city) on car license plates. The project has not been without its critics. While some have noted its extravagance others have pointed out that it displays a schism in its dealing with local culture, by trying to 'have it both ways' - suggesting 'deep cultural roots', even though the real point is to show the city's sophistication and modernity, and that the project primarily aims to convince people that Dubai has more to offer than 'sand and distant views of oil fields'. In official publications, the surrounding context is never clearly shown. The hotel appears isolated in the midst of a wide expanse of water - somehow hiding the inescapable and harsh reality of the surrounding desert-scape. Edward McBride, expressing the official architectural reaction to this project, noted that the hotel is symptomatic of an era where 'the medium is the message'. Although, unlike in Las Vegas, where one has roulette wheels, magic shows or night clubs, here the 'spectacle' is the structure itself (McBride, 2000). The project was designed from the top down, starting with an image and progressing to a total physical

manifestation, linked to an identity 'Arab-Eclectic'. Such descriptions are primarily directed at laymen: what is in essence described as Arab-eclectic is nothing but a reminder of the postmodern excesses of the 1970s and 1980s (Elshestawy, 2004).

Some development layouts and designs are inspired by the local souqs and by Arab and local architecture, for example the Gold Souq. Some modern facilities with elegant aesthetic lines are inspired by traditional local architecture, such as the Mina Al Salam Hotel. The city is becoming unique for its blend of the new and global, with the old standing side by side. The reference to the traditional is deliberate; for example, the Palm is an ever-lasting symbol of life in the desert. It brings to mind the oases in the middle of a harsh landscape, a garden or paradise in an unexpected place. Other projects, such as the Dubai Mall, although new and modern facilities are inspired by local Arab architecture. The Mall recreates the sense of traditional streets and neighbourhoods. An effort is also made in the appellation of facilities inspired by local identity. For instance, Jumeirah Palm's fronds were named offer local palm tree species. Some appellations of new projects are derived from Arabic names, such as Wild Wadi (Wild Valley), Ibn Batuta Mall (after the famous Arab traveller Ibn Batuta). Nonetheless, when I asked one interviewee whether he was familiar with these tall towers in Dubai, he replied; "They are attractive but do not reflect the culture and civilisation of this area, which enjoys rich cultural elements (Interview, local inhabitant, 25.6.06). In fact, history and tradition were essential elements in the development of JPI, which maintained core elements of Arabic heritage and tradition, while introducing the latest architectural designs and concepts; the result is some beautiful elements of modernity, but without too much loss of connection with the past (Elsheshtawy, 2004).

7.6 Conclusion

This chapter has demonstrated that an analysis of globalisation is essential in understanding the technological features of JPI. It is important to understand the role of architectural aspects on Dubai's urban mega projects, as an effect of the flow of technology. This chapter has considered the effects of technology and looked at ways in which architecture can reflect the impacts of globalisation. Since the 1990s, Dubai has put

major efforts into upgrading its technological infrastructure in an effort to provide the technological basis to support its new economic strategy, encouraged by managing free trade zones, Dubai Internet City and Dubai Media City. Hundreds of architects came to the city to contribute to the plethora of building works. The data shows that Dubai has a large body of global architectural companies that design the city's projects. This reflects the level of impact of globalisation that Dubai is experiencing. Globalisation has promoted technological tools in the development of JPI. For instance, special ships were used to dredge sand from the sea using satellite GPS technology.

The policy of branding the city has already been adopted, and this is not just a question of economic growth opportunity, but is an attempt to frame local identity as well. Some examples of the effect of local architecture on globalised projects were discussed. The local government has attempted to find solutions that continue to balance modernity, globalisation and local identity. An integration strategy between global and local architecture was adopted in Dubai. The inclusion of local influences was by design, such as the symbolism of the palm tree and the curved shape of traditional boats. The purpose was for these images to be used as a marketing ploy, but also to become a symbol for Dubai. The city is open to the world, yet unique, where new and old stand together. However, for some, the new iconic architecture in Dubai reflects the global culture more than local identity. Above all of that, the various implications of these projects are not quite clear, specifically social and ecological ones, even if claims to the contrary are made. For that reason the next chapter will assess the social dimension of globalisation on the JPI Mega project.

CHAPTER EIGHT

THE SOCIAL DIMENSION OF GLOBALISATION

8.1 Introduction

Globalisation is the intensification of worldwide social relations, which link distant localities in such a way that local events are shaped by occurrences from many miles away and vice versa (Giddens 1990:64).

Globalisation can be described as an economic and technological phenomenon involving social, cultural and political structures and processes (UNESCO, 2001). It is therefore difficult, in practice, to isolate the impact of any single dimension of globalisation as opposed to any other economic, technical, social or political changes (Torres, 2001). The evolution and the actual operation of the urban mega projects characterising Dubai require social and cultural analyses in order to understand them. This chapter focuses on what my broad fieldwork data reveals about the social impact of Dubai's urban mega projects, including the JPI mega project. My analysis draws upon interviews and participant observations in Dubai. The analysis presented in this chapter is important because it represents a profile of generations in an oil rich nation, struggling to adapt to the competing pressures of values from the West, including technological advances in every facet of life and western ideas which conflict with deeply held Islamic beliefs.

It is important to look at the challenges and problems facing Dubai in this period of radical transition, in order to fully understand the current situation in Dubai. Generally, one of the crucial challenges facing many developing and transitional nations is how to balance the benefits of globalisation with the risks and costs. Even if there is a net benefit from globalisation for the whole economy, some groups or sectors will lose out. The net benefits are not shared equally amongst different sectors, and, with globalisation, there are increasing inequities in terms of certain groups, sectors or regions participating and

growing much more than others (Tombesi, 2003). Thus, whilst the benefits of globalisation are generally accepted, the jury is still out on assessing the social impact arising from globalisation and more importantly on how to best manage the risks and costs in order to maximise the net benefit for all concerned.

Specifically, when Dubai started its strategy two decades ago, there was considerable debate within the Emirate, and to some extent around the rest of the UAE, regarding the hazardous path made by Dubai's venturing leadership and inconsistency with the traditional policies of the region. A re-branding policy was adopted, about which several questions could be raised, for example: Does the city really need these projects? What is the actual impact on the local population and its life? I will endeavour to provide answers to these questions. My focus is to identify some of the potential effects of globalisation on social and cultural aspects, particularly the following:

1. The social and cultural context.
2. The social problems surrounding the implementation of mega projects.
3. Policies on the new divisions of labour in response to globalisation.
4. Local community reflections and overall satisfaction.

8.2 The Social and Cultural Context

It is essential to examine social and cultural effects as a whole, because these factors can be highly influential upon, and even determine the success or failure of an economy. In Dubai there is a widespread notion that the contemporary socio-economy is restructuring in such a way that 'spaces of flows' are coming to dominate 'spaces of places' (Beaverstock, Smith *et al.,* 1999). Generally, in any geographical study, spaces of flows and spaces of places are necessarily intertwined; each space relies on the other for its reproduction. These places define distinct geographical scales and the analysis therefore illustrates the interplay of different levels of social action. This shows that globalization is a rescaling of human activities, but it is not a simple imposition of one scale upon other scales (Taylor *et al*., 2001). Consequently, the characteristics of

contemporary society become unusual in the quality and quantity of social processes operating at a global scale.

This section analyses the societal make-up of Dubai by dividing local inhabitants into several 'types' according to their positions with regards to globalisation as well as attitudes and responses to mega projects. Measuring social impacts includes the examination of positive and negative changes in the cultural habits and lifestyles of people. These characterisations are drawn from a synthesis (Abdullah, 2004) of a changing Dubai. With my various observations and survey data, I have observed through my extensive fieldwork study that most of the UAE population and the inhabitants of Dubai in particular, seem to fall socially into two categories: the 'booming citizen' and the 'consumer citizen'. The UAE to a large degree is a conservative country, but this is beginning to change at an accelerating pace. Some believe that the city of Dubai is a hot bed of environmental, financial and national security risks.

The 'Booming Citizen'

I have explored the economy in relation to the 'Booming Citizen'. The UAE economy has expanded greatly from AED 10bn to almost AED 365bn at present, which is about 36 times more than what it was when the union was established. The diversification and expansion of the UAE economy means increasing wealth over and above anything seen in history (Abdullah, 2004). The per capita income is among the highest in the world, because of the high global demand for oil. One of the results is the constant growth in the number of wealthy citizens who have accumulated vast investments following the surge in oil profits over the past three decades. The Merrill Lynch and Kabjimneay Company announced one million wealthy owners in the UAE, of which 59 thousand were millionaires in 2005 rising from 52.8 thousand millionaires in 2004. Total estimated personal wealth in the UAE is over USD 43bn according to estimates in 2007 (Asa, 2008). This kind of wealth created a new social structure in the UAE, whose hub is the commercial financial and industrial elite. There is no doubt that, in the light of current indicators, the number in this category will continue to increase, due to a new upturn in the economy of the UAE, and the emergence of new investment opportunities for

breakthroughs in mega projects, which perhaps constitute the biggest investment opportunities since the beginning of the flow of oil exports in the 1970s. This recovery is, however, regarded by some intellectuals as a fact more than a real recovery in terms of intellectual communal or cultural gain. The wealthy do not share the benefits by contributing to social causes and charity. Therefore, political issues, and status have become more important than genuine respect from the people.

For economic growth, and for almost all other social indicators, the last ten years have shown positive progress in comparison to previous decades. The per capita GDP growth rate increased from 4.1 percent annually (1984-1995) to 8 percent per year (1994-2005). Progress in life expectancy and reduction in infant mortality was also considerably higher during the period of globalisation (1994-2005) than in the previous decade. Table 8.1 shows that the major economic and social indicators for Dubai look fairly optimistic.

Table 8.1 The Major Social Indicators of Dubai 2005

Non-oil GDP (in million AED)	132.731	Annual population growth rate (2000-2005)	7.32
% of employed (15 years & over) of the total population	74.3	Under 5 years mortality rate (in 000)	8.9
% of unemployment (15 years & over) total population	1.3	Life expectancy at birth (years)	78.3
% of inactive population (15-64 years) total population	11.8	Bed/population (in 000)	1.8
% of employment in tertiary sector	45.1	% of householders connected with water, electricity and waste collection services	100

Source: Statistical yearbook, (2005)

There has been dramatic progress in the areas of economic growth, health and other social indicators. The changes in structure and policy that were implemented during the last decade seem to be responsible for this. The feminization of employment expanded first with the internationalization of services, especially in call centres and data entry. These events have been linked with broader social changes, especially changing attitudes to gender. This has led to extravagant suggestions that the contemporary era is witnessing

Changes in attitudes in recent years have also had an effect on the economy. We can see that the openness of modern globalisation towards professionalism, technology, expert advisers, practitioners and scientists, has made individuals more dependent on other trades and professions, such as specialized engineers, architects, economists and accountants. The UAE community is heavily dependent on such experts and consultants of various nationalities for the expansion of the economy, the continuing emergence of new sectors of production, shopping centres and regional financial openness.

Table 8.2 Dubai population (10 years and over) by educational status from 1980-2005

Qualification	1980 %		1985 %		1995 %		2000 %		2005 %	
Illiterate	61,933	28.7	66,785	22.9	99,078	16.7	69,899	9.2	71,274	5.89
Literate	47,731	22.1	74,128	25.4	94,307	15.9	140,775	18.5	152,154	12.57
Intermediate	83,528	38.7	11,6131	39.8	306,445	51.7	385,863	50.73	740,271	61.16
Below University	5,757	2.7	9,497	3.2	20,203	3.4	32,422	4.26	49,,998	4.13
University and post-graduate	16,844	7.8	25,468	8.7	72,686	12.3	131,735	17.32	196,741	16.25
Not stated	3	-	105	-	533	-	-	-	-	-
Total	215,796	100	292,114	100	593,252	100	760,694	100	1,210,438	100

Source: Statistical Yearbook, (2005)

The number of university graduates in Dubai was approximately one hundred and ninety thousand in 2005, with seven thousand of these obtaining a master's degree. The number of students graduating with doctorate degrees is only just over one thousand. Table 8.2 shows the distribution of the population, according to their educational level, in Dubai. It is clear that illiteracy has decreased significantly from 28.7% in 1980 to 5.89% in 2005, in the total population of Dubai aged 10 years and over. The majority of citizens (61.16%) had an average education level. Academics and holders of higher education diplomas represented 16.25% of the population, mostly at university. A lack of education

Figure 8.1 Dubai population (10 years and over) educational status from 1980-2005
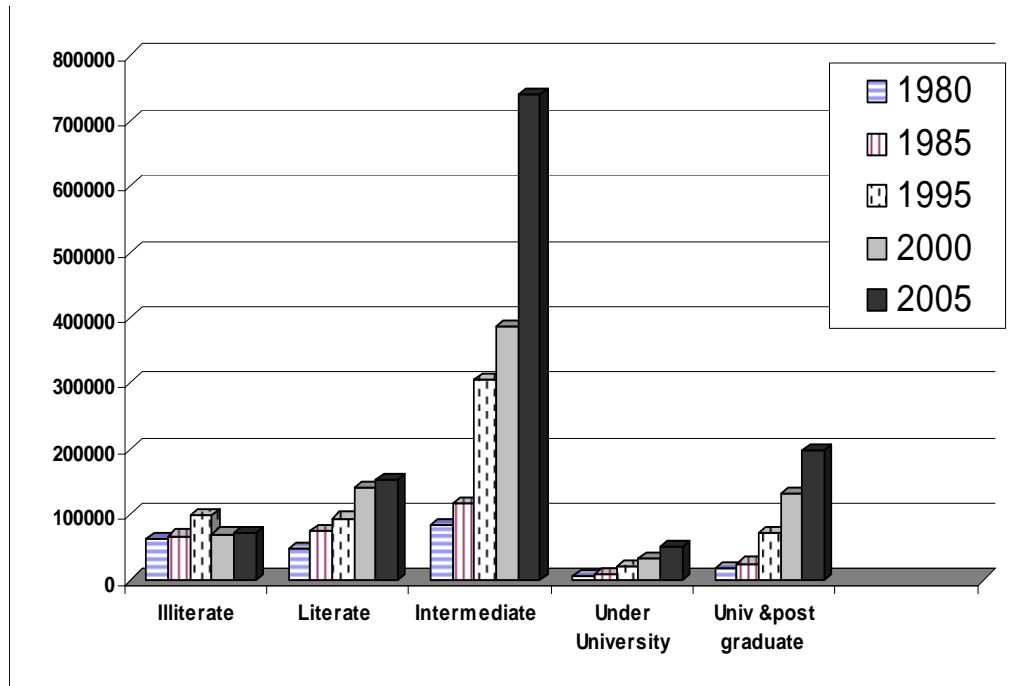
The World Bank's statistics show that 1.3 percent to 1.9 percent of UAE's GDP is dedicated to education (table 8.3). The UAE has, in fact, had the lowest share of public spending on education from 1980 to 1999. These figures must be tempered by the fact that the UAE also has the highest rate of private provision, with 45 percent of pupils enrolled in private school, while the figures for Kuwait, Singapore and Bahrain are 31 percent, 26 percent, and 19 percent respectively (Al Sheriani, 2007). Expanding higher education capacity and other initiatives are undoubtedly important steps towards the long-term development of local human capital in Dubai and the UAE as a whole. In the short term, however, the fact remains that the local human resource capacity is not adequate to support the ambitious knowledge-based and value-added mega projects development strategy in Dubai.

Table 8.3 Public spending on education as a percentage of GDP

Country	1980	1995	1999
UAE	1.3	1.9	1.9
Saudi Arabia	4.1	5.5	7.5
Kuwait	2.8	6.1	6.5
Bahrain	2.8	3.6	3.7
Singapore	2.7	3,1	NA
Iran	7.5	4.1	4.6
USA	6.6	5.2	5.0
UK	5.6	5.2	4.7
France	4.9	6.0	5.9

Source: World Bank (2003)

The 'Consumer Citizen'

The UAE has been inundated with huge quantities of imports of consumer goods from various countries around the world, with minimal regard to duty, taxes, controls, regulation or protection. The Emirates occupies first rank in the import and consumption of many essential and luxury goods at a global level. Consumer indulgence did not begin at any particular time, nor have there been any particular or intensive marketing campaigns for goods and products from around the world. The abundance of oil wealth created special and exceptional attributes, leading to the creation of purchasing power amongst individuals. Consumerism is linked to prevailing financial affluence and societal transformations associated with the emergence of new capitalist economic system and the evolution of a free-market system, where consumption becomes the common denominator of all activities. Luxury carries consumer value, which soon turns into a way of life and becomes lavish. Less fortunate groups try to emulate, without having the actual means to do so. Some of them own the latest Mercedes model, but do not have the means to pay for its regular maintenance. Consumption is part of a natural economic cycle and is an indicator of prosperity, but consumption rates in the UAE amount to overstretching (Abdullah, 2004). With regard to the rates of annual imports, Figure 8.2 shows that there was an almost threefold rise in value from 1991 to 2003. The rate of annual increase was on average 8.5%. In general, the consumption of minerals and low value products in addition to means of transport (aircraft, vehicles and ships) rose by 32.3%. The percentage of electrical appliances, electronic and mechanical devices constituted 21.3% of total imports in 2003.

Figure 8.2 Value of Imports in Dubai (1991-2003)
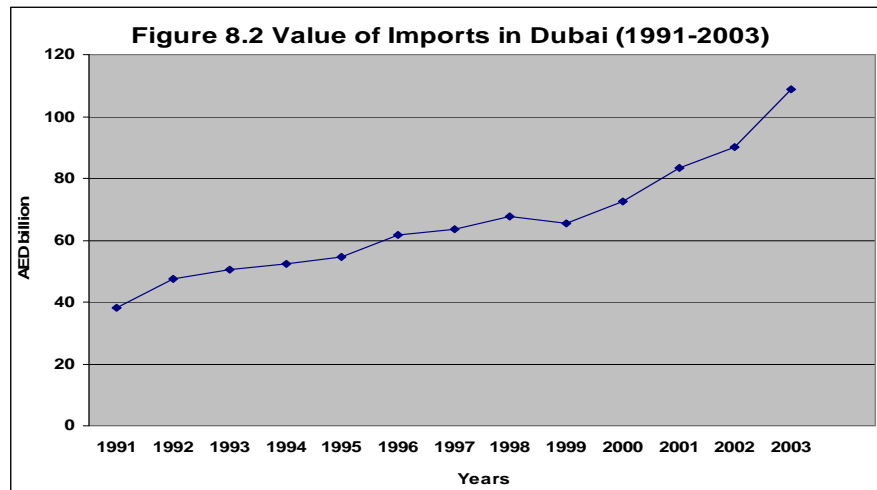
Source: Statistical Yearbook, (2005)

Dubai is the highest consumer in the world in terms of imports of specific electronic goods, and the second highest consumer in the world for the import of gold and trade. In addition, it has imported more than 200 thousand kilos of wrist watches, or the equivalent of ten watches per inhabitant. It imports an average of 6 telephones, 5 radios, 4 recorders and 3 televisions per capita annually (ibid). Currently UAE enjoys high levels of broadband Internet penetration, particularly in Dubai (64 percent) and a high mobile telephony penetration rate (close to 100 percent) (UAE Yearbook, 2004). In the UAE there are more than 40 thousand types of imported consumer items, sold in more than 20 thousand supermarkets, which was one supermarket for every 200 people in 2004 (Abdullah, 2004). The UAE recently emerged on the list of countries that have the largest number of commercial centres per capita in the world, and a financial and societal transformation to a consumer society. It consumes more than it produces in a kind of gluttonous ignorance that only creates harmful waste.

Table 8.4 Trade in gold (1996-2001) in Dubai (Millions USD)

Years	1996	1999	2001
Value of trade	10,170	10,300	14,750

Source: Federation of UAE Chambers of Commerce & Industry, (2002)

Table 8.4 shows a growth of 37% from 1996 to 2001. Statistics also show that Dubai's total imports of gold reached 489 tons in 2001, while exports rose by 23% to 274 tons. In line with what happened at world level, imports declined slightly in 2001 from almost 522 tons in 1999. The highest proportion of sales takes place during the Dubai Shopping festival, when sales volume double. The percentage of annual gold sales also jumps 20% in the wedding season. Most gold shoppers are visitors from GCC and European countries who make trips to the UAE to purchase luxury jewellery at prices exempt from taxation. In Dubai, jewellery is a local industry, but imports constitute approximately 58% of the total jewellery sold in retail outlets.

In comparison to Dubai we can see that in some other Asian countries the head of family may sacrifice a luxury house or fabulous car to make more funds available for the education of his children, while in the Emirates gifts and holidays take precedence over education, a fact that builds consumerism, but neglects control over future mortgage and oil prices (Interview with local inhabitant on 10.7.2006). Consumption is not motivated by need, but by the desire for foreign novelties for the house or luxury goods. This may have a direct impact on the psychology of the decision makers among the economic elite with regard to the implementation of projects, which have been characterized as the biggest and the largest of mega projects. The new urban mega projects era is characterised by an addiction to music, photographs movie icons, and games. Values and concepts flood in legally or illegally from the east and west. Many interviewees have claimed that consumption is compensatory behaviour for past deprivation and denial, i.e., before the discovery of oil (Interview with Economic researcher on 22.11.2005, and local inhabitant, 12.7.2006). A senior Marketing & PR Officer added: 'Consumer behaviour is fuelled by the mass media and propagandist companies carry consumers towards their dream of a different life' (Interview, 20.6.2006). To a great extent the consumer is the victim of the consumer output of globalisation.

As Matthew *et al.* (2001) argued, the issues raised in cities regarding urban outcomes have led to a broad critique of the economic and cultural effects of consumption-oriented development. For example, Judd (1999) uses the concept of a "tourist bubble" to illustrate these links. In many cities there is a well defined boundary

separating tourist spaces from the rest of the city, creating tourist reservations that are "secured, protected, and normalized environments" (Judd 1999, 36). A key characteristic of these new consumption spaces is "the way people must visit to buy and consume within these locations the goods and services on sale there, and this is a consumption that is for fun and enjoyment, rather than for necessity" (Mullins *et al*., 1999, 45). Just as the competition for manufacturing led to copycat subsidy programs, consumption-oriented economic development creates seemingly standardized tourist environments, consisting of conventional complexes, fancy hotels, entertainment and gambling complexes, and sports facilities alongside new office towers and (re)developed waterfronts. The idea behind these developments is to evoke a certain image of the place, and to provide status for those experiencing the place. Amongst the ways to achieve these aims are the construction of unique visitor attractions, playing host to prestigious events, and using theme festivals to link tourism development to city marketing (Hall 1992, 1996; Paddison 1993; Short *et al*., 1993).

The aesthetics of borrowing from around the world and playful juxtaposition seems a general feature of places to play. For instance, the crescent of the Palm Jumeirah will be a tourist resort designated for 32 hotel lots, each of which will have its own national theme. At the Palm office, they said that they 'like to think of it as going around the world without leaving Dubai'. Perhaps this can be seen as an urban materialization of virtual round-the-world travel. Dubai will provide a round-the-world experience without having to make the journey (Junemo, 2004). The waterfront mega projects are of particular significance, and, in this respect, both the Palm Jumeirah and the Burj Al Arab are reflected in the global consumerism trend. The Palm Island could be understood as a continuation of such thoughts on a gigantic or even a global scale. In such a way, the stage is set for Dubai as a global entity. As Elsheshtawy (2004) points out, simple or humble developments will not achieve such an effect.

This type of 'booming' and 'consumer' behaviour represents the character of changes associated with globalisation in Dubai. However, these categories do not tell the whole story of change. It is also essential to examine the proliferation of cultures in Dubai.

8.3 Co-existence of Cultures in Dubai

Dubai, more than any other city in the GCC countries, is considered to be an open, tolerant and cosmopolitan city. This is due to its global orientation policy. For example, although Dubai is an Islamic Bedouin community, the sale of alcohol is allowed, even to Muslims. Most entrepreneurs prefer the city because of the more liberal lifestyle choices available. Various options have become important for international business. In the words of Assistant Director, Public Relations and Organization Department, Dubai Municipality, "The developments presently seen in Dubai are reflective of what is happening in the outside world. Globalisation powers seem to be preparing people in the city for the coming phase of 'the city of money' the phase of merging between global and local values'' (Interview, 10.12.2005). As one property investor pointed out, "Dubai seeks to develop policies to deal with various challenges. Nevertheless, it is under increasing pressure to accommodate foreign investors, for instance opening the possibility for foreigners to buy land and houses in the Emirate" (Interview, 14.6.2006). Wealthy foreigners bring with them alternative cultural and lifestyle ideas, which does not appeal to the majority of the local population of Dubai, because local citizens fear that, sooner or later, the foreigners may cause problems. The welfare state, which was built on oil revenues and the rigid distinction between local and foreign cultures, fills a gap between the different strata. Current policies encourage the shift in socio-economic groupings towards professional, technical and administrative formation, leading to the development of mega projects. The service professions back the flow of thousands of families coming from the groups mentioned.

Dubai's population was 1.6 million residents in 2006; the majority being of Asian, Arab and Western nationalities. Given this unique population, as well as its location at the tip of the Arabian peninsula, Dubai has become a border region, in which one can detect a variety of cultural conflicts: West/East, modernization/fundamentalism, Arab/Asian and so on. These conflicts are resolved spatially through a policy, which, on the face of it, attempts reconciliation through co-existence. However, a closer examination of this policy reveals that the policy has moved in an exclusionary direction through the development of clearly defined borders, i.e. zones or enclaves. This is evident

in modern project development - out of which the authorities have created an instant, easily recognizable image of a city which is on the verge of joining the global community. The existence of these groups has prompted many to claim that a hybrid culture is being constructed in a process related to consumerism and identity (Elshestawy and Nagga, 2000; Kazim, 2000). For example, certain items of food or clothing find their way from one group to another. While the official image that is being propagated is of a great interaction of cultures, the reality of the situation does not sustain this view. In fact, cultural groups maintain strict segregation measures, by having their own set of institutions (schools, etc) which enable them to maintain their cultural values. Some argue that the UAE is not a "melting pot." Many separate and distinct social and ethnic groups reside in the UAE side by side, each maintaining its own cultural identity and tolerating the others. The largest groups: Indians, Pakistanis and Iranians, as well as smaller groups which have been in the country for a long time, such as British, have their own schools, their own clubs, and their own places of worship, and they tend to spend their leisure time with their own people (William, 1997). Many groups spend a minimal amount of their earnings, and send most of their money home to relatives (Elsheshtawy and Nagga, 2000; Kazim, 2000). Thus, segregation occurs institutionally, and the public sphere is segregated along economic lines. Groups are clearly identifiable (Indian, Arab-Egyptian, Lebanese, Syrian, Moroccan etc.), locals by their traditional dress - *dishdasha* for men, *abaya* for women.

Public codes of conduct are a useful way of examining the beliefs and attitudes of the population. For example, in general, all UAE nationals are devout Muslims, and follow conservative social habits in their dress code, male-female relations and public behaviour. However, they do not force non-nationals to follow these rules. For example, many UAE women are veiled and segregated from men, while Western women living in the country dress and follow social behaviour as they would in their own home countries.

Extensive dependence on foreign labour has, however, caused problems of a more subtle and less visible sort (William, 1997). Some families insist that their daughters wear the veil, whilst pornography is available, in contradiction with Islamic beliefs. New city dwellers' clothes and tourists' semi-naked bodies, along with flagrant pictures on bill boards, offend the modesty of the indigenous population (Interview with local inhabitant,

11.7.2006). Drunkenness and prostitution are not uncommon in Dubai. According to Davis (2006), Dubai is known for its tolerance of Western sins, apart from drugs. Unlike Saudi Arabia or Kuwait, or even its close neighbour Sharjah, Dubai is tolerant of lack of modesty and morality. However, recently, the government has begun to clean up prostitution in the city. Hundreds of Indian, Russian and Iranian prostitutes operate under the control of mafia gangs, with the sex trade based on kidnapping and enslavement. Davis adds that prostitutes keep five-star hotels full of Arabs and European clients. He notes that when Westerners glorify the unique openness of Dubai, they mean the freedom to drink and have sex, not the freedom to organize unions or publish critical works (ibid).

From a governance point of view, liberal attitudes to social behaviour and lifestyle options were seen as highly important for Dubai's economic position, as indicated by many government officials (Interviews with Head of Studies and Statistics, 18.12.2005, senior in the Public Relations and Organisation Department of Dubai Municipality, 13.6.2006, and Consultant in Department of Economic Development, 23.7.2006). The 'melting pot' of Dubai has generated a number of security concerns that have been taken more seriously, though sometimes reluctantly, by the state since 11th September 2001. Dubai could easily be used for money laundering and, though no expert wants to go public with figures (for reasons of political correctness); concerns are often raised off the record. The central Asian, Indian and Russian mafias try to develop their activities in competition with older, settled groups of a similar nature. The local media tends to report only incidents that occur in public places. Drug trafficking is a problem that is more openly addressed by officials and local newspapers. It is no secret that the city is espoused to the principles of liberalism. These are only examples of the 'dark side' of this heterogeneity and should not be seen as especially surprising. If globalisation is a meaningful phenomenon, then its dark side should also be involved.

From this tolerance of more liberal attitudes and codes of conduct, we can see that Dubai is responding to globalizing tendencies - tourism, large corporation headquarters, events (conferences, horse racing, rock concerts, etc.) - thus increasingly catering to transient populations. Dubai has a population crisis. It is teeming with incoming foreign manpower and growing every day, while the local populace is in decline. Indications are at a new record of imbalance, and locals total no more than 18%

of the population, as indicated by statistics from Dubai Municipality, only 12% according to unpublished government data. This population imbalance is troubling, because every achievement or success is dwarfed by it. The ratio of immigrant population which to native is the highest in the world. The UAE as a whole has a total population of 4.5 million, but nationals are outnumbered ten to one, 1.2 million Indians, 700,000 Pakistanis, 300,000 Iranians and contributions from dozens of other nations. The social environment of Dubai thus requires responses.

The thematised environment of Dubai thus promotes a social responsiveness, because they are prompting responses to their features. They aggregate this responsivity, not least because their creation is characterized by playful free associations and unrestrained fantasy. For example, to create a place like The Palm is almost a paradigm of divine play: the possibility of creating land, at will, in any shape. This imaginative play continues as each buyer of a signature villa or beach house has the choice of different architectural themes (Junemo, 2004:186). The impact of globalisation has been apparent on the physical partition of the island, which is reflected in the hybrid villa design styles.

8.4 Urban Mega Projects and Fragmentation

In trying to place these urban projects within the larger context of globalisation, questions of urban segregation in Dubai need to be examined. While Dubai's urban mega projects are marvelous in their sheer scope and ambition, they tend to highlight the segregation tendency of globalisation. One might argue that it represents a form of hybrid development but it nevertheless emphasizes 'polarization' and 'exclusiveness'. For example, the JPI project controls access through a variety of means: security guards and by its complete prohibiting ordinary folk from entering (figures 8.3).   There is a kind of fragmentation of the island. The crescent is used for hotel and recreational services; the trunk was planned for commercial services and entertainment facilities, while the fronds harbour the housing area. Thus, it becomes isolated from the rest of the island. It results in a lack of integration between the inhabitants of the island and outsiders who come in to work or to entertain. Social problems may emerge because of this fragmentation.

JPI has a unique morphology, with recreational beach extensions; the Trunk is in the centre of the island, with hotels and cafes representing meeting points for both 'insiders' and 'outsiders'. The villas (which have private beaches) in the 17 fronds are linked by roads to the Trunk, which is also linked to the Crescent by metro line, and there is water transport around the island. There are two populations on JPI: the first is mainly from the high-income class, whether they be owners or tourists, and the second consists of employees and workers in hotels, shops and service centres, but they do not live on the island. The first group finds it more attractive to live on JPI when the second group is excluded. In JPI the grouping of houses in the fronds is not conducive to integration, and is a rather irrelevant feature to the rest of the population, as JPI is basically set up to serve tourism and recreational trends. The populations of JPI are another type of population, not traditional city dwellers. They come from various quarters of the world, mostly in pursuit of a life of leisure and luxury, acting as components in the economic dimensions of globalisation and tourism.

Figure 8.3 Security police in JPI showing a direction to the pass office for those who are not living in the island

Source: Photographed by the Author

I have assessed the repercussions of social interaction on economic performance in Dubai. The study suggests that the major urban projects in Dubai have forced the expulsion of citizens to the margins of the city. This may be an unexpected outcome of urban mega project developments, which were supposed to attract populations to the urban area and to create a new economy. It was very clear that the community was not expected to participate in decision-making processes. Amongst alarming societal expectations, the JPI project increased the isolation of local people and also marginalized them.

Being a newly created space, the island has virtually no history, but its population is somewhat unique; it is hybrid in nature cultural composition, as a result of global forces (technical and economic), but serves an overall recreational purpose. The habitation of the island is in its first stages, so has not yet reached maturity. The development of common areas and cultural activities creates some potential for social inclusion strategies and participation mechanisms. However, the integrated design strategies do not solve the social segregation problems that arise when two different income-level group occupy the same space.

Fragmentation of aesthetic expression is widely recognized within post-modern theory, and the playful relation to the symbols that lie behind it. Symbols apparently can come to signify anything, as the sign has lost any significant relationship to the signified (according to Harvey, 1989a). In the course of the progressive 'redrawing of boundaries' there has been an apparent evacuation of the nation (Oncu and Weyland, 1997:10), and fragmented developments are geared towards a global audience. The city is thus being re-created through the gaze of the tourist, the look of multi-national corporations, and the stare of real estate development companies. In such a context, it becomes quite natural for developments to become isolated and fragmented on the island. While there are plenty of extras enacting scenes within rows of tall buildings outside the urban frame, new segregated neighbourhoods are being generated. Thus, divisions are reinforced: the privileged segment, i.e. multinational corporations and their beneficiaries, versus low-wage immigrant workers and low-paid locals.

It might be argued that Dubai's distinctive (fragmented) social structure is, in fact, a source of its stability. Such divisions may not prove problematic, but further discussion of this is requires (Elsheshtawy, 2004). Generally, hybridity requires some reaffirmation of identity, while former identity in newly created cities may be erased or reconstructed. Dubai may be an example, or it may offer a model for other traditional cities. It should, in its course to become a global centre, reveal its true self, as it still does along the banks of the Creek and in its marketplaces. This identity needs strengthening, not in a superficial manner, but in a way that could make the city habitable for all (ibid). Paradoxically, fragmentation and diversity of culture has enhanced and stabilised the city. Each segment is self-contained, but able to join with the others and to face modern challenges (ibid).

Neighbourhoods are consequently designed in response to local and migrants demand. Different circumstances have made Dubai a place for the flow of global migrants, as can be seen at neighbourhood level. Each neighbourhood has special characteristics, as for example:

1. Al Satwah: This is an old neighbourhood with modest Arabic houses, located between two of the most advanced areas in the city. Its inhabitants are low-paid immigrants and locals of Dubai.

2. Arabic Ranches, Springs, the Hills and Gardens: These communities are an example of the new planned gated-community neighbourhood, which have been promoted as ideal locations for foreign and expatriate investment.

3. Al Warqa: This neighbourhood has developed over the past eight years, and is available for those seeking to build their own houses, subsidized by government housing programs.

4. Mirdif: This is neighbourhood on the sandy land extending east, dating back to the eighties. It is similar to Al Warqa, in that it is only available for locals to build their own houses.

5. Jumeirah: This is regarded as a model of units leased to European and high-paid workers (Michael, 2005).

JPI's identity is associated with expatriates, and the new global economy. It is a source of contact with the wider world of easy access and the media. While not an argument against hybridization there is, nevertheless, a suggestion that there might be negative outcomes, as parts of the city are now exclusively associated with an elite who can afford the multi-million dollar price tags in the development (Elsheshtawy, 2004).

While policy should be open, it is sad that some estates have to be closed or guarded to protect against unwanted elements. Graham and Marvin (2001) indicate many places for leisure and consumption that are carefully controlled, such as shopping malls and theme parks, which are regulated by closed-circuit TV cameras, private security, and forms of visitor regulation. These places customize their infrastructural connections within the wider urban region. This can be seen in the Palm Jumeirah, a gated community and secluded haven. More public areas with hotels and other public amenities have their own security guards in their lobbies.

Figure 8.4 a café between two hotels in the Trunk

Source: Photographed by the Author

Thus there is more to be said about social exclusion, as the majority of residential projects involve deluxe residences. The housing market does recognise the

need for more medium range housing projects (Interview with a local real estate broker, 26.12.2005.), but current projects reduce the capacity for this type of housing. In the light of that, some developers have requested the government to support medium range housing requirements, and even more low cost housing projects, through the allocation of more land, and to encourage the private sector to invest in this type of housing. There is an expectation of a continuous rise in rents, until a suitable quantity of residential units is available. Therefore, there is a need to look for innovations that will enable 'modest' land uses instead of 'luxury' ones in order to reduce the social gaps.

In conclusion, Dubai's urban mega projects lead to segregation and the JPI project morphology hinders social integration. For example, there are new forms of police security on the island, created to ensure the privacy of property owners. It is not possible to enter the Fronds area without a gate pass issued by the security office. The policing is conducted by a private company, instead of the official police.

8.5 UMPs: The Beginning of a New Era of Economic Development or the Beginning of New Social Conflicts?

This section outlines some of the social conflicts and problems in Dubai that have arisen as a result of the urban mega projects. Human impact on a community can be highly disruptive, with great stress enforced by rapid change (Warrack and Dale, 1982). However, Warrack (1993) makes the point that there are public benefits from mega projects, and these tend to be longer-ranging and regional/national in scope, whilst in comparison negative impacts tend to be immediate and local. Even the sheer size of a mega project understates the impact it will have on an existing social environment. More research is needed to better understand changes in terms of social development occurring to individuals and families in Dubai. Many social changes and social problems have emerged in various sectors of society, including schools, drug usage, and changes in family values. This is due to the rapid transformations that have taken place in the city. The stress between generations is manifested in complex and different ways; many individuals of past generations were illiterate, and the new, literate generation is open to many new influences. There are questions over whether new technology has been good

for family life and marital health. Specifically, changing attitudes to gender roles and beliefs about family relationships are all transforming.

The execution of mega projects in Dubai reflects a desire to upgrade the city to the level of a global economic force. Some projects are designed to be functional and symbolic, but many are consumer driven. The funding and design, the construction and marketing phases are products of globalisation and a tool for real estate developers, without consideration for social aspects and local culture (Interview with a property investor, 9.11.2005). The UAE is in general undergoing a state of alienation and uncertainty about what the future holds. Indications and the facts reflect the emergence of a frame of reference for future development and full integration in the globalisation process through the transformation of economic regulations. The projects have raised a strong community debate. They have given the UAE a high profile to many businessmen around the world, and large returns entice investors at home and abroad. Many residents in Dubai believe that the JPI is a source of pride and a symbol of national identity. This identity-creation serves pragmatic functions by attracting tourists and investors to the UAE, thereby linking the UAE to 'new globalism' (Kazim 2000). The impressive development has had negative consequences on the local population by turning it into a minority population in a multi-national, multi-cultural society. The indigenous population is even excluded from many fields and occupations, and with so many specific competencies required, many locals just moved out of the area to settle elsewhere (Interviews with a local Businessman on 1.11.2005). The rapid decline in the population has resulted in a tremendous shift in cultural identity.

This has not been the case in countries like Egypt, which is densely populated and somewhat less involved in globalization. Its demographic profile and general culture are less likely to change in comparison to the UAE, which could be said to be facing a crisis. To make matters worse, other emirates are jumping on the band wagon. Similarly, according to William (1997) the presence of thousands of foreign child minders in UAE homes is likely to have had a long-term cultural and social impact on the next generations. Most of the nannies are Filipinos or other non-Arabs, who speak little or no Arabic and know nothing about the local culture. As with judges and teachers who are

non-nationals, the resulting long-term impact of this is unknown, but it is an interesting and potentially significant factor.

The impact of growth on income distribution depends on the package of policies used to achieve growth, and the extent of its relevance to the distribution policies adopted. In this sense, there is the familiar message that poverty reduction in Dubai has mostly been as a result of globalisation. Another message is that liberalisation is not an end but a means to achieving growth with equity, whereby many liberalization policies need to be accompanied by complementary policies, and that piecemeal reforms do not work. Of course some effects will only be felt in the future, such as rocketing spending on health care and family planning. A number of reasons underline the better than expected social impact. Rapid globalisation led to rapid rates of growth of GDP as well as exports, and, with measures of openness, the economy became more integrated with the global economy. The relocation of the transnational community is part of the emirate's efforts to modernize Dubai and its people.

The most important results that are likely to emerge are population dispersions to the margins of the city, away from the centres of economic activity. These dispersions could have a further impact, tearing social relations and creating more negative aspects. The disruption of the population has led to a loss of satisfaction in life and low participation in social activities. The economy has been affected by access to new homes in new locations, and residents to new housing in other areas of the city. This has resulted in adverse social and psychological disorder, accompanied by weakness in social relations and the emergence of new social relations. "I cannot teach my sons and daughters our customs and traditions among my new neighbours, I prefer to go to the eastern outskirts of the city, where the local population has new tenure", said one chief executive staff in Nakheel, the same company implementing policy to attract investors and foreign owners (Interview with Director Marketing, Nakheel, 14.6.2006).

The pace of social change in Dubai has been greater than in other UAE cities. Social revolutions may occur as a result of mass media output, surges in mega project development, and a fluctuating rather than stable workforce. Rapid infrastructure development and technological advances are reflected in news and other media streaming

from the West into Emirate homes through CNN, political reports, Fox, movies, documentaries, cartoons, and even fashion programmes. It has become clear that Dubai is now entering the twenty-first century with its new development strategy.

The struggle between traditional and modern remains a stumbling block. On a social level, the number of drug addicts has increased at an alarming rate, and divorce rates too. These issues used to be foreign to Arab culture. Family relations are tending to be less close, sometimes complacent or apathetic, even among brothers. The nuclear family was previously counter to Bedouin tradition. There is an apparent scarcity of broad symbiotic relationships, or maintenance of kinship ties and coherent relationships. With regard to gender divisions, domestic tasks are noticeably still in the hands of women, but foreign maids alleviate their work. However, there have been major transitions. Women have begun asking their husbands to participate and share in some household chores and they have also started to object to traditional treatment. There is a conflict over dress code. Jeans seem to be universally popular, and modesty levels have changed, though it is interesting to compare this change with other Arab countries like Egypt or Morocco, in which nomadic traditions disappeared earlier in history. These issues remain debatable, but there are concerns about globalisation leading to damage to the fabric of local culture.

Table 8.5 Population (15 years and over) by divorced status from 1980-2005, Emirates of Dubai

Year	Male	Female	Total	%
1980	461	833	1,299	0.66
1985	495	1,241	1,736	0.65
1995	881	1,775	2,656	0.48
2000	889	2,188	3,077	0.43
2005	2,197	3,395	5,592	0.48

Source: Statistical yearbook, 2005.

Further issues include the increasing phenomenon of divorce cases and the emergence of homosexuality, and the increased proportion of spinsters. This increase is a reflection of how some girls have been wronged because of excessive demands for dowry and marriage expenses.

The city is divided by a motorway; most 'lower' social classes transferred to huge developments on the edge of the city or beyond. During the implementation phase of the mega projects, the population suffered from local road closures, and dust and noise from the traffic of heavy equipment on the existing roads, which occurred because of the excess load of rocks and building materials transported through them. This resulted in changes in levels of service, road safety and traffic accidents. According to 2006 statistics, traffic accidents caused 157 deaths in a total of 915 incidents, involving 1,457 injuries. Statistics also reveal that roads leading to urban enterprise zones had the most recorded incidents, and the Emirates and the Sheikh Zayed Roads areas were the most prone to accidents. Statistics also indicate that many foreign workers, especially Indians and Pakistanis, were involved in accidents and injury (Statistical Yearbook, 2005).

Figures 8.5 & 8.6 Traffic jams on the Sheikh Zayed road
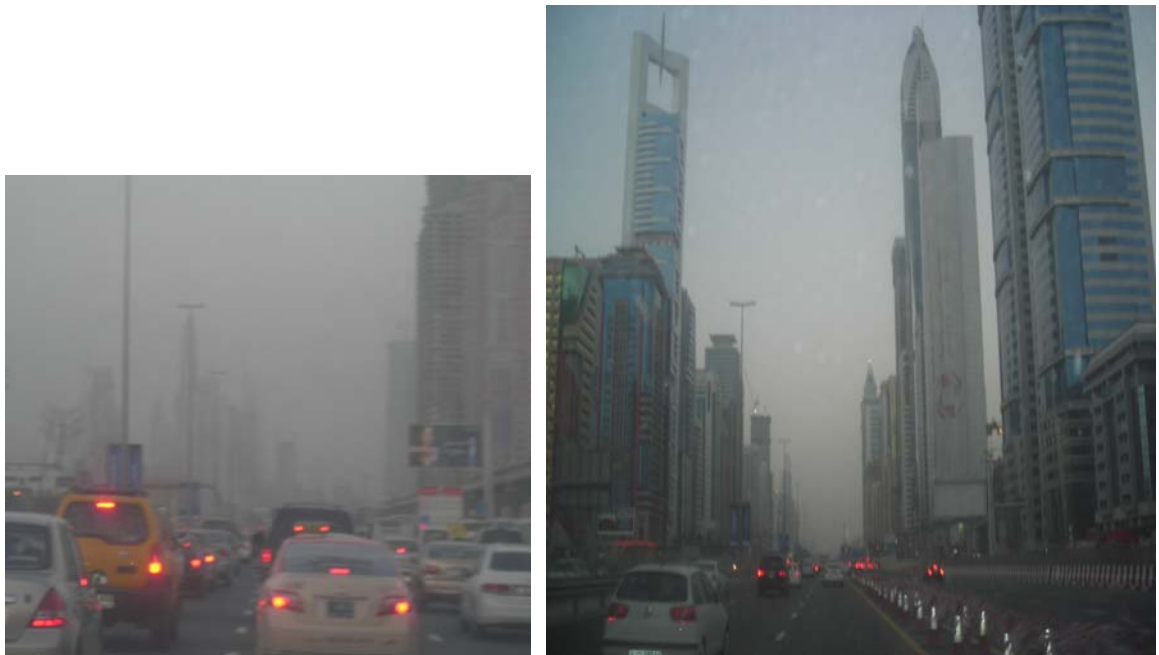
Source: Photographed by the Author

Some negative results relate to certain groups living near major roads, especially shopkeepers living near the Metro Line project. Many have lost clients, and there has been increased noise and pollution nearby. This could be due to the effects of mega projects. There are environmental and social concerns, such as poor facilities, with potential damage to housing on artificial islands, and the high rate of humidity by

8.6 New Divisions of Labour

This section discusses the impact of new divisions of labour in Dubai. Immigrant labour constituted 62 per cent of Dubai's population in 1968. These workers had some cultural impact but they had no political power within Dubai, no claim for a workers' union nor claim to naturalization (Gunaim, 1993). The number of workers has increased according to state policy, reaching 88 per cent in 2005. The UAE in general has faced problems of a lack of skilled labourers, and responses to this have varied from importing foreign labour to improving the level of education in the labour force. There is inequity between skilled and unskilled labourers (Figure 8.7). Most highly skilled labourers are foreigners (98%), while national labourers represent only 2% in this job sector. Typically, local businesses are unable to compete effectively against new businesses. Moreover, local labour skills are likely to mismatch project requirements. Most employment opportunities fall to workers from outside the area. The tragedy is that the indigenous population is disadvantaged by their ethnicity, following openness trade and import of labour. Businessmen from around the world have founded factories and companies, which have attracted foreign labour with guaranteed work. Dubai has a free market, festivals, no taxes and commercial transactions that facilitate the transfer of regional offices. One businessman noted that "Long commercial relations between the Emirates and the Indian subcontinent have created a tendency to absorb Indian, Pakistani and Bangladeshi labour in preference to others" (Interview, 3.7.2006).

Economic transitional cities experience considerable change in cultural and demographic heterogeneity as a result of large-scale migration. Friction may be associated with opportunity and social mobility, but that can be detrimental to social justice. The bulk of Dubai-based immigrants belong to the labour force. Dubai, more than anywhere else in the UAE, is heterogeneous, with 83 per cent of the workforce made up of migrants. This creates problems for the state, in terms of humanitarian aspects and foreign relationships. A strike by thousands of Asians workers in Burj Dubai arose

because of delayed wages, and a bridge collapsed under pressure of work to meet construction deadlines.

Figure 8.7 Labour quality between National and foreigners according to skill level in 2006

Skill level	National	Foreigne
Unskilled labour	10%	90%
Skilled labour	5%	95%
Highly skilled labour	2%	98%
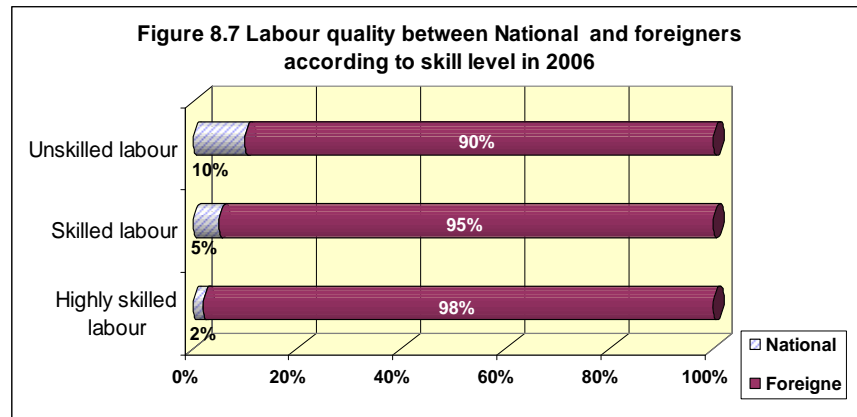
Source: The daily Al Bayan Archives

Sassen's (1998a) work on 'city user' theory links with some examples of what is happening in globalising Dubai. Sassen describes flows of capital, wealthy immigrants and flows of professional workers across borders. There is a mass immigration of cultural forms to reshape local cultures. The majority of migrant workers are poor, and there are questions of rights. It has to be considered that some parties might resort to urban political violence in order to claim their rights, which may seem to lack the same weight as that enjoyed by the 'new city users'. However, parties may begin to put forward demands, in a struggle to obtain recognition of the existence of their rights. Each new era comes with new ways to put forward demands. Though this might not be the case in the foreseeable future for Dubai, an extreme example of delinquent protest can be the burning of cars and the looting of shops. Such events have occurred during the last decade in major cities in the developed world.

635 thousand Indians and 208 thousand Pakistanis contribute to all levels of life in Dubai. The South Asians who sweep the streets, clean houses and operate taxis are at the bottom of the social ladder. At the middle level are doctors, bankers and engineers. At the highest level are some key South Asian property developers (Ahmed 2002).

Table 8.6 Dubai residents according to nationality in 1995, 2006 (thousands)

Country	1995*	%	2006**	%
Indigenous	108	16	182	11.4
Other Arab	66	9.8	105	6.6
Indian	293	43.3	635	39.7
Pakistani	105	15.5	208	13
Iranians	23	3.4	125	7.8
Bangladeshi	20	2.9	113	7.1
European	23	3.4	95	5.9
African	4	0.6	37	2.3
USA	4	0.6	9	0,5
Other Countries***	30	4.5	91	5.7
Total	676	100	1600	100

* General Authority of Information, 1995
** Department of Statistics, unpublished data
*** Most of them from the Philippines and Sri Lanka

In 1994-95 the government was already showing concern about demographic imbalance when it set up a ministerial-level commission to recommend ways to reduce dependence on foreign workers; it subsequently issued regulations limiting the number of domestic servants per household and prohibiting the lowest-paid workers from bringing their families with them, but by the middle of 1997, the 80:20 foreigner-national ratios had little changed (William, 1997). The UAE does not adopt a policy of naturalizing selected foreign professionals who contribute significantly to the national economy and welfare. Leadership believes that naturalized citizens cannot be fully trusted, especially in a crisis, an attitude perhaps rooted in tribal society, where family is primary and foreigners, although treated hospitably, are not part of it. There is also an understandable desire to maintain control. As long as skilled foreign workers are willing to work without citizenship, there is little incentive for the government to give them more than monetary benefits (ibid).

The Asian population is engaged in the trade and construction sectors, whilst Europeans are mainly employed in management. In recent years, the government has encouraged the employment of Arab labour, but some companies are reluctant to employ them. "Arab labourers are not as obedient as Indians. I have tested some of them periodically and even discovered the misappropriation of money", said a local businessman (Interview, 3.7.2006).

Figures 8.8 & 8.9 Locals are a very rare sight in many commercial centres. The author did not see any in the Naif retail trade area when capturing these images on camera.

Source: Photographs taken by the author

Some institutions and ministries aim to boost local employment. Resettlement is a very complex issue, which raises questions about how to deal with post-oil, or about how the education vacuum can be filled. What can be done to meet the need to provide for the future of a growing young population? Local institutions and large companies have conducted projects for the rehabilitation of the local workforce. They have identified a ceiling for the number of foreign labourers that should be employed in government institutions. A senior in the Public Relations and Organisation Department of Dubai Municipality stated that the municipality has conducted a rehabilitation project over 6 years in higher technical colleges to help graduates and reduce foreign labour. The water and electricity boards promote local employment and enticement students to university or college to obtain qualifications in specialist subjects (Interview on 13.6.2006).

Foreign labourers on the other hand, have made many complaints about their positions in Dubai. There are excessive numbers of contractors and workers on poor salaries, and they suffer from an inability to obtain adequate housing and essential needs, such as the basics of toilets and kitchens. I am personally familiar with one owner of a traditional house in Dubai which has ten rooms with 60 occupants. Six interviews were

conducted with workers from India, Pakistan and Bangladesh on the Jumeirah Palm Island. Responses were in agreement about the low level of housing and poor salaries that these people received. However, the media have inflated the issues of the rights of workers in the UAE, with unfounded exaggerations about workers not being allowed to enter markets or restaurants, or about the lack of drinking water at work sites. I have tried to verify the veracity of these claims in my fieldwork encounters with workers (Interviews, 9, 11, 12/7/2006). I did not find in my interviews and fieldwork observations any concrete evidence for most of the international media stories referred to earlier. I conducted three interviews on JPI, two of them with group workers. I also interviewed three Indian and Pakistanis workers in the Al Quze area, where a large proportion of the labour force resides. I noted from these interviews that, although there was some dissatisfaction about some construction companies delaying salaries and problems with residential density, the general reaction to Dubai and, generally, for the UAE was positively sentimental. In the words of one interviewee, 'one should be fair, the situation here (in UAE) is much better than in our home countries in terms of the working environment, accommodation conditions and, of course, the salaries' (Interview, 11.7.2006).

Expatriates' view of Dubai may be characterised in Ahmed's (2002) words; he described the influence of Pakistani cultural elements in Dubai. Ahmed notes the Urdu expression 'Dubai *chalo,'* which means 'Let us go to Dubai', which is the equivalent of the expression 'Westward ho!' This has crept into Pakistani culture: there are popular films around this theme, like '*Visa Dubai da*' ('Visa for Dubai'), in Punjab. It signifies the possibility of gathering relatively quick, legitimate, and huge amounts of wealth in the Arab states. Dubai, therefore, has come to be a modern-day El Dorado or Shangri-La for Pakistan. For many Pakistanis, 'Dubai *chalo'* has indeed become a lucky saying.

There is however a kind of injustice experienced by workers in the UAE. Older workers say that large sums of money are usually required to obtain work, a process that is accompanied by bias on national or religious grounds on the part of young administrators in companies, who are mostly non-residents. One Indian worker said, "One of my relatives stipulated taking four months of my salary if I obtained a job in Dubai"

(Interview, 9.7.2006). Workers' problems in Dubai can be summarized by the fact that some companies have influences (through relatives and friends) with official bodies, and are not afraid of administrative penalties. As a result, the practices of these companies are immoral. Several demonstrations have taken place over the last three years, leading to government interest in this phenomenon. At the time of writing, the government was on track to conclude several agreements with worker countries to re-organize the rights of the various parties. In short, under the accelerated pace of capital flows in Dubai during the boom of mega projects and uneven distribution of wealth in the city, the developer and administrator class became better-off, whilst the raised cost of living among the lower paid classes led to a sense of deprivation. This case creates a kind of jealousy and a demand for justice in the distribution of wages.

8.7 Local Community Reflections and their Satisfaction

The scarcities of financial resources are one of the main obstacles encountered during economic and social development in developing countries. However, this is not the case for Dubai as the Emirate has successfully progressed in improving its standard of living in the present period. Average per capita income has achieved outstanding growth. In 2000, when the vision for Dubai was declared, the economic goals to 2010 were to reach GDP of USD 30bn by 2010. However, in 2005 the figure already exceeded USD 37bn. Plans include access to GDP per capita in 2010 to USD 23 thousand, while in 2005 it reached USD 31 thousand, which shows that over five years has been the achievement of the objectives planned for ten years were achieved.

Dubai's new social policy shows that the socio-cultural development of its citizens is the cornerstone of the process of sustainable development. Socially, there is a general sense of dissatisfaction. For example, one local interviewee remarked that: "It seems that Sheikh Mohammed bin Rashid decided to use an attacking strategy, as described in his book "My Vision". He adds, "I do not agree with much of what is happening in Dubai and I think that the risk looming might have impossible devastating effects, with the spread of debauchery and depravity and negative social change. People

in the city were, until recently, known for modesty and religion" (Interview, 17.6.2006). A member of staff from the United Nations working in Dubai said: "I do not like the manner of economic planning in Dubai, where it fuses all aspects, and dimensions have been adapted only to achieve financial gain" (Interview, 18.7.2006). Regardless of the declared policy elements, what is fundamentally adopted in social policy in Dubai is the openness towards global cultures. The announced policy, which shows more concern about national identity, looks like a 'coming down policy', expressed some critical voices recently in the whole of the UAE. JPI is one example of a local government project which is part of a new socio-economic strategy. The Palm was developed to create new boundaries and accessible places, but also to create multicultural social networks. Some 90% of Dubai's population consists of mobile workers, and therefore the city must be able to handle the constant motion of the population. To respond to this mobile population, the Palm must remain culturally neutral in its symbols. One interpretation is as valued as another. I asked a senior consultant in the economic department: does the problem of lack of national cadres play a negative role in the development of UMPs in Dubai? He replied:

> *"Certainly, yes, it is a major cause, we have in Dubai hundreds of investment companies and the market needs a long time to prepare local cadres. Honestly the UAE market did not take adequate opportunity in this regard. Therefore, the subject of the availability of cadres is one of the impediments to economic development. The main reason is that the rapid growth of the Dubai market cannot significantly be matched by the wheel of natural growth, but there are other reasons. For example, in Dubai, today we do not have colleges and institutions to train cadres, there are no professional institutes. Mostly, we have higher technical colleges and some university graduates"* (Interview, 23.7.2006*).

Dubai is a city which depends on the borrowed or the produced. The Palm, for example, carries generic images that create openness. Rather than creating a coherent culture, the openness allows people to assemble their own meanings. The Palm allows associations with what is already known about cultural themes, but they differ according to individual cultural background.

It is clear that the public did not expect to participate in decision-making processes. This was the case in the planning of the JPI and other mega projects, which was mainly decided by the political and economic elite. While there is talk about civil participation in enormous projects, the pattern of participation is often only formal and symbolic, serving and recognizing the decisions taken earlier.

The most direct social problem created by the huge volume of foreign labour is the threat to national security, and family or local norms. There are concerns about national traditions and Islamic values. For several reasons, not everyone likes to discuss issues with researchers or journalists, because, firstly, the overall economic development is positive, and secondly, they like to avoid problems with the government. However, there is growing criticism within Dubai and amongst its neighbours. A local interviewee stated:

> *"It's a waste of time and money to build JPI and the other two islands; you have plenty of desert land to build on, who is going to go for this hot humid weather. Japan is the 2nd richest country in the world and is lacking land. It would not waste money on building an island"* (Interview, 12.7.2006).

Another account was as follows:

> *'Recently, Dubai has become largely a microcosm for the polarization of wealth and poverty in the world, with entrenched globalisation and the open market. It would seem that the rich [TNCs] are getting richer, and the poor [Labourers] are growing in number, and are needy, and eroding the middle class [the local population]'* (Interview, 5.7.2006).

The JPI project was subject to different criticisms and allegations from the outset. The results of interviews indicated that the mega urban projects are a major source of anti-Islamic and Arab nomadic activities and practices. Others have linked the implementation of the projects to concern for national sovereignty and the problems of foreign workers (according to a variety of interviews conducted with local inhabitants on 17.6.2006). One respondent commented:

> *"I do not want to talk more because this subject is killed by debating it in the newspapers and magazines, and the results are minus zero. Simply foreigners started to eject us from our homes after feeling that they are the majority"* (Interview, 11.7.2006).

Another made the point that:

> *"The people of the UAE are foreigners in their own country. If you go to a public market with your traditional clothes, you look abnormal in the foreign ocean around you. Expatriates changed our culture".* He added, *"It would be the right of each of these states to intervene to protect its personnel in the UAE and this is familiar to the United Nations as well as the human rights associations. There is collusion from some big officers. The sale of visas is very popular. The state has enacted laws to correct the situation in the last period but still the situation is far from being controlled"* (Interview, 10.7.2006).

Research shows that, in the last decade, some bad aspects have crept in, such as prostitution networks and trafficking being perpetrated by Indians and workers from the former Soviet Union. The activity of these networks harms the reputation of the UAE in the Arab region and the world; there are also links to other organized crime and money laundering (Interview with a Journalist from the Al bayan newspaper, 17.7.2006).

The process of political engagement still largely follows a tribal system, in which leaders turn to a higher authority. Not much attention has been paid to this so far. However, the uniqueness of the government power in controlling the planning processes is not always seen as the lifting of oppression by the authorities, but, on the contrary, is considered as a kind of affirmative action for the interest of the country and its people. In addition, a distinction can be made between important decision-making processes in the UAE and other developing countries. But in the UAE, it is very rare that decisions significantly affect the local population. The government compensates the local population several times over. However, others claims that concrete achievement in

Dubai is not considered a real achievement; they also believe that a genuine achievement is development of human and humans (Interview with local inhabitant, 19.7.2006). Another local respondent said: "Who owns these high towers? By whom are they inhabited? Who receives the benefit from the income they generate? Unfortunately, citizens pay tax of a social and cultural kind on the existence of these projects (Interview with local inhabitant, 25.6.2006).

8.8 Conclusion

The aim of this chapter was to analyse the process of globalisation and its impacts on social dimensions in Dubai. The study affirmed that the local population turns out to be a minority of about 12%. Globalisation has created a new type of citizen: the buoyant class, which makes up the commercial, financial and industrial elite of Dubai. Consumption and materialistic concerns have become an obsession, on the border between luxury and lavishness. The consumer is perhaps the victim of the consumer output of globalisation. Most projects are designed to be functional and consumer driven. The funding and design, construction and marketing phases of the projects are created by the flux of global tools for real estate developers, who pay little attention to social aspects and the culture of the local population. JPI is an example of how local government has applied new economic and social strategy. The Palm creates socially accessible spaces, but also new boundaries and restrictions. It depicts ways to find common ground for collective imaginings, premised on mobility and multicultural bonds over distances. The Palm can be seen as an example of a generic place whose symbolism does not relate to a specific culture. The openness that Dubai depends on is thus borrowed or produced, like the Palm. These do not provide a coherent culture, but do provide openness for people to come and assemble their own meanings in an open environment.

The results of the interviews highlight the focus of Dubai on social developments to date, in terms of the promotion and the implementation of its vision. In this respect there was unanimous agreement and awareness among the interviewees as to the main elements of Dubai's vision, as well as praise for achievements thus far, particularly the JPI mega projects. Several respondents pointed to problems of social change in the city with

UMP strategy adoption. These clearly reflect how local people try to protect themselves from globalisation's unwanted elements. From what I heard during the interviews, globalisation seems to represent the best way to increase risk of social upheaval, for all its booming economy.

This chapter has focused on UMPs to show how development has dictated social aspects. Its flexible policies have attracted multiple migration flows, and, in doing so, are posing some threat to national security. The problems have increased since 2001. The JPI project has hampered social integration, and has had negative consequences on the local population. The public were not involved in decision-making processes, as planning was governed by the political and economic elite. The JPI project was subject to many criticisms and allegations. The interviews indicate that the mega urban projects were a major means for the emergence of anti-local values, activities and practices.

This chapter's findings support the argument that there are discrepancies between the goals of maintaining direction for the local population and the goals of government. Dubai is facing the effects of major transformations resulting from globalisation through the mega real estate projects and many of these changes create social and cultural pressure, not only on the community of Dubai, but also in all the other Emirate communities. Dubai's character changed as of the year 2000, due to a combination of speedy urban mega project development, social and demographic changes, and the increasing flows of globalisation. The next chapter's task will be to explore, in more detail, the relationship between local, regional and global political stability.

CHAPTER NINE

THE POLITICAL DIMENSION OF GLOBALISATION

9.1 Introduction

This thesis has so far covered the economic, technological and social dimensions of globalization as they affect the JPI. A general discourse on the globalisation dimension in Dubai would be incomplete, however, without discussion of the political dimension of the UAE's unique federal system. This chapter therefore analyses the political structure of the UAE since its foundation in 1971 and the factors affecting its economic development and potential risks to mega projects in Dubai in the light of prevailing regional politics.

The chapter includes discussion of decentralization and democratization, and the resultant effects on decision-making in Dubai. The core work here is to provide answers to the following questions: Is the political system's support for mega projects progressive and productive? Is Dubai on the right track, given the enigmatic status of regional and global politics? Are there internal or external threats to Dubai's mega projects?

9.2 The National Political Context

9.2.1 Historical overview

Political tension has been apparent in the Gulf region since the first European colonization by the Portuguese (between 1500 to 1750). The region was an important crossing point between Europe, Africa and Asia and, after the expulsion of the Portuguese, control of the region came to the British. Table (9.1) shows the political chronology of the UAE from the 16th century up to the date of declaration of independence.

Table 9.1 A political chronology of the United Arab Emirates

16th century: Portuguese merchants came to dominate the Arabian[1] Gulf and the settlements on its southern shores. Among these settlements were various centres of seafaring peoples.

1793: The Bani Yas, a confederation of Bedouin tribes from the Arabian interior, established a presence at Abu Dhabi.

1803-66: The Al Qawasim Sheikh Sultan bin Saqr ruled Ras al-Khaimah and Sharjah as a maritime power.

1806: A treaty was signed between the Al Qawasim and the United Kingdom in Bandar Abbas (Iran) by which the Arab tribes agreed to desist from their perceived piracy[2] and respect the British East India Company's flag and possessions.

1818: A British expedition was directed against pirates at their headquarters in Ras al-Khaimah.

1830: The Bani Yas challenged the Al Qawasim maritime dominance.

1833: The Al Bu Falasa, a sub-tribe of the Bani Yas, settled in Dubai.

1866: The Qawasim lands were divided after the death of Sultan bin Saqr, resulting in Al Qawasim decline against the increasing strength of the rulers of Abu Dhabi (whose rule was based on land rather than naval power).

1870s: Dubai became the largest port on the Trucial Coast.

1892: The British entered into a series of exclusive treaties with the Trucial rulers.

1945-48: Abu Dhabi and Dubai were at war, as Sheikh Shakhbut claimed his lands extended as far north as Jebel Ali.

1958: Petroleum was discovered offshore in Abu Dhabi's waters.

21-25 November 1969: A meeting of the Federation of Arab Emirates (formed in 1968 by the Trucial States, Bahrain and Qatar) in Abu Dhabi provisionally chose Sheikh Zayed as President, Sheikh Rashid (Dubai) as Vice-President and Abu Dhabi as the capital.

18 July 1971: Six of the seven Trucial States agreed to federate before the British withdrew from the Gulf at the end of the year; Ras al-Khaimah elected to become independent.

29 November 1971: The Sheikh of Sharjah agreed to share the island of Abu Musa with Iran.

1 December 1971: The United Kingdom's treaties with the Trucial States were terminated.

2 December 1971: The United Arab Emirates (UAE) was formed, following the secession of Bahrain and Qatar from the Federation; Ras al-Khaimah confirmed its decision not to join the newly independent state.

10 February 1972: Ras al-Khaimah joined the UAE.

Source: Lea (2001)

---

[1] Arab people do not use the term "Persian Gulf". Persia, now known as Iran, forms the northern coast of the Gulf, but the longer Southern coast is pure Arab.

[2] Al Qawasim were branded as pirates by Westerners representing the viewpoint of the East India Company, but that does not reflect reality of that time, because Al Qawasim were only defending their own territories against colonial presence.

Figure 9.1 The regional location of the UAE in the Gulf

From 1600, tribal groups began settling in coastal areas, forming the nucleus of the current native population, from desert areas, in Oman, the Makran coast and the south coast of Iran. Bani Yas and Al Qawasim[3] were the largest tribes. At that time, Britain showed interest in the region, but Al Qawasim was a stumbling block to its plan to control shipping routes to the Indian Ocean (Lea, 2001). Al Qawasim had a strong influence, with a naval force estimated at 500 vessels and political alliance with the Saudis (Wahhabi movement). In an attempt to gain control of the seas, the British launched several attacks on Al Qawasim ports. Defeat of Al Qawasim in 1819 led to British colonization of the Emirates that lasted until 1971. It was not a military colony, but treaties took place with Emirate sheikhs, to guarantee freedom of movement of British ships and pacts were made against entering into agreements with other forces.

The most important treaties between Britain and the sheikhdoms were in 1820, according to which the Emirates were known for the next 150 years as 'the Trucial

---

[3] Al Qawasim are the present day rulers of the two Emirates of Sharjah and Ras Al Khaimah; in the 18th century they were also governors of many areas in Persia.

Emirates'. Political circumstances eventually allowed the UAE's union, but the Emirates continued to experience problems in coping with regional powers. For instance, Iran occupied Greater Tunb and Lesser Tunb Islands and Abu Musa Island, just one day before the declaration of independence. The British withdrawal from the Gulf had led the Emirates to face an important issue in the late 1960s. New responsibilities would come to face them[4], in particular, the need to fill a military and political vacuum in the region (Al Fara, 1996). This obliged the Trucial States to consider immediate needs to look after their security. It had been recognized that it would be exceedingly difficult for each Emirate to remain an independent state. There were in principle no obstacles, cultural or historical, to their coming together. Accordingly, on 18 February 1968, Sheikh Zayed bin Sultan Al Nahyan, ruler of Abu Dhabi, and Sheikh Rashid bin Saeed Al Maktoum, ruler of Dubai, met to seek agreement to form a Federation and to invite the rulers of the other five emirates and Qatar and Bahrain to join them. On 27th February, all nine rulers signed an agreement to form The Arab Emirates Union (ibid). However, despite long negotiations from 1968 to 1971, it proved impossible to reach agreement on the practicalities of the union of the nine emirates. Eventually Qatar and Bahrain opted for a separate independent existence.

On the 2nd of December, 1971, the rulers of six emirates officially proclaimed the foundation of the United Arab Emirates (Ras Al Khaima did not join the Federation until 10 February 1972). The establishment of the United Arab Emirates as a nation coincided with petroleum wealth in Abu Dhabi emirate. Each of the seven emirates controls its own economy and finances. Each emirate can determine its own policy in the public and private domains. The rulers constitute the Supreme Council of the UAE. Sheikh Zayed was elected as the first president.

---

[4] For more details of British withdrawal causes, see: Derby (1973), 'British Defence Policy East of Suez 1947-1968', London, pp. 304-321.

9.2.2 UAE Political Components

It is necessary to examine the political make-up of the UAE, which is a small Gulf state between Oman and Saudi Arabia. The UAE is a federation governed in a traditional manner by tribal leaders, who exercise broad powers based on hereditary rights. Each of the rulers of the seven emirates is likely to be succeeded by his eldest son or brother. In May 1996, the Supreme Council decided to make the provisional Constitution of 1971 permanent, and to confirm that Abu Dhabi would continue to be the capital of the UAE and the presidential seat as well. This did not constitute any significant political change but rather was a further step towards institutionalizing the prevailing system.

Table 9.2 The seven Emirates that make up the confederation by area

Emirates	Area/sq km	Area %
Abu Dhabi	67,340	80.55
Dubai	3,885	4.65
Sharjah	2,590	3.10
Ajman	259	0.31
Ras Al Khaimah	1,684	2.01
Umm Al Qiwain	777	0.93
Fujairah	1,165	1.39
Islands	5,900	7.06
Total	83,600	100

Source: Ministry of Planning, Annual Statistical Abstract, 5th ed., 1991:14.

It is argued that federal systems offer benefits, such as flexibility to respond to regional differences and prevention of abuse of power, as no single group is able to gain complete control of government at national or local level. The federal system spread the power to resolve conflicts and handle administrative burden. However, benefits only occur if the state is energetic and responds effectively to policy needs with sufficient resources (Nice and Fredericksen, 1995; Saffell and Basehart, 2004).

The UAE is commonly considered to be a successful federation, having lasted for more than three decades. Areas of sovereignty not specifically assigned to the federal government are left in the hands of individual Emirates, which maintain a good degree of

autonomy (Al Shaheen, 1997). The flexibility of the federation allows the rulers to work together, but remain as sovereigns. However, such a set-up can complicate urban management and coordination. Urban mega projects in the two largest emirates, Abu Dhabi and Dubai, are an example of absence of coordination and joint planning, presenting risks and duplication in projects.

The Supreme Council of the Federation

The highest authority in the UAE is the governors of the seven emirates who retain all authority. All laws and decrees must be ratified by the Supreme Council. It makes all important decisions of state, and is responsible for the formulation and supervision of all UAE policies.

Figure 9.2 Hierarchy of authority in the UAE federal government
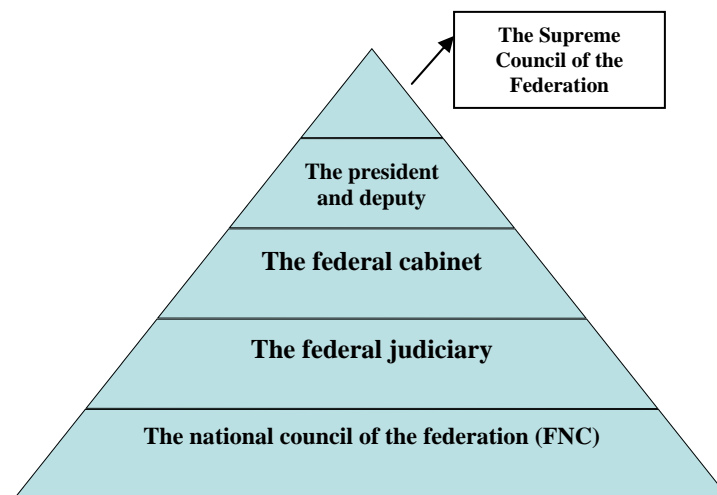
Source: Personal research.

The President and Deputy

The members of the Supreme Council elect the President and Vice-President from among their number, each to hold office for a five-year term. The president in turn appoints the Prime Minister and the Council of Ministries.

The Federal Cabinet

Article 60 of the Constitution stipulates that the executive body of the federation is overseen by the President of the Federation and the Supreme Council. The first cabinet

was formed in December 1971 and had twelve members, representing all seven emirates. They were nearly all members of ruling families (i.e. sheikhs). The cabinet was expanded to nineteen in order to include non-sheikhs.

Table 9.3 Emirates cabinet representatives

Year	1972	1995	1997	2007
Abu Dhabi	6	6	8	8
Dubai	5	6	7	8
Sharjah	3	4	2	6
Ajman	2	1	2	4
Ras Al Khaimah	3	3	2	6
Um Al Quiwain	2	1	1	4
Fujairah	2	1	1	4
Total	23	22	23	40

Source: Rugh, (1997: 18) and (FNC) http://www.majles-uae.com

It was expanded to twenty-three in 1972, when Ras Al Khaimah joined the federation, and to forty in the late 1990s. Around half of that number were from the two biggest Emirates, Abu Dhabi and Dubai.

The Federal Judiciary

The Constitution provides for an independent judiciary. There are three types of courts in the UAE. The federal primary courts address civil, commercial, administrative and personal status cases. The federal appellate courts give special decisions and judgments and deal with urgent penal sentences arising in the civil courts.

The Federal Supreme Court consists of a chairman and a number of judges (not more than five) appointed by decree of the president after approval by the supreme council.

It convenes to adjudicate on the following matters:

- – Disputes between various members of the UAE federation, or between the principality and the Federal government.
- – The constitutionality of federal laws or legislation from any of the emirates.
- – Interpretation of the provisions of the Constitution, if so requested.
- – Accountability to ministers and senior officials of the federation recruited by decree.

– The interpretation of federal treaties and conventions.

The Federation National Council (FNC)

For the first time in its history, in December 2006, the UAE witnessed the first partial parliamentary elections to choose half the members of the 40 members of the FNC. The Council does not enjoy any legislative powers, and has only a consultative role. There is some inequality among the population, in spite of the fact that, constitutionally, this should not be the case (according to federal law no. 17 of 1972). In practice, there are two classes of citizens in the UAE. The one with higher status can apply for positions on the FNC and other high positions either in federal or in local government. Naturalized citizens cannot do this. However, some get around the low via personal contacts and bribery. On the other hand some indigenous people lost their rights by failing to maintain their paper in good order after changes in the regulations. Consequently, the criteria do not perfectly distinguish the indigenous from naturalized citizens as there was no systematic rule for obtaining citizenship in the early 1970s up to 1990s.

Some suggest that modern elections are an imported concept, but imposed indirectly, rather than evolving from new global trends, according to the Head of the information section, at the General Secretariat of the Municipality of Dubai (Interview, on 14.6.2006). A minority of intellectuals advocated a modern state and had more concerns about democracy; but they were also subject to heavy outside influences.

Analysing the political history of the UAE, we can conclude the following:
1. The Constitution of the UAE is relatively static by nature and the Supreme Council of the Federation is the only body that has the right to propose amendments by majority agreement. The proposal to amend federal laws is the jurisdiction of the federal cabinet, while the FNC has the authority to approve constitutional amendments or federal laws (Al Shaheen, 1997).
2. However, there is debate on the degree to which the Emirates are united or independent:

 - The supreme council is at the head of federal executive power; this authority pertaining only to federal laws.

- The organization of the judiciary on the basis of the establishment of a federal supreme court, joining the judiciary to the principality of any federal judicial authority, is left to the discretion and choice of the emirates.

- The federation members are entitled to make treaties with neighbouring countries on condition of notifying the Supreme Council in advance; if the council refuses, it can be transferred to the federal court to decide on the matter.

The hierarchy of the federal government authority comprises the Supreme Council, which has its President in Abu Dhabi and Vice Presidents in Dubai, the legislative body (the Federal National Council, whose Chairman is in Dubai), the Executive body (the Cabinet, whose Prime Minister is in Dubai and whose Deputy Prime Minister is in Abu Dhabi) and the Judiciary see Figure 9.3.

Figure 9.3 The Federal Government Authority
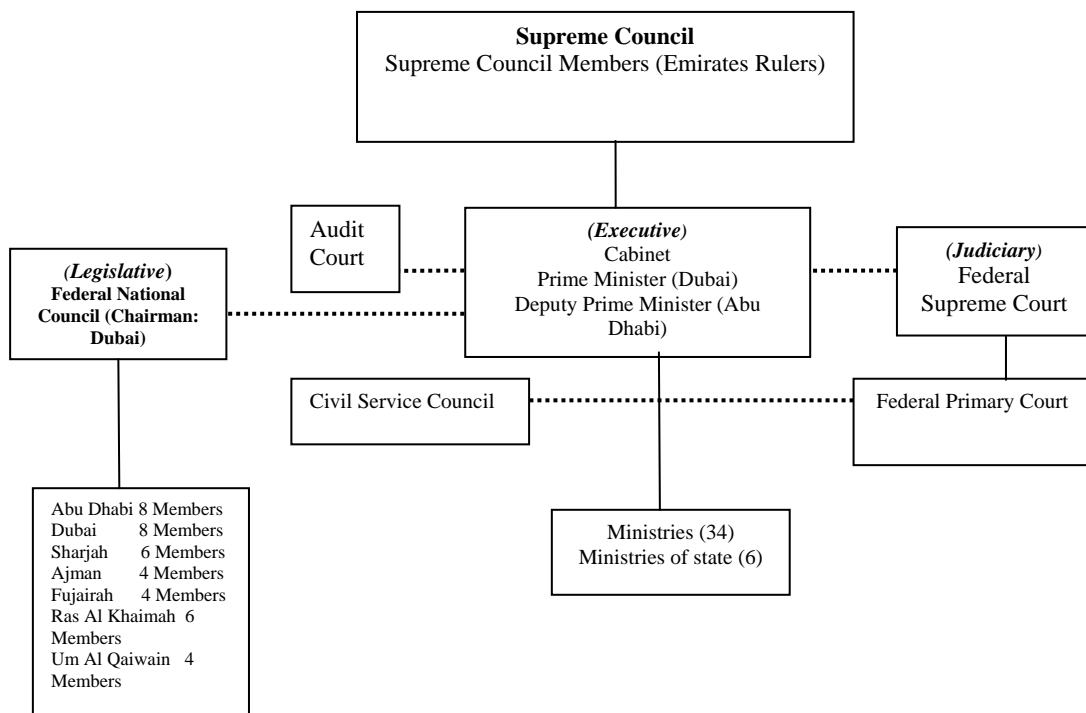
Source: (Al Jasim, 1990)

Jurists see the UAE as the central constitutional unity, watching over foreign affairs, while only some internal affairs are regulated by the unity. Some believe that the

The tribal tradition within the modern state is reluctant to relinquish power and some of its freedom. Thus conventions have become established among the governors of the seven emirates. The privileged status of the Emirates of Dubai and Abu Dhabi means that the other emirates do not have the same level of representation.

9.2.3 Dubai as a Model of a local government: the legislative framework for Urban Mega Projects

This section gives an example of how Dubai deals with its local economic development, the governance system, and how this has affected planning of the mega projects with particular reference to the JPI, addressing some advantages and difficulties associated with this structure.

The JPI case indicates that the current legislation does not provide the necessary framework to transform the areas using the JPI model. This is a certain weakness that decreases the success of the project. The JPI case also indicates that there is confusion in terms of problem definition, where the Palm was proposed as a housing environment ignoring the conservation issue. This situation brought about a problem of scale. Relatively better quality of life for Palm inhabitants does not always mean an improvement for the quality of life on an urban scale, even though in the JPI case it provided a better environment for some elite inhabitants. Ultimately, however, these projects contain individual agents who are swayed by personal politics, drive ideologies, specific desires, and flawed understandings of how structures such as politics and the economy work, and there is no space for the public point of view. As shown in Figure 9.4 the decision making process in the city can be described as follows: a project is presented

first to the Executive Council and in turn to the consultant authorities concerned, such as the Committee on Dubai's Competitiveness (CDC) and the Economic Review Committee (ERC). Once the project has passed through these two bodies, Sheikh Mohammad (the ruler of Dubai) then makes the final decision on whether the project is approved. The issue here is not that projects or decisions are taken without substance or reason; but that many factors are considered at once. However, when I asked an expert in the Department of Economic Development, he said that any misleading information during the production of estimate results would have serious consequences. That leads to the question as to why most decision making processes are conducted so hastily. He replied that there are some projects that have been under scrutiny since 1995, but that only now are being executed; perhaps the time was not appropriate during that period (Interview, 9.6.2006).

In the word of one senior official "If the government opened the door to the public to share in decision making processes, then the government can offer less protection against the destruction associated with structural change and the difficulties of the democratic bureaucracy dilemma" (Interview with senior official, 11.11.2007).

Figure 9.4 Decision Making Process in Dubai Urban/Economic Development Projects
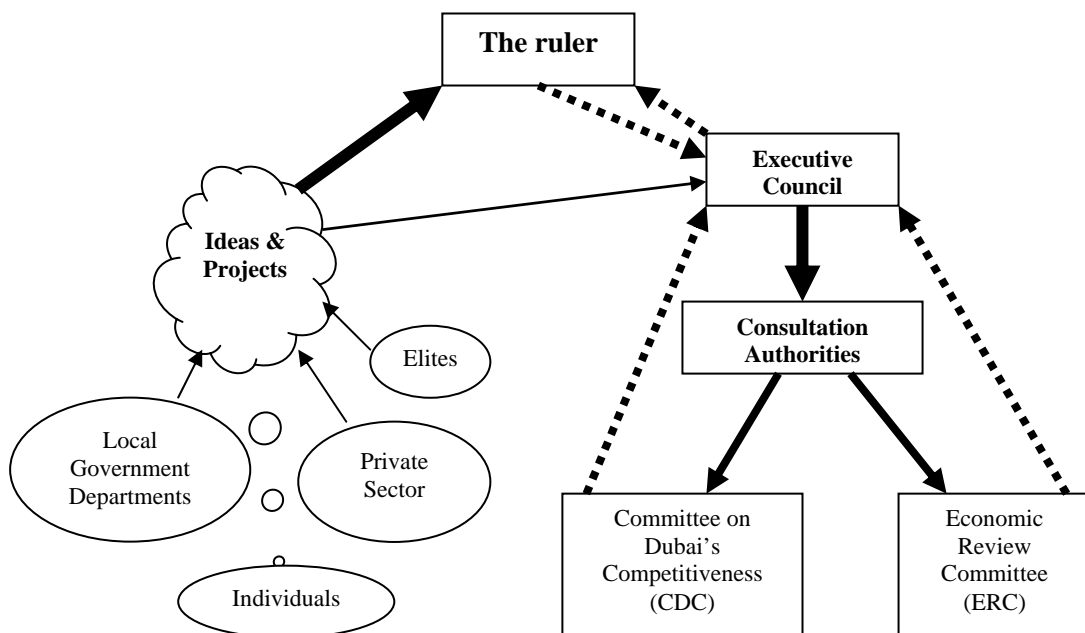
Source: Researcher's creation, based on interviews.

This might not be the case in Dubai, where the state is at the centre of development plans. Several interviewees pointed to the inconvenience of local participation in decision making processes (Interview with local inhabitant on 5.7.2006). However, some related that to the lack of highly skilled labour in developing institutional back-up to decision making and implementation processes (Interview with the Director of Public Relations Department of Customs, 10.7.2006). He added "there are areas that need to be improved. "We really need to have more and more knowledge-based highly skilled labour who can impose their ideas confidentially; at that time the government will certainly encourage them and listen to them".

It is also worth noting the role of local government in dealing with circumstances in Dubai. Traditionally, the ruler has exercised power. He leads Dubai not like a state but like a company. He relies chiefly on three important leaders, who turn Dubai into a realm. They are Mohammad Al Qirqawi, who heads Dubai Holdings, Mohammad Al Abbar, who heads Emaar, and Sultan bin Sulayim, who heads Nakheel. They are equivalent forces, and have not been aggressive players against each other until now. The core local government policy was based on cooperation to tackle real estate business, by furnishing lands for its corporations. Grants were made available, such that governmental and semi-governmental corporations were able to take advantage of available land to develop projects and also sell land to other developers. The biggest role for government was to create infrastructures that could re-form empty desert spaces. The waterfront lands along the Jumeirah and Jebel Ali were prime areas for consideration. The emergence of these private finance companies was an important factor in mega project developments. These areas became the vehicle for stimulating and attracting private sector investment. Local government effected power to enable regulatory action planning to accelerate development activities, through the use of resources, promoting development of local urban policy.

In sum, Dubai is Sheik Mohammed's vision, and The Palm and The World are his ideas, as was the Burj al-Arab. The political structure described above constitutes a potential source of uncertainty, and a breakdown could occur, caused by the development of major problems, which can be considered as a negative point in terms of the

sustainability of the urban mega projects. The next section will look more closely at these issues.

9.3 The Uncertainties of the Internal Political Situation

The chapter so far has discussed the formation of the UAE as a federation. This section looks at issues that have arisen over the last three decades, the state of health of the UAE and its future, and in particularly the uncertainties within the internal political framework, which may cause risks to Dubai's mega projects in the long run. There are gaps between the federal and local systems within the emirates, problems in federal ministries and even between emirates departments. A number of pieces of legislation and measures are not clear or accurate, which affects their implementation (Interview with one university lecturer, 13.7.2006). The dividing lines of responsibilities are sometimes blurred, resulting in some important areas not being attended to, and this impedes the development of integration between federal and local institutions. The most important difficulty facing the Federation is the achievement of consensus among its members over the final division of governmental powers (between local and federal authorities). The Supreme Council tends to emphasise the independence of the individual emirates rather than the unity of the federation.

In addition, the decisions of the Supreme Council are not always implemented by individual emirates. The tendency of the emirates to assert their independence has proved stronger than the desire to achieve unity (Al Jassim, 1990). Differential resources among the Emirates mean different incomes and this has contributed to strains on the federal system. This underlies the federal budget delays during the 1980s, jeopardising planned expenditure, state services and enterprises. Federal government derives its revenue from the Emirates according to decision number 6 of the Supreme Council, taken on 6 November 1976 and following decision number 1 on 10 June 1984, stipulating the payment of 50% of oil revenues from each Emirate into the Federal budget. The UAE produces 2 million barrels per day and is ranked fifth among OPEC producers and twelfth in the world. Abu Dhabi produces 90%; therefore its oil contributes most to the federal budget, but the Federal government has been constantly restricted by the failure of some

Emirates to contribute their budget shares. There are also emirates that have no oil and suffer from insufficient revenue.

In addition, there is confusion between the personal wealth of the rulers of each emirate and the public wealth of the emirates. Emirate incomes are generally considered to belong to the ruler, who finances his own emirate first and then contributes to the Federal State. As a result of these priorities, each emirate carries out its own local development without proper consultation or coordination with the other emirates or with the federal authorities. This can lead to duplication of projects and brings about competition for mega projects between the emirates. As Dubai is more international than Abu Dhabi, the two emirates occasionally diverge in regulations affecting trade and business. For instance, Dubai agents for foreign businessmen cannot represent their clients in Abu Dhabi or vice versa (Interview with economic analyst in Economic development Department, 22.11.2005). There is a certain rivalry between the two major emirates, which manifests itself in their urban mega projects and sponsoring of international trade fairs. Thus, the individual emirates have been following uncontrolled and virtually regulation-free economic policies in disregard of the federation. An absence of a comprehensive federal economic development policy, particularly for industrialisation and urban development strategy can be seen clearly in the two largest and wealthiest emirates. Among the most serious risks facing the UAE in the near future is that developmental gaps are now appearing between the emirates, and perhaps a weakening of national identity and a shift from civil obedience to public criticism (Interview with Economic Researcher in the Economic Development Department, 22.11.2005). It can be said that inertia and lack of development of the Constitution are responsible for this gap.

Although the Federal Constitution defines the borderlines between the two levels of government, as is often stated in general terms, two aspects are worth noting. For one, the federal budget supports almost totally the vital areas of education, health, electricity and water supply, security, major roads and other infrastructure, for all emirates. However, in the word of one senior official: "This may have created a sense of dependency for poor Emirates, and rendered local initiative quite marginal" (Interview, 4.7.2006). An important gap was identified as regards an institutional set-up charged with

the responsibility of formulation and follow-up of macro policy. This link is deemed critical to successful development, not only in filling a decision making vacuum, but also in identifying responsibilities (public or private sector) with regard to initiating development activity. Most local governments are willing to respond by establishing formal decision making processes, but federal regulation continues to cause institutional uncertainty.

Tension also continues over many other key issues, such as the widening of participation in decision making processes to include powerful technocrats (up until now the preserve of wealthy families). The wave of democratization that started in Europe and extended to Latin America and Eastern Asia, with the collapse of Communism, seems to have passed by the UAE and the Middle East, according to Ghorashi (2003). Nonetheless, the UAE has a relatively advanced level of administrative decentralization, even if it is politically centralized, according to the Head of Comprehensive Planning & Studies Unit, Dubai Municipality (Interview on 18.12. 2005).

Local analysts interviewed by the researcher pointed out that there has been widespread popular satisfaction with sheikhdom regimes. Some argue that democratization is being accelerated by pressures from the outside. With the JPI project, the circumstances have meant an absence of involvement by local residents, who take no part in decision-making. There are no environmental pressure-groups or trade unions. In fact, community participation appears only to take place through the local authorities (Interview, Journalist in Al Aqarria, Internet City, 21.11.2005). Some claim that it seems unlikely that democracy will emerge in the UAE in the near future (Interview with local inhabitant on 5.7.2006). There is a weakness in specifications for political reconstruction. The presence of workers from many countries weakens the national fabric and solidarity, attracting political rifts and external pressures. Therefore, politicians in the United Arab Emirates feared to open the door to political reform, with the prospect of potential crises, foreign workers already constituting a major force in the country (Interview, Journalist in Al Aqarria, Internet City, 21.11.2005). The country has not laid down bedrock principles of political and economic constructivism. So it seems that major political change is needed to avoid disintegration and to develop the country on a sustainable basis.

Authoritarian ways are mildly objected to by academics. For example, according to the constitution, oil revenues go directly to the Prince, and are not published in the national budget statement. Although the royal family complacently enjoys its popularity, the regime leaves little scope for open discussion. The people of Dubai are not much interested in politics, because Al Maktoum governs the city-state in a tolerant spirit. Also there are no political prisoners. A few years ago, Dubai's prisoners for financial crime were given access to phones, faxes, conference rooms and even secretaries to help them maintain their businesses while incarcerated (Taylor, 1998).

There are indications that the standard of governance in the UAE is good and does not suffer much from problems of corruption. The organisation Transparency International drew up a Corruption Perceptions Index, in 2003 (Table 4.4), showing that, of the MENA countries, Oman and Bahrain scored the highest and are ranked 26th and 27th respectively. Kuwait and the UAE came in at 35th and 37th respectively. Many Arab states like Algeria and Yemen at 88th, fall towards the bottom of the rankings. Compared with some parts of the world, the struggle against corruption in the UAE is fairly satisfactory. In his survey of MENA countries, Robert Looney (2003) measured control of corruption in terms of voice and accountability, political stability, regulatory quality, rule of law and government effectiveness. The survey revealed that the UAE is:

- Somewhat near the norm for control of corruption (0.702).
- Considerably below many countries in voice and accountability (-0.611).
- Close to the norm in political stability (0.963) and with regard to the rule of law (1.096),
- But less so in regulatory quality (0.690) and government effectiveness (0.584).

The UAE is therefore fairly consistent in its reform efforts, making progress in some governance measures, but lagging behind in voice and accountability. There is a call for the expansion of public involvement and participation in decision-making and generally more democratization, including the area of municipal business. Recently, the federal government has made a decision to expand the role of the FNC, adopting partial election for members, which reflects the new desire to have more public participation in the long term.

This step has received broad acceptance among different community brackets. An advocate and economic specialist in Dubai Investments noted:

> *"It's a move in the right direction. We think that it's definitely going to bring more stability and balance to the FNC. As people are elected there will be a positive addition to the members circle, and we hope that those who are elected represent the private sector and non-governmental officials. I would really like to see more variety of people represented in the council* (Interview with economic researcher, on 22.11.2005).

Table 9.4 International Corruption Perceptions Index for selected countries, 2003

Rank	Country	Score[*]	Surveys Used
1	Finland	9.70	8
2	Iceland	9.60	7
3	Denmark	9.50	9
4	New Zealand	9.50	8
5	Singapore	9.40	12
6	Sweden	9.30	11
7	Netherlands	8.90	8
8	Australia	8.80	12
9	Norway	8.80	8
10	Switzerland	8.80	9
26	Oman	6.30	4
27	Bahrain	6.10	3
35	Kuwait	5.30	4
37	**UAE**	**5.20**	**3**
46	Saudi Arabia	4.50	4
68	Iran	3.00	4
88	Algeria	2.60	4
88	Yemen	2.60	4
106	Sudan	2.30	4
118	Libya	2.10	3

Source: Robert Looney (2003), Original source: Transparency International, Transparency International Corruption Perceptions Index 2003 (Berlin: Transparency International, 2003)

---

[*] A scale of 0 to 10, where "0" denotes a country where most transactions or relations are tainted by corruption while "10" denotes a corruption-free country.

Another interviewee stated: "This is not new. People have been doing this through the Ruler's *majlis*, which are open all the time for presenting opinions and ideas. But what is different probably now is that we are institutionalising it" (Interview, local resident, on 10.7.2006). On the other hand, many feel that the elections are not encouraging. The tendency is to combine recruitment with election, which does not reflect social reality locally or regionally, but suggests that the ruling political class in the UAE does not seem to have the will or the desire for radical change. Rather there is cosmetic reform under the banner of the modern state. Academics see a problem of potentially good social players being reduced to mere spectators, sidelined and having no direct influence. As an interviewee mentioned, there are no powerful parties demanding change or participation in the formulation of projects. Any change at the top of the pyramid is as a result of commendable leadership decisions, not powerful social forces (Interview, Head of studies and statistics, Economic Development Department, on 18.12.2005). According to Sheikh Mohammad bin Rashid, Vice president of the UAE and ruler of Dubai:

> *"Our country is secure and stable, its people are busy in development not wasting time speaking politics; every citizen has security of homeland and we have no demands to participate in "the cake" because it is on offer to everyone"* (Al Bayan, 25th October, 2003).

Some political debate has emerged in private, and among some interest groups in the major professions, but they are not licensed to bargain, or make objections to rulers or officials. There is no independent middle class, though a growing body of well-educated government officials, senior businessmen active in economic affairs and professionals involved in construction projects enjoy an excellent income. The salaries of government employees rose by 25% in 2007. In general, in spite of a little more agitation, citizens still enjoy the benefits of free medical and educational facilities, in addition to subsidized housing.

Political reform in the UAE therefore remains ambiguous and has lost a little of its authority. It is still based on the interests of current rulers, not on lasting economic or

social values (Al Shaheen, 2006). Reconstruction has not been coordinated, and emerges from local/regional rivalry. Intensive and continuous development has occurred in the seven small geographical units by their own management rather than through the development of larger political units under one management authority. In an interview, the Executive Director of the Statistics Center (3.10.2007) stated that:

> *''In spite of the above, we can say that the UAE political system is not so fragile. It has, in fact, sources of strength and resilience that will probably protect it in the long run and can be mobilized by leadership to maintain the essentials of the current system in the longer term. Internally, the UAE federal political system appears to be stable, showing no major signs of domestic tension. No identifiable opposition groups have formed inside or outside the country, and close observers have found no indications that there are grievances causing significant discontent below the surface''.*

But what about regional and global circumstances surrounding the UAE in general and Dubai in particular? The next section sets out to answer, in more detail, the embryonic relationship between regional/global political stability and the JPI project. Issues of external and internal policy can affect the mega projects in Dubai; the Middle East is known to be an area of conflict, crisis and complexity.

9.4 Global and Regional Politics

To understand how and why Dubai has changed depends on understanding why most investors select the city as a safe place to invest their money, because of the way political processes work in other parts of the Middle East. This point will be exemplified in different parts of this chapter.

Current globalisation has been enabled by an environment of greater interdependence, but one in which security issues still matter. The Arabian Gulf region has a special weight in the new global order because of its unique distinction as the

possessor of two-thirds of the world's oil; it is also the heart of Islamic civilization, rising furthermore to the centre stage in international affairs and global economy. The current and future challenges facing the Arabian Gulf and the UAE are particularly immense. Some new concerns have developed over the past few years, and some old ones reappear.

Historically, as Fernand Braudel (1993) indicates, numerous city-states have played a significant international role in the past, but in reality lacked political might. At the end of the fifteenth century, Venice was an international economic player without major industries or banking and financial sectors. Antwerp was one of the key trading nodes in northern Europe despite not owning ships, which would have been considered a strategic asset at that time. Genoa was a banking hub; but could not be considered to be an outstanding trading centre. At a strictly political level, differences are very meaningful: Venice was a strong city-state, while neither Antwerp nor Genoa had any political influence at all (ibid). In the modern era, according to Taylor (2003), some cities occupy important strategic positions in the global network, but lack political might. Hong Kong is an example of a big economic player with little political influence. It attracts a large amount of business, as does Dubai.

9.4.1 Regional Risks, Terrorism and Sectarianism

The Gulf States are mostly similar in their political institutions and social structure, but political instability remains a great fear. Saudi Arabia is a key concern in the region, because of its size and its being the largest economy in the entire region. Weaknesses in the Saudi system date back several decades, with poor communication with the population and some corruption. There is growing discontent with corruption and inequitable sharing of oil wealth. Al Qaeda is attempting to overthrow the regime because of its alliance with Western countries (and especially because of the American military presence), but there is no evidence of success for Osama bin Laden's attempts to persuade the Saudis to topple Al Saud with attacks on Riyadh and other areas, and many civilians have been killed. Al Qaeda carried out 30 terrorist operations in the last four years, targeting foreigners, killing 104 people, most of them civilian and security personnel (Bradley, 2005). Despite opposition to Western presence among religious leaders in the

mosques, they do not support the attacks of September 11, or Al Qaeda's extremist work (Gause, 2005). The most serious risk to Saudi's mega projects was an attempted attack on oil facilities in February, 2006. Generally, however, the Saudi security services have proved highly effective in arresting the perpetrators of terrorism and dismantling their networks, but they cannot rule out destabilisation of the existing system. Due to worsening economic conditions following the first Gulf War in 1990, and high unemployment (15%) among the younger generation, there have been calls for adjustment and reform.

Terrorism has become an increasing concern in some countries neighbouring Dubai. The JPI's dependence on tourism and its increasingly high profile leave it particularly vulnerable to terrorist attacks. In addition to the potential of terrorist attacks, danger lurks, from Afghanistan to Iran, Iraq, Palestine, Somalia, Algeria and Egypt, areas with grass roots turmoil, suggesting a need for modification to current Arab regimes, in order to overcome potential and economic instability. The GCC states have to face the fact that their oil wealth could make them a target for terrorists. There is also a worry that Iran could become a nuclear power within a few years.

Arms purchases in GCC states amounted to USD 35bn in 2006 (World Tribune, 2007), but many countries are too small to protect themselves against neighbours. That means firm commitments to the United States, whose military presence in the region guarantees the flow of oil to global markets; Iran and Iraq are main sources of instability, but terrorism in general is a certain risk. In mid 2006, Al Jazeera broadcast a videotape of Al Zawahiri, the deputy of bin Laden, threatening attacks on the Gulf, after previous appeals by Al Qaeda leader Osama bin Laden; there were threats to target oil facilities and to damage GCC and Western economies. Four years after the American invasion of Iraq, there has so far been no spill-over violence in neighbouring states, and there has been no influx of refugees, who went mainly to Jordan and Syria.

There are sectarian conflicts between Sunnis and Shiites in Saudi Arabia. Shiites represent 10% of the total population there, while in Bahrain they represent 70% and in Kuwait 25%. The Emirates is mostly populated by Sunnis, with only around 4% Shiites;

so there are no tendencies towards sectarian violence. Peace depends on the integration of the minority Shiites in the UAE and Shiites' national loyalty. In general, Emirate Shiites represent the most successful integration in the Gulf region, the UAE being one of the most tolerant countries of the Gulf with regard to religion, and it has the most diverse racial, national and cultural make-up (Shiites in Emirates, Arabic CNN, http://arabic.cnn.com/2007/middle_east/, Accessed on 23.6.2007).

There are serious concerns about a probable Iranian-American conflict resulting from Iranian nuclear activities and Iranian interference in Iraq. If the United States attacked, Iran would respond in the Gulf States' hosting American military facilities. Iranians could also deploy suicide bombers in those States. In contrast, some argue that the Iranians have no interest in attacking the UAE, due to their dependence on its banking services, shipping companies, transportation and investment outlets in Dubai. Dubai calculated that some USD 300bn moved from Iran to Dubai in 2006 (Corsi, 2006). Since 2003, when the purchase of houses by foreign nationals was legalized, Iranian investors have rushed to invest in the construction industry. According to statistics, some 10 to 30 percent of real estate transactions are conducted by Iranians (ibid). There are 300 thousand Iranians living in the UAE, most of them (36%) working and running their businesses in Dubai (see Table 8.4 in Chapter 8). An Iranian Business Directory published in Dubai lists 7,073 Iranian companies operating in the city, in 31 different business categories ranging from banking and finance to oil and real estate. The Iranian Trade Center in Dubai regularly holds international business shows and an Iranian Business Council operating to promote Iranian investment in Dubai (Corsi, 2006).

There is nothing to gain and much to lose if they try to undermine regulations or stoke the flames of sectarianism as a result of military attacks on mega projects (Interview with businessman, 1.11.2005). Director of Public Relations Department of Customs, argued that there is an atmosphere of optimism about the future, and the reason for such optimism is that the region is very important for the world, which would suffer if there was a dangerous disturbance (Interview, 10.7.2006).

Dubai is fortunate not to have suffered many of the embarrassments that other Middle Eastern governments have, and it has been able to focus, almost exclusively, on economic development, leaving policy issues in the hands of Abu Dhabi. Its foreign policy is shaped under the tutelage of Abu Dhabi. Dubai has a strategic location in the heart of the world's richest region, midway between the Far East and Europe. The Strait of Hormuz, 90 miles away, carries more than 40% of the world's oil, representing one of the key strategic nodes of global energy (Escobar, 2006). Over 120 shipping lines and 100 airlines connect to more than 140 global destinations. Dubai is diversifying into high technology, shipping, cargo and tourism. All three depend on the strategic location of the city, brokering exchanges stretching from South Asia to Central Africa and into the former Soviet Union (Stanley, 2003). Dubai is differentiated from other cities in the region and benefits from certain political and economic conditions. Foreign direct investment has expanded strongly and mega projects have become synonymous with Dubai's development.

Dubai began to show its face on the global political scene after September 11th, having been suspected of financing certain terrorist acts. Whether this was true or not, the accusations added pressure on the Gulf States and suggested a political justification for the extension of American political influence in the region. There is no doubt that, both before and after 11 September, its security has depended mostly on defence agreements with Western powers, including the USA and France (Marchal, 2004). Should this apparent lack of political weight be seen as a weakness? The answer appears to be 'no'. One may provide some justifications for this view.

Political instability in the region has in fact served Dubai. Contemporary conditions may have allowed weaknesses to become more of an asset than a liability. The lack of political importance allows a form of strategic opportunism, where politics and economics are managed loosely, with stability and not too much interference. Dubai has developed particular relationships over the last two decades with both Iran and Iraq. These will be further discussed below.

Political and economic factors are often inter-related, as will be further discussed later in this section. The problems in Iraq may still have ambivalent effects on Dubai, as

political reconfigurations are not yet complete. Although the UAE opposed the U.S. invasion of Iraq in 2003, Dubai is today a major transit point for military contractors, mercenaries, contract workers, and others travelling to support U.S. military operations in Iraq and also Afghanistan (Zunes, 2006). In addition, the Iraqi port of Umm Qasr is currently managed by a Dubai company. On a short term basis, oil prices will pick up, but the longer term outcomes are a concern.

In spite of tension, Dubai has a flourishing re-export trade with Iran. Despite ongoing conflict (territorial claims over three islands between Tehran and the UAE), most analysts seem to think that re-exports from Dubai to Iran may reach over 50 per cent of the total amount of Dubai's re-exports, though the official figure is only around 20 per cent (ibid).

Dubai has made every effort to take advantage of all political events in the region. During the civil war in Lebanon, it attracted many of Beirut's skilled workers and investors to the city. The same occurred during the Khomeini revolution in 1979 and the eight-year war with Iraq. Kuwaiti businessmen and companies moved to Dubai, and settled there after the liberation of Kuwait in 1990. Despite the dissatisfaction of the international community with the Taliban (even before September 11th), the regime was recognized by the UAE, and Afghanistan still ranked 10th in re-exports from Dubai in 2000 (Marchal, 2004).

In terms of strategic power, the two main challenges facing the UAE are Iranian superiority in various areas, necessitating plans for potential confrontation and self-defence, and the failure of the peace process in Palestine, which may have critical regional and global consequences. The UAE is traditionally cautious of taking sides in any regional conflict. Dubai also has close relations with Washington. This raises its profile on the world stage. According to Sultan bin Sulayem, the Chairman of the Dubai World Company and Nakheel, USD 3.5bn were invested in the United States in 2006. A takeover was made of the management of American ports, previously run by British companies. One of the six American ports was the port of New York City. This caused controversy in the American Congress, bringing Dubai into the global spotlight. The procurement by an Arab company raised fears in the American Congress of a terrorist

threat. The case was an example of what can happen when leaders do not bring accurate information to negotiation. In the United States, most people never clearly understood that Dubai's port management business is administrative, and it is not responsible for security; so there is no issue of terrorism, which is the responsibility of customs and the Coastguard, but this point was lost in the political struggle between the Republicans and Democrats (Alarabiya.net, 2007). This is a good case in point as regards whether manipulation is political or whether the case for economic protectionism is valid. Whatever the case, Dubai raises its profile across the world.

External risks have increased, due to the faster than expected slowdown in the US and global economies, accompanied by a rapid growth in oil demand. This study believes that a crisis in Dubai's mega projects could occur. That is because investors in Dubai are concerned about the likely impact of geopolitical risks, especially the high risk of a military confrontation between the United States and Iran. An American assault on Iran would be a big mistake, because that could affect Dubai's interests and would be worse than Iraq and Afghanistan (Interview with senior official 4.7.2006). The next section will reveal how potential risks could affect the JPI and other mega projects.

9.5 The Risk to the JPI Project and other Major Projects

According to the Managing Director of the National Bank of Dubai, "There is no question that Dubai is well on its way, not only to becoming the fastest growing city, but also encouraging innovation and a willingness to take risks'' (Al Khaleej, 2006). The construction of JPI, for instance, was a gamble requiring careful analysis of political, financial and economic factors, although the financial risks seemed acceptable because of the size of oil reserves in the region and expected high oil prices in the next few years.

Instability in Saudi Arabia seems to be one of the biggest potential threats to mega projects in all GCC states. The projects are near a region characterized by instability and violence; it would appear that the political dimension needs to be considered carefully. Further attacks on mega projects would prove painful. Mega projects are big

potential targets for terrorist attacks, as demonstrated by the attempt to attack oil installations in Saudi Arabia in February 2006.

The general infrastructure in Dubai is not immune to terrorism as it was mostly established before security problems arose in the region. Most large real estate projects (hotels, shopping malls, tourist services) are possible sites for attack. As in Saudi Arabia, the aim of destroying some targets would be to intimidate foreigners and create unwillingness to travel. It is well known that Dubai depends on Western personnel, experience and techniques in the development of its economic policies. These personnel will also become unwilling to work in the city if they fear a threat. The security system in the Emirates has great precision, but not immunity, and the security system in Dubai has no previous experience of dealing with terrorist attacks. The mega projects in Dubai are the closest possible target to Iran (just 100 nautical miles away). A conflict could focus on the Strait of Hormuz, which would directly affect Gulf oil shipments, driving prices upwards.

Private investors in JPI believe that political circumstances will affect their businesses negatively; financing with regard either to the completion of existing projects or starting new ones would depend largely on the duration and conditions of any confrontation with Iran. Both the government and private investors have made enormous investments in JPI (in housing, hotels and tourist facilities). This project has many separate parts, some still to be completed, and could now face a shortfall in funding, or might take longer than originally expected, according to a Project Management & Claims Consultant in Hill International (Interview on 13.11.2007).

Mega project risk has to be faced. According to International Monetary Fund (IMF) estimates, plans for public and private investment (2006-2010) total more than USD 700bn in GCC oil and gas, infrastructure and real estate (Finn Biz Newsletter, (2006). The Gulf States have the economic means to sustain the current big projects. Financial risk includes the bursting of a real estate bubble, as a result of over-fishing in the real estate sector, tourism and transportation. Governments in the Gulf are irreversibly committed to mega projects, which constitute a core development strategy.

In an interview with an economics researcher at Dubai Economic Development Department, the researcher posed the following question: Why did Dubai adopt – as some call it – a highly risky mega project policy? He replied:

> *"Perhaps Sheikh Mohammad believes that risks must be taken, and often stressed that "nothing ventured nothing gained". Of course there are some sides to the risks and they can occur at regional or global level, which may entirely, fail the experiment. Up to this stage, all conditions have contributed to the success of Dubai's mega projects* (Interview, 22.11.2005).

Table 9.5 Rating of the importance of each factor in the decisions of foreign companies to invest in the UAE

Factor	Rating	% high	% very high	% Total
Political stability in the UAE	1	46	46	92
Telecommunications	1	48	44	92
Availability of banking services	3	60	27	87
Absence of tax	4	43	40	83
Potentially profitable regional operations	5	49	28	77
English is widely spoken	6	51	24	75
100 per cent repatriation	6	42	33	75
Transportation	8	42	32	74
Political stability in the region	9	48	24	72
Availability of distribution services	10	44	25	69
Availability of healthcare facilities	11	51	14	65
Availability of insurance services	12	46	17	63
Potentially profitable global operations	13	46	12	85
Ability to enforce contracts	13	41	17	85
Availability of education facilities	15	43	11	54
Availability of skilled labour	16	40	13	53
Availability of legal business services	17	42	10	52
Cost of labour	18	36	9	45
Size of domestic market	19	37	6	43
Presence of suppliers	20	41	1	42
UAE per capita income	21	34	4	38
Presence of other rivals	21	31	7	38
UAE specific consumer preference	23	28	7	35
Availability of unskilled labour	24	25	6	31
Cost of raw material	25	18	5	23
Availability of raw material	26	10	3	14

Source: Qasrawi, (2004:86)

Since 2001, TNCs have invested optimistically in JPI. A number of studies have proved this. For instance, Qasrawi (2004) conducted a survey on the driving forces for FDI inflows to the UAE through assessment of 26 factors in decisions to invest in the UAE. Respondents were asked to rate their importance, on a scale of 1 to 5, with 1 representing the highest importance (Table 9.5).

Paradoxically, in ranking the importance of the 26 factors, 92 per cent of respondents put political stability first. This indicates a major disparity between TNCs and the Economic Intelligence Unit (EIU) risk assessment measurements (see Table 9.6). 72 per cent of respondents put political stability in the region ninth in their rankings of reasons to invest in the UAE. They believe the UAE to be more stable than any other country in the region. However, it could be argued that the UAE's political stability derives to some extent from regional stability and can be affected by neighbouring countries (Qasrawi, 2004: 90). The variance between the views of economic analysts may also reflect, on the one hand, the vague understanding of Dubai's new economic strategy and a lack of appropriate communication between government authorities, particularly at federal and local institution levels. Indicators from this survey would not necessarily provide substantial evidence to support or reject the main contention of the market risks. Tourism is also vulnerable to disturbance and political uncertainty in the Gulf region and beyond.

Incongruously, some political and financial risks stem from reliance on low-cost foreign workers, who constitute an overwhelming majority in Dubai (as discussed in Chapter 8). According to Alnefesi (television interview), a decision in the Indian parliament requested a referendum about the Indian presence in Dubai and rights to self-determination. Alnafesi connected this with a warning of what happened in Singapore, which was historically and ethnographically Malay, but became overrun and ultimately run by settlers from India and to a large extent China (Abdullah Al Nafeesi, an interview at Al-Jazeera TV on 31 March 2006). That may be due to the WTO's recent demand for parity between local and foreign workers in salaries and working conditions. The high cost of foreign labour would negatively affect particularly the construction sector.

Table 9.6 UAE country risk summary in January and December, 2001

Risk rating	Overall rating	Overall score	Political risk	Economic policy risk	Economic structure risk	Liquidity risk
Jan	B	30	C	B	B	A
Dec	B	30	C	B	B	A

Source: EIU, (2001)

International bodies and governments may create a sort of labour unrest. Technological functions currently depend on foreign experts, and gaps may develop in the future, leading to a slowing up of mega projects. Any collapse in oil prices or other risks, which include political developments in the region, may frustrate plans for mega projects (Interview, with Project Management & Claims Consultants, Hill International, 13.11. 2007).

In contradiction to the Qasrawi (2004) survey, the Economist Intelligence Unit (EIU) provided a country risk summary for 2001, which portrays the UAE as a place of high risk for conducting business (see Table 9.6). The EIU report focused on the financial risks of liquidity and economic policies due to a lack of scrutiny and comprehensive studies for economic projects, not political risk, which was ranked as 'C'.

There are many ways of seeing risks in Dubai's mega projects. Investors may consider internal or external risks to their investments, while the local people look at mega projects in terms of the long term security of the state. As a political reader at the UAE University warned:

> *"I wonder for who are all of these projects? Property has been bought by people from abroad. There is a difference between economic growth and development. Economic growth is accumulation of numbers, but in development you have to develop economic synchronisation with political, social and economic dimensions. You would not take a message only from the number. The political fact is that those people, when they stay here for a long time, will claim citizenship rights, and remember they are the*

majority. This is the place where political factors play a key role"

(A programme on Al Arabia TV at 25.5.2006).

9.6 Conclusion

Political analysis provides this study with valuable understanding when exploring the risks to JPI mega projects. This chapter has discussed and analysed the internal and external political circumstances surrounding Dubai's UMP sustainability. The chapter has reviewed the political situation in the Arabian Gulf region, revealing that British colonialism was the focal factor for the formation of the current political pattern in the UAE. Attention was paid to the structure of the federal government, to understand to what extent the experiment of federal unity was successful. It appears that flexibility in the federal government gives the rulers of the Emirates full authority and significant means for success and continuity. However, the state constitution has many weak points, and needs to be amended in the light of political, economic and social change in the UAE and in the light of globalisation. Indications are ambiguous about the political status of the emirates internally and externally. At the domestic level, it still depends on the tribal system as a central force of political power and its freedom should not be restricted. On the other hand, there is clear control by the largest emirates (Abu Dhabi and Dubai) over most political and economic activity, creating a feeling of injustice among poorer emirates. Nevertheless, recent positive trends may help to overcome some problems, such as the introduction of partial elections of FNC members, which is expected to develop further.

Externally, despite the political storms in some major regimes in the region, Dubai has succeeded - at least so far - in taking advantage of its own political situation internally and externally to develop its economy. Interestingly, Dubai has succeeded in dealing with various local, regional and global objectives. Minimal political conflict has allowed the development of mega projects and has shown that the desire to achieve both benefits and security is essential. However, it is likely that key tensions within and between countries will be a feature of global policy making.

In analysis of geostrategic situations, some signs are apparent. The central political risks facing Dubai's mega projects are the probability of internal disruption in Saudi Arabia, which will lead to insecurity in the whole region. Dubai also faces the threat of terrorist attacks and the probability of confrontation between the United States and Iran. The failure of the continuing peace process in Palestine could critically affect global and regional economies.

CHAPTER TEN

CONCLUSIONS AND IMPLICATIONS

10.1 Introduction

Research on the complicated relationship between globalisation and urban mega projects remains limited. In particular, little work has been done to explain the process through which UMPs are created, or to explore in depth their contribution to urban change. Globalisation is acknowledged to have an evolutionary, recognisable and dynamic role in explaining urban economic transformation. A major concern in this thesis has been to study the specific mechanisms, relations and dynamics of urban mega projects in the UAE, with specific reference to the JPI. The broad aim was to investigate the operation of UMPs and their role in the context of globalisation. The second concern was to determine a theoretical perspective from which to find a clear methodological position for effective empirical research. A wide range of theoretical and analytical standpoints are recognized.

This research was situated within the debate over globalisation and urban mega projects and their impacts upon new urban policy. The research set out to answer three key questions. First, what is the economic dimension of globalisation? This included an examination of the effects of global economic factors, primarily foreign direct investment in projects like the JPI, and how economic factors have become a catalyst for development. Secondly, the thesis examined the technological and architectural features of large-scale development. Thirdly, it focused on new social trends and the extent of public participation, and finally the political dimensions of globalisation were analysed.

Chapters 2 and 3 outlined the theoretical context of the study. Chapter 2 explored what can be understood by the term 'globalisation' and how this might relate to the Dubai urban mega projects. Two stages were involved. First, I developed a conceptual

framework of 'globalisation', contending that the concept is slippery. However, its basis is economic. Secondly, particular attention was paid to the effects of globalisation in terms of how globalisation has changed the economic functions of cities and how this has prompted new urban economic policy. Chapter 3 analyzed the effects of urban mega projects. It showed how UMPs can transform landscapes rapidly, intentionally and profoundly, in clearly visible ways. Previous work has concentrated on mega projects in general. The work in this chapter used the theoretical framework to guide the focus to the JPI case study.

Chapters 6, 7, 8 and 9 were the core of the thesis. They argued that change in Dubai shares common points with development of UMPs in other places. Dubai is experiencing a dramatic increase in new global-style economic activities, as well as the effects of a changing national, social and cultural environment. It becomes necessary to account for different effects from the four dimensions and the power of those effects. This leads to important questions, concerning differences between Dubai's UMPs and others around the world; a question that will be answered in this chapter. UMPs worldwide are affected by different urban strategies and driving forces. The question is how to account for variations, perhaps mainly in terms of individual government strategies. Contexts entail differences. This is important because, while examining issues around UMPs in different places, the contexts need to be understood enough to explain why there are differences. What follows in the rest of this chapter are the implications and important lessons to be learned, recommendations and directions for future research.

10.2 Comparison of Dubai with other UMPs

Other major cities apart from Dubai, in East/Southeast Asia and in GCC countries, have recently adopted mega project development strategies. According to Jessop and Ngai-Ling Sum (2000), governments and venture capital funds, investment banks, real-estate companies, mega corporations in different urban centres co-ordinate and market themselves by offering different fixes that are related to some form of hi-tech settlement, e.g. Singapore's 'Intelligent Island' and 'Science Hub' (at a cost of USD

20bn) and Malaysia's 'Multi-media Super Corridor' (at a cost of USD 2.9bn. A mega project policy in East/Southeast Asia is one way for cities to compete.

Dubai's urban policy was a vision set in the context of a global movement. It represents a competitive initiative, creating a unique urban space. There are similarities with other UMPs in terms of socioeconomic restructuring and reorganization of the system of governance. The local structure has a global aspect to it. Planners and the local authorities have adopted a proactive and entrepreneurial approach to identifying market opportunities and assisting private investors. Large-scale projects were at the centre of new urban policy in Dubai and are dependent on real-estate markets. The Burj Al Arab hotel and the three Palm Islands are primary examples. They are a reflection of the extraordinary belief of key figures in the city, who had a vision to develop its economy and its competitive market position. The JPI project, for instance, as well as reflecting global processes, necessitated changes in the systems of local and regional governance, and indeed national regulation. The projects are examples of local ventures following global trends.

The evaluation of the differences between and similarities among UMPs adds an important aspect to our understanding of urban politics and community options. The study of mega projects in different contexts provides a basis for assessing the impact of factors that influence the adoption of mega project strategy. In Europe, private financing strategies take projects out of the public sector balance sheet, and that factor plays a significant part in decision making. In the same way, criteria have to be met to the satisfaction of multilateral lenders, and that is another important factor in developing countries. Altshuler and Luberoff (2003) describe typical US mega projects that bear similarities to ones in other countries with a similar federal tradition. However, these factors may not pertain in the UK, which has a more influential central government.

Almost all UMP studies in the West agree that mega projects developed in the United States and European countries do not often achieve the objectives set out for them. The literature shows that most mega projects carried out in the West are about infrastructure (transport systems, canals, tunnels, roads, railways and airports) (Altshuler

and Luberoff, 2003, Flyvbjerg *et al*., 2003). In Western countries, new liberalism has allowed a significant impact on urban space (Wu, 2005). 'City branding' in Europe is a powerful image-building strategy (Kavaratzis and Ashworth, 2005). Following that strategy, many nation-states develop a strategy of 'visualisation' for global audiences (Ó Tuathail, 1997: 303). In the Asia-Pacific region, visualisation took the form of urban mega projects in the 1990s (Olds, 1995), in particular featuring high-rise buildings. Bunnell (2004) spoke of the key concept of re-imaging. While in some Western countries the terms post-industrial or de-industrializing urban decline came to be applied, city authorities in Southeast Asia sought to overcome the negative perspectives of 'third world' underdevelopment. This re-imaging of urban spaces involved material and symbolic transformation: "the (re)construction of 'real' spaces as well as place marketing through various media" (ibid).

These can be seen as two intertwining processes. Gleaming new commercial architecture became the new or 'developed' image for a city with an eye on global consumption. In Kuala Lumpur, for instance, the world's tallest buildings in 1996, the Petronas Twin Towers, represented a developed cityscape. The modern image of Kuala Lumpur as a world class city was communicated on postcards and television pictures of its landmark towers. The Twin Towers were a 'city within a city' project designed to present an image of Malaysia as a fully developed country with world-class commercial space (ibid). The case of Malaysia is that of a post-colonial country that could be considered to be moving in a direction of de-orientalisation and re-orientation. The mega projects gave to Malaysia the image of a 'rising East' that might even challenge the West on the leading edge of modernity (ibid).

Kuala Lumpur has undergone global re-orientation since the early 1990s (see Bunnell *et al*., 2002); the urban region has been 'wired' to global networks through massive investment in information and communications infrastructure (Bunnell, 2004). Malaysia launched the Multimedia Super Corridor (MSC) in 1996, in addition to the new electronic federal government administrative centre, Putrajaya. The MSC includes a new 'intelligent city', Cyberjaya, which was intended to attract 'world class' IT and

multimedia companies (Bunnell, 2004). The global re-positioning of Kuala Lumpur has entailed considerable imaginative investment (ibid).

Dubai generated some pull factors by launching Dubai Internet City, Dubai Media City, the Knowledge City, and E-government. Policy was less strict than in Malaysia, as Dubai did not have concerns about such matters as legal exemptions and tax incentives. From the mid 1990's, the strategy was to focus on high knowledge-intensive companies to support the new economic strategy, boosted by the existence of free trade zones. Domestic and foreign technology companies in Malaysia applied for "MSC Status" and had to show that they would transfer technology or knowledge to Malaysia or otherwise contribute to the development of the MSC and the Malaysian economy. The MSC's key advantage is the growing pool of knowledge workers. "Malaysia now has over 7,000 professional software developers (James, 1999).

Dubai, Singapore, Kuala Lumpur, Shanghai, Hong Kong and Vancouver all developed UMPs as a re-imaging, re-branding and re-marketing strategy to create competitive global centres in financial, tourist and service sectors. However, Dubai mega projects were characterised by fast planning and quick implementation, they can be characterised as fast-tracked projects. According to the UMP literature, mega projects can take from 4 to 8 years to complete, with a workforce of several thousand workers. Dubai projects take 2 to 3 years, from the emergence of an idea to completion. The city has the advantage of available space in the desert, unlike Hong Kong and Singapore, where land is scarce.

From the mid-1980s Hong Kong provided ample funds for further expansion by local property capital, seeking to build a new urban bloc, consolidating real estate, and developing commercial and technological interest around new mega projects such as a science park, cyberport, and the Chinese-medicine port, mediating the emergence of a global-regional-national bloc of economic actors involved in information and communication technologies and services (Jessop and Ngai-Ling, 2000). Singapore is an example of a small town turning into a metropolis in less than 20 years, which is beyond normal imagination, and a similar process is taking place in Dubai. Singapore, in the early

1990's, focused on a knowledge intensive strategy. The development of the Singapore Science Park was an effort to promote business. Similarly, Dubai has a focused economic vision, built around higher value-added functions in corporate and IT services, development activity and tourism (Keivani *et al.*, 2003).

Public land ownership in Dubai, Hong Kong and Singapore is another interesting issue. In these territories, land is not essentially required for agriculture, but is rather an asset open to investors (Harvey, 1982: 369). In spite of similarities, there are several differences in mega project real estate in Dubai, Singapore and Hong Kong, linked to different policy options for management (Olds and Yeung, 2004). Haila (2000) describes Singapore and Hong Kong as cities with economies based on real estate ('property states'). Revenue from land and buildings in Hong Kong is an important source of public revenue. On average, the government has generated about one-third of its revenue from the sale of leases on land (Wu, 1989; Schiffer, 1991; Henderson, 1991), and there are connections with TNCs. Until recently, neither Dubai nor Shanghai admitted foreign buyers. Only UAE or GCC nationals were accepted in the former. In China, all property belonged to the state. This is no longer the case, with freehold property available for sale to all-comers. Developments in Dubai are increasingly available on long leases to foreigners, as in Shanghai. There are different markets and dynamics (AME info, 2005).

Hong Kong, Shanghai and Dubai are all currently enjoying the impact of economic boom. It is hardly surprising that Dubai property continues to attract global interest, when cost comparisons are made (United Arab Emirates, 2005). Yet, although China is not as wealthy as Dubai; the restricted availability of new developments has sent villa prices up to USD5-6,000 per square metre, while in Dubai USD2,000 is a more general benchmark. This price differential highlights the competitiveness of Dubai in terms of real estate. Dubai has managed to contain prices, although some of the earliest units have doubled or trebled in value. Aside from Shanghai, it is also interesting to note a recovery in Hong Kong real estate prices that now hover approximately 50% above the price levels seen in Dubai (ibid).

Some argue that the Dubai real estate boom is not a bubble that will burst when funds dry up, as can happen in the industrialized world. What happens is that supply can run ahead of demand. The question is how big can the Dubai real estate sector become before it becomes oversupplied? All the evidence from high growth economies suggests that the recent project announcements that appear impossibly visionary will be attainable and viable (AME info, 2005). What is generally noticeable is the massive size of the investment of global and regional capital and the extent of the planning required on the part of designers. The regional funds for Dubai came from Saudi Arabia, Kuwait, Iran, other GCC states and the Indian sub-continent. There was also limitless support from government.

Following Singapore, Shanghai, Hong Kong and Vancouver, Dubai witnessed faster urban development and its position since the 2001 JPI project seems staggering. The implementation of urban mega projects has accelerated dramatically. Dubai differed from other cities in its very bold approach. The government was able to make a strategy in the same way as a private management company would, as the ruler of Dubai is himself a director. What distinguishes the Dubai mega projects is that they have a combined focus on real estate market prices, the creation of residential and commercial neighbourhoods and knowledge facilities.

The extensive input of local, regional and global capital has created a motivation among multinational companies under a fully supportive government, engendering creativity and innovation. The highest tower in the world, the largest artificial islands, the first seven star hotel in the world and dozens of other mega projects have created a new pattern of urban landscape.

In Vancouver, UMPs reflect social networks among transnational actors who have the power and ability to operate on the global stage (Olds, 1997, Mitchell and Olds 2000). Relationships between local authorities in Dubai and global property investors developed over time. In some Pacific cities, a shared vision between local authorities and developers coincided, but sometimes there is weaker co-operation and some uncertainty. Dubai shares some of Vancouver's mega project experience. Both cities were shaped by

the forces of globalisation, flows of capital, foreign culture and real estate interests (Olds, 2001).

Table 10.1 Comparison of JPI mega project model with some Asian mega projects

	Dubai	**Hong Kong**	**Singapore**	**Malaysia**
Project name	Jumeirah Palm Island (JPI)	Cyberport	Science Hub	Multimedia Super Corridor (MSC)
Scale of investment	Huge	Large	Huge	Large
Cost	USD 6.5bn	USD 1.68bn	USD 20bn	USD 2.9bn
Spectacular Character	Unique architecture & innovative ideas	Scientific	Scientific	Scientific
Type of project	Recreational & residential	Cyber facilities	Science Park	Information Systems Software; multimedia products
Source of Investment	Government and Transnational Corporations	Pacific Century Cyber Works (HK$ 7 billion equity capital) Government (land worth HK$ 6 billion).	Dell, National University of Singapore, Singapore Polytechnic	Government, Private Sector, General Public and International Society (Azlinah and Syed 2004).
Governance	Nakheel (Government owned corporation)	Pacific Century	Government and Dell, National University of Singapore, Singapore Polytechnic	Malaysian Government
Social impact	- Boosting real estate sector - Negative impacts on local cultural values	Creating jobs for: 4,000 workers during construction, 12,000 professional jobs on completion (10% from outside Hong Kong)	This project involves building the world's first nation-wide broadband network that wires up the entire island. (One Network for Everybody) (Jessop and Ngai-Ling Sum, (2000).	- Will employ a substantial number of knowledge workers, and will transfer technology or knowledge to Malaysia and contribute to the Malaysian economy - Malaysia's growing pool of knowledge workers (James, 1999).
Decision-making process	Very fast	Slow (Jessop and Ngai-Ling Sum (2000).	Relatively fast	Relatively slow

Source: Compiled by the author.

In sum, Dubai was able to develop its own unique philosophy, as its UMPs differ somewhat from the Western and East and Southeast Asian models. Dubai gains fully from the interaction between government and the private sector. It is difficult to imagine an agenda in the West that might stimulate the private sector to the same extent

as that found in Dubai. In particular, there are no taxes levied, and there is a much lower level of bureaucracy and red tape, and indeed much more administrative flexibility. There is also an absence of trade union conflict, lobbying and pressure groups. Instead, the city offers donations and concessions of an economic, social and even political kind. Another distinguishing point is that mega projects in Dubai did not displace populations from their homes, since most projects were created in new, unpopulated areas. The West requires institutions to plan and make decisions, while there is personal decision-making authority in Dubai in the implementation of mega projects. There are no pressure groups to oppose planning decisions in Dubai, which is not the case in most Western countries. Popular acceptance was made in Dubai of these projects, even if they did not especially serve the interests of the local population. Most mega projects are tourist-oriented, in the form of buildings projects, housing compounds and artificial islands. In this sense, Dubai has learnt from Vancouver's experience of encouraging immigration, especially of high-income people, and the right to own property. Dubai offers a permanent residence visa for those who buy property.

10.3 Dubai as a new model of urban development

Dubai's mega project strategy creates new types of urban place and space for production, services, work and consumption. Dubai is now considered as a multicultural city that has succeeded in opening new marketing modes and in modifying the spatial division of consumption, at the same time enhancing quality of life for both locals and visitors, with good leisure and entertainment facilities, shows and unique landscapes. Dubai is diversifying its sources of revenue to gain competitive advantage, with activities that strengthen its position as a global city and regional gateway.

Dubai's experience of urban development is unique and represents an advanced model, as discussed in this research, which has sought to identify its causes and characteristics. The objectives of Dubai are clear, namely to gain substantial capacity and to maintain a strong determination to be a global centre in tourism, services and trade. Dubai was able to create a sophisticated infrastructure and ideal environment to equip it

for this role. As Sheikh Mohammad bin Rashid said: "Dubai will not accept a substitute for first place" (Al Maktoum, 2006).

The concept of globalisation in the eyes of Dubai is: "the global dealing environment which will prevail in the future, with distinctive productive, economic, technical and communication platforms" (Al Maktoum, 2006). Dubai has the stuff to fulfil its vision and potential at both regional and global levels. Dubai's mega projects are challengingly bold and involve adventure and the most important attributes of courage and speed in decision-making processes. There are similarities and differences between the Dubai model and models of development in Southeast Asia, in terms of the pivotal role of government and the relationship between government and the private sector; the main point now is that Dubai can no longer be considered as just an oil economy, just as it is not an old or enormous developmental economy.

In many respects, the Dubai model is not like the other models of Hong Kong, Singapore, Malaysia, Shanghai or Vancouver, with different priorities and different methods, but there are similarities in the broad outlines. The distinguishing features include the following:

- Policy makers for Dubai's mega projects are not risk averse: that is evident from the lack of long-term studies on the one hand and also the speed of implementation, which might be supposed to reduce the level of perfection, especially in construction projects. Most mega projects in Dubai were decided on in a hurry, in order to seize the opportunity, achieve the first goal, and block competitors; so many of these projects jumped over the standards and studies to be carried out in a very short period. This feature is spreading in the new globalised economy as regards technical and e-commerce projects, whose principle is 'first come is the winner'. Consequently, Dubai mega projects are completed in record time.

- Most of Dubai's mega projects pose huge challenges to competitors in terms of cost and design, and technological and architectural features. Dubai's mega projects reflect excellence in concept, creativity and luxury (Burj Al Arab, Palm Islands, Burj Dubai, Dubai Mall). It could even be argued that they are too creative (for example, the Burj Al

Arab Hotel, is designed in the form of a sail, the Palm Jumeirah, is designed as a date palm tree and Jumeirah Beach Hotel is designed as a large sea wave).

- The mega projects in Dubai have created new markets. Some industries have clearly contributed to the projects, for instance the emerging information systems industry and the building materials market. The markets have prospered as a result of the influx of investors and tourists. Different markets have grown, such as the right-hand drive used-car market, the gold market and the vegetable market, which is the largest in the world (Al Maktoum, 2006).

- Jumeirah Palm Island is a clear example of a self-financed mega project, with sales of residential units and villas on the island estimated at AED 5bn, while the cost of the infrastructure was only AED 2bn, and profits were subsequently even higher in Jebel Ali and Deira Palms.

- Another feature is non-stop monthly declarations of new projects in Dubai, as they all form bridges to other projects. Real estate ventures have led to the creation of complementary projects, such as the integrated specialist centres (Dubai Internet City, Sports City, Silicon City, the Medical City, the Navigational City, and so on). Many of these projects integrate global implementation methods and management, the best example being Dubai Ports World, which manages ports in many countries around the world.

- Dubai's mega projects tend to do away with the idea of an advanced north and a backward south or a distinctive west and east.

- Mega projects in Dubai allow architects and investors to run riot in imaginative terms, with unlimited freedom to develop and achieve remarkable concepts. They reflect a high degree of collective effort and coordination between the executive and the task force.

In conclusion, it can be said that Dubai is on its way to becoming a global centre of excellence in the economic dimension. In the environment of globalisation, it strives to build a new economic structure and thus keep pace with radical transformations in the global economy. The aim is to consolidate its role for capital, business, tourism and

technical matters, as well as to be a global gateway. Dubai is trying to take advantage of the new atmosphere of globalisation, whilst still attempting to protect the ideology and social values of its local communities against the changing tides of new and disturbing global values.

Dubai's non-mainstream experience may be continued, even if the central powers of the global system would try to prevent the emergence or penetration of an Arab nation. In spite of this, Dubai does not differ much from the rest of the world's capital cities, which are based mainly on the exploitation of cheap labour and the rush towards bigger development projects (Davis, 2006). However, Dubai is moving forward steadily with impressive successes, because it has a clear vision, and benefits from a lack of tensions and the crises that beset other cities.

Certainly the phenomenon of Dubai has caused great interest among academics and critics, and it could be said that Dubai has become a more exciting phenomenon, having grown from an ordinary oil city to a leader in the Arab world in establishing a non-oil economy. Dubai is a unique economic and demographic phenomenon; it is a physically and architecturally amazing and challenging city, modelled on historical and modern economic foundations and benefitting from global flows.

10.4 Findings of the four globalisation dimensions

Dubai's mega projects clearly demonstrate the massive impact of the four dimensions of globalisation. It is apparent that globalisation can be "a double-edged sword" to transitional economies (Wu, 2000). Globalisation has had a deep and pervasive influence on Dubai, which recognised the necessity to go global and find new resources to supplement the traditional economy, whilst continuing to play a role as a regional hub. Global forces were harnessed and exploited to the full in local projects. The government was willing to make space for globalisation; inward investments have penetrated the mega projects, and this in turn has become a strong incentive for further inflows of capital to the real estate sector. FDI not only boosts urban growth, but also creates risks and fears

of a sort of nationalism creeping in with local residents, as they seek to protect local values, like other cities in market economies, attempting to secure their position in the global system. Such feelings have not been completely recognised by decision-makers, but they have by the local population and other Emirates citizens.

This section raises a key question about Dubai's transformation in economic, social and political development terms. One of the important findings of this thesis was that mega projects in Dubai and other cities constitute a re-imaging and re-branding of the city. This is part of the new-liberal approach to "new urban policy". The economic dimension considers the effects of FDI and global involvement in the JPI project. Foreign corporations are key players in capital flows. The JPI has attracted many real estate investors and developers, aided by large global bankers and hoteliers, who benefit from tourist interest. In the political dimension, several factors explain the reasons behind financial flows. Neighbours have suffered political and economic crises. Global and regional political circumstances have helped Dubai to emerge as a flourishing city. It has outstripped other countries and states in the Middle East and Southeast Asia.

Analysis of the economic dimension of globalisation shows the impact of FDI on the JPI mega project. Investors obtain profits through creative projects in the island. However, casual observers of Dubai real estate could be confused: rents are rocketing and re-sale property is in short supply. At the same time, huge building projects make it appear that a large supply of property is about to flood the market. Dubai's transformations are a result of globalisation forces and regional processes as well. The policy of urban production fixes the local economy to the global market. Most of Dubai's UMPs reflect a re-marketing and re-branding strategy through novel and unique built environment images. The JPI project embodies and expresses processes that reflect global flows mixed with local elements, such as the shape of the palm tree and the sail shape of the Burj Al Arab hotel. The projects are decidedly local, but capture global trends. Symbolism is a feature of new urban policy in Dubai. The financing, design, construction and marketing phases of Dubai's development were created by large real estate developers, to compete with global tourism symbols. Globalisation goals promoted technological tools in the development of JPI. Special boats were used to dredge sand

from the sea using GPS technology. Hundreds of architects came to the city to contribute to the plethora of building work.

A global and local architectural integration strategy has been adopted in Dubai. Some design has been inspired by local *suqs* and other local architecture. However, most of the new iconic architecture reflects global culture more than local identity. The architectural design of the Palm Island villas mixes influences from Islam, the West, Andalusia and other Mediterranean styles. The different designs overlap as a result of diversity among investors, engineers, designers and architects from the USA, Europe, Eastern and Southeast Asia. Special touches were added to create an exhibition of unique designs, in a global, cultural and tourist hub.

Along with rapid economic development and urbanisation, a new social and cultural direction has evolved. Up to the 1990s, it was generally believed that the local population was socially connected and had common domestic habits and social beliefs. I have argued that the adoption of the mega projects policy had negative consequences on the local population. The local residents of Jumeirah spread eastwards to the outskirts of the city, though there was no real need for displacement, since the project's land was reclaimed from offshore. I also noted that the Dubai urban mega projects led to segregation; the size of the JPI project and its morphology hindered the social integration of the population. Just as an example, there are new forms of police security on the island, created to ensure the privacy of the property owners. It is not possible to enter the fronds area without a gate pass issued by the security office. The policing is by a private company, instead of the official police. The impact of globalisation has been apparent in the physical partition of the island, which is reflected in the hybrid villa design styles. There is therefore a kind of fragmentation of the island. The crescent is used for hotel and recreational services; the trunk was planned for commercial services and entertainment facilities, while the fronds harbour the housing area. Thus, the fronds become isolated from the rest of the island. It results in a lack of integration between inhabitants of the island and outsiders who come in to work or entertain. Social problems may emerge because of this fragmentation, because of polarisation and irregular distribution and cultural interaction. However, the settlement of the island is in its first stage and has not reached a stage of maturity.

I have assessed the repercussions of these new forms of social interaction on economic performance in Dubai. The study suggests that the major urban projects in Dubai have forced the expulsion of citizens to the margins of the city. This may be an unexpected outcome of urban mega project developments, which were supposed to attract populations to the urban area and to create a new economy. It was very clear that the community was not expected to participate in the decision-making processes. Amongst alarming societal expectations, the JPI project increased the isolation of local people and marginalized them. My research findings support the thesis that there are some discrepancies between the goals of maintaining direction for the local population and the goals of government. Dubai is facing the effects of major transformations resulting from globalisation through the mega real estate projects and many of these changes create a social and cultural pressure, not only on the community of Dubai, but also in all the other Emirate communities. Dubai society changed from the end of 2000, due to a combination of speedy urban mega project development, social and demographic changes.

It would seem that Dubai has been taking a major risk in its attempts to reconcile economic growth with mass population growth and changing national identity. The fact is that rapid economic development has dissolved the original population. The experience of Dubai might seem similar to the Singaporean, Hong Kong or Malaysian experience, but its political context is quite different. In those other countries, work is mostly carried out by indigenous people, while Dubai relies entirely on a tremendous diversity of people and nationalities that have no emotional sense of loyalty towards it. Capital flows create migration among wealthy people (cross-border professional workforce) and among a less wealthy class (the majority of migrant workers). This entails a multidirectional migration of cultural forms, and needs for re-adaptation of sub-cultures. Perhaps there should be an issue of new policy, beyond the policy of culture and identity. In sum, the interviews indicated that the mega urban projects were a means towards the emergence of anti-islamic value activities and practices.

In terms of political dimensions, it appears that tribal ways are still at the centre of political power, and are self-perpetuating. The main task concerning politics is to assess the extent of popular participation in decision-making processes. I have argued that

Dubai suffers from modern economic development and uncertainty, instability and a lack of real collaboration between the ruling elite and the populace. In interviews in many local institutions, I observed that there are gaps in planning and management, content and structure and in coordination between institutions.

Externally, Dubai has succeeded, at least so far, in taking advantage of its own political situation to develop its economy. Dubai has succeeded in dealing with various local, regional and global objectives. Analysing geostrategic situations, I argued that the central political risks facing Dubai's mega projects are the probability of internal disruption in Saudi Arabia, which will lead to insecurity in the whole region. Dubai also faces threat from terrorist attacks and potential confrontation between the United States and Iran. I have also argued that the failure of the peace process in Palestine can critically affect the regional and UAE economies.

The impacts of global forces are not equal, but relative in the light of changing conditions regionally and worldwide. The process of social impact was much greater at a local level (social problems and cultural change). One direct consequence is that the indigenous population became a minority 12% of the total Dubai population. There is uncertainty regarding the private sector's control over economic activity and the decline of public control, particularly at local level.

10.5 Implications, lessons, recommendations and further research

This final section answers three key questions: What is the utility of globalisation to Dubai? Is Dubai a successful model? Are Dubai's urban mega projects sustainable? In answering these questions, the lessons from the JPI mega project can be learned. I propose a number of recommendations as a result of my thesis on Dubai, and I will suggest related future work on analogous studies.

10.5.1 What is the utility of globalisation to Dubai?

It has been argued in this thesis that the theoretical concept of globalisation is slippery. To overcome difficulties in using this amorphous concept, this thesis has focused on the effects of globalisation and changes in economic, technological, social and political impacts. The thesis therefore helps to discover what Dubai can tell about globalisation and what globalisation can tell about Dubai. Dubai is pertinent to the debate on globalisation because the city is frequently hailed as the most globalised economy in the world, and its recent economic growth demonstrates how city-states can flourish in the new global economy. The impact of globalisation on Dubai extends far beyond the purely financial. The interesting JPI mega project in particular provides an insight into global dynamics in the Middle East region.

.

This thesis supports the idea that forces of globalisation serve to shape policy outcomes. Such forces have played a central role in Dubai's policy making. I have explored a variety of mediating factors, such as flows of FDI and existing ideas about 'the need for change'. I have provided evidence that the dynamics behind Dubai's urban mega project developments are global, but, in terms of capital, more regional in origin. Nevertheless, it is possible to describe Dubai's urban mega projects as a "showpiece of globalisation". I provided evidence of increasing economic globalisation in the implementation and financial support processes of the JPI project. For example, many foreign companies have established their headquarters in Dubai. The activities of architects operating internationally were well ahead of the involvement of other global actors. In sum, urban mega projects serve local ambitions, but, largely, implementation is in practice still global in character. The success of projects and greater familiarity with UAE legislation will possibly lead to greater global orientation in the implementation of new mega projects in the near future. Substantial globalisation influences will no doubt still be present. In short, my thesis has demonstrated, on both empirical and theoretical grounds, that Dubai has become increasingly interconnected on the global stage, mainly in terms of being involved in huge projects that widen its international competitiveness on a global scale.

10.5.2 Is Dubai a successful model?

Since 2001, the question has emerged as to whether or not Dubai's growth is sustainable. This section discusses whether the city functions as a model of urban development, based on contemporary images and symbols rather than concepts, processes, clear methods and sustainable strategy. Dubai's strategy has been towards the creation of a solid income generation outside the oil sector, mainly in the innovative development of economic activities whose main vehicle is the mega real estate projects. This entails opportunities and challenges. The strategy of using urban mega projects to promote local economic development has become prominent. Dubai may have succeeded in creating a developed economy and has put in place a modern infrastructure. As the strategy is new and was quickly developed, it entails a large degree of uncertainty in the political, social and environmental dimensions.

Community development should serve humanity, and not vice versa. However, the study of Dubai's urban development projects might lead one to think otherwise. With acceleration of the establishment of large-scale projects and attempts to vie with other cities in developed economies, Dubai has perhaps ventured too far. Some believe that there are serious multiple risks in the UMP strategy. The policy stemmed from the desire to obtain new economic resources away from the dangers of relying on a single source of oil income. The new dependency on UMPs may entail losses to locals within the landscape shaped by mega project, while those "outside" stand to gain or remain indifferent.

There are many ambiguous aspects in the achievement of mega projects. The JPI project has helped to enhance Dubai's economic opportunities. Nevertheless, its development should go beyond mere economic requirements. Giving priority to mega investment projects required radically changing outcomes, not only in terms of physical repercussions, but also in the formulation of objectives and implementations and the fulfilment of valid expectations and results. Flyvbjerg, (2005) stated that there are difficulties in calculating the cost of mega projects. It seems that the rush of UMPs has

dominated the mentality of Dubai policy makers and planners, with some long-term concerns not being taken into account.

The JPI project is one of the most complex projects ever undertaken in the UAE, technically, socially and politically. It is difficult to see how its success can be maintained without greater confidence in the net benefits of these massive undertakings. The issues around building coalitions and undertaking environmental mitigation are likely to remain dominant in modern-day mega-projects. A clear risk in the case of JPI is the almost complete dependence on the performance of services for the area around the regional framework in which Dubai operates. It means that the great bulk of the boom in Dubai is regionally based. We should not forget that Dubai has become a regional and to an extent global hub of tourism and services, and that is not reassuring, as the tourism and service industries are vulnerable to volatile fluctuations and little control. The decline in the prices of oil would in turn affect the performance of the economy in Dubai and its pace of growth.

Sustainability is a key concern in today's global economy. The fact that the UAE is a small open economy does not mean that it is a fully globalised economy, as most media, newspaper and articles assume. Other cities in neighbouring Arab countries also have competitive aspirations, but saturation also becomes a concern. The best option for Dubai could be to maintain a level course for as long as is required, but without concern for being the leader within one generation. The race to be leader involves complex factors, with volatile oil prices still playing a destabilizing role. One interviewee asked the question as to whether Dubai was just an industry or is it a real economy. Dubai is founded on investment in construction and in concrete. The service sectors and consumption tend to control the economy above all other aspects. Dubai's mega projects may have limits to their success. Long term viability may depend on external factors. The question is extremely complex. In the meantime, the following observations can describe the Dubai experience:

- The image of extraordinary success tempted decision-makers to ignore the duty of caution, where risks entailing the pumping of large volumes of capital that were not absolutely necessary for the natural growth of the economy.

- The surplus accumulated in the real estate sector is perhaps the first indicator of the realistic limits to the carrying capacity of the economy. The economy of Dubai is relatively small and has physical and geographical boundaries that cannot be ignored. Dubai companies are now focusing principally on overseas investments.

- Dubai has limited experience, non-completion of certain projects and gaps in infrastructure. Problems of interference may occur as a result of rapid growth in a short time. Painful correction may be expected in the coming years in the real estate market, which has become the most important engine of economic growth.

The strategy has been to create revenue based on the value of land and reclaimed sea-space, and land prices generate high demand. The land is not a renewable resource. The portfolio concept of using the various components of the system to finance the total cost of building and maintaining this recreational project could destabilize the city's future self-sufficiency and political viability. In addition, the results of my semi-structured interviews indicate a significantly unsustainable development within this and similar mega projects in terms of social and environmental implications.

10.5.3 Lessons to be learned and recommendations

It is very difficult to generalize lessons in social science; however, through my experience of examining the impact of globalisation on Dubai UMPs over quite a long time (four years), I can clarify some key lessons from this research. The lessons outlined are very important because they can help improve similar other infrastructure modernization efforts and UMPs within urban UAE and GCC countries environments. Clearly, the increasing pace of UMPs growth in Dubai remains the challenge of sustainable development based on the following grounds:

-Among the most notable lessons in the Dubai case study is that many inevitable aspects of the processes of globalisation are immensely complex.

- A strong relationship can be noted between the increasing trend for economic globalisation in Dubai and the worsening problem of non-involvement of local nationals. The strong reliance on market mechanisms and the absence of trade unions, together with the non-maturity of civil society and demand for skilled labour to develop the mega projects, has led to the restructuring of local employment and the disappearance of local professionals.

- This study implies that a higher level of social activism and an increasing number of social conflicts are likely in the future Dubai.

- Mega projects have led to an increase in gross income, with the workforce benefiting the most, while the middle classes are rather in decline. Workers in turn can quickly become rich and benefit from real estate speculation. Others do remain poor, as a result of inability to cope with living costs and price rises, but speculators could suffer if there is a considerable decline in the real estate market, further hastening the decline of the middle classes. There are other factors that endanger this middle class. The economic and social strata change with the growth of a parasitic type capitalism, and illegal activities such as money laundering confound the situation.

- Foreign investments in urban property may represent some risk issues in Dubai as these assets can be sold easily on the financial market. When these foreign investments are marketed, they lead to deterioration in assets, falling prices and loss of confidence among foreign investors in the domestic market, which affects the stability of the local economy.

- Deeper integration and increased dependency on global economic dynamics can sometimes be ill-considered. There can be inadequate deliberation about risks on the part of policy makers, and a lack of accountability in project decision-making processes.

- The incentive for the decision-makers and promoters to present an unduly optimistic view of their projects is unlikely to diminish. Available shields against this tendency are unfortunately too limited in the UAE. In the end, we should rely

on public participation, democratic decision-making and accountability to help focus the mind.

- There has been a weak application of environmental assessments of the impact of these urban projects. In particular, recent reports have noted that tremors in eastern districts of the UAE are increasing. This may explain why the UAE is at risk of quakes, and why developers should incorporate earthquake safety in all new buildings.

- The absence of serious programmes for social, intellectual and skills development (human development) could lead in the future to two outcomes: the failure of current programmes to take into account human development, and the failure of local communities to interact with modern-day variables, therefore requiring import of other people who *can* co-exist with the changes taking place in the UAE context.

- Dubai can be cited as a model economy, which most Arab cities are now imitating. And if other Emirates, GCC and Arab cities are to follow Dubai's success, they as well must capitulate to exogenous global forces.

- In sum, Dubai is well suited to lead the world in creating sustainable dense cities, if it follows new radical planning and sustainable designing strategies.

Although this research has focused on one project, it is possible to generalise about Dubai UMPs strategy. First, Dubai is under significant pressure from globalisation processes to deliver on a range of economic outputs determined by the federal and local government. Secondly, it is likely that the pressure for Dubai to deliver success locally will generate a culture of competition amongst different parts of the GCC to attract inward investment from businesses. Already there is dissatisfaction within the GCG region with the way that social elements are changing within Dubai. Moreover, there is a growing recognition of the disadvantages of an unbalanced population. There is repetition and duplication of projects in Dubai and between other cities of the state resulting from the lack of coordination and competition between these cities. Despite this, the previous analyses indicate that globalisation is not just a matter of taking or leaving it as a whole -

there are many possibilities for dealing with it. The UAE should move towards globalisation, as dictated by its special circumstances, problems faced and the goals to look forward to.

Among the most important recommendations I will suggest in this study are:

- UAE cities and Dubai in particular need to consider a more holistic approach for a sustainable strategic development based on both global interpretation and local understanding of development in our day.

- City authorities in the Emirates should prepare a package of policies, procedures, and supervisory backup that limit any negative impacts of crises arising from globalisation processes.

- The main issue here is targeting and identifying the policies that can best increase UMP capacity and sustainability. Other issues that need to be addressed are the promotion of opportunity, empowerment and security.

- The TNCs in the area of technology should bond with UAE companies through the imposition of laws on transferring knowledge and technology, and contribute to the development of the local economy, as was the case with the Malaysia Multimedia Super Corridor.

- All information on megaprojects should be subject to independent peer review, as we cannot trust the information produced by UMPs developers who are often biased to make their project look good on paper and promise large benefits to the economy.

- There is an urgent need to integrate the local population and allow them ownership of properties to make a kind of balance. This might entail offering soft loans without interest from the government and extended payment plans from developers, so that they can participate positively in the property market processes.

- Necessary controls should be established within the real estate market to put more acceptable limits on speculation.

- National company and national capital investment should be encouraged through considerable reductions in land prices; in addition more facilities should be made available in certain sectors, with support given to product marketing.

- More attention should be paid to developing local human capital, by broadening education and training in order to improve the labour skills of the national work force.

- Higher education should be expanded, and other initiatives taken towards the long-term development of human capital in Dubai and the UAE as a whole.

- The research and development sector should be supported and assigned more funds to facilitate inventions and ideas and their rapid circulation.

10.5.4 Future research focus

Further research might usefully focus on the impacts of each of the dimensions of production, marketing and consumption of iconic architecture in contemporary globalising cities. Another future research task will be to explore, in more detail, the embryonic relationship between UMPs and other globalisation dimensions in the UAEs other cities, in particular Abu Dhabi and Sharjah. The competition to establish UMPs in these cities is very clearly conflicting with the overall interests of the state. Reconciling the demands of different cities is therefore a topic of research interest. Research is also needed into environmental issues to examine in further depth the performance of UMPs in terms of their short and long impacts.

My research highlights the need for much greater questioning of the nature and impact of globalisation and UMPs in transitional economies in particular under the pervasive impact of globalisation particularly, the relation of Dubai and another UAE and GCC UMP cases. I am aware that my research remains limited by its focus upon just one city. I therefore aim to undertake much more extensive and detailed analysis of how the Dubai experience compares to that of other nations and cities. Therefore, I suggest more explicit and detailed attention be given to the socio-economic aspects of mega projects in future studies.

Appendix I

List of Interviewees

Interviewee	Code	Gender	Age	Location	Date
Local Entrepreneur					
1. A local entrepreneur	001	Male	45+	Office	6.12.2005
2. Businessman	002	Male	40+	Office	1.11.2006
3. Businessman	003	Male	35+	Office	3.7.2006
Municipality of Dubai (MD)					
1. Assistant Director of Planning & Buildings.	004	Male	35+	Office	4.12.2005
2. Head, Dept of Studies and Research, MD	005	Male	45+	Office	25.10.2005
3. A senior in the Public Relations and Organisation Department, MD	006	Male	30+	Office	13.6.2006
4. Assistant Director, Public Relations and Organization Dept, MD.	007	Male	35+	Office	10.12.2005
5. Head of the information section, at the General Secretariat, MD.	008	Male	40+	Office	14.6.2006
Nakheel					
1. Sales Executive, Nakheel.	009	Male	20+	Office	12.6.2006
2. The manager of Research and Development, Nakheel	010	Male	50+	Office	12.6.2006

3. PR senior in Nakheel	011	Male	30+	Office	25.10.2005
4. Project Manager Client Representative at Palm Jumeirah	012	Male	30+	Office	16.11.2005
5. Senior Environmental Engineer, Nakheel	013	Male	30+	Office	19.6.2006
6. General Manager, Planning Infrastructure & Utilities, Nakheel,	014	Male	35+	Office	19.12.2005
7. General Manager - VIP Sales, Nakheel.	015	Female	35+	Office	9.7.2006
8. Director of Marketing, Nakheel.	016	Male	40+	Office	14.6.2006
9. Director of Marketing and Brand Management, Nakheel.	017	Male	45+	Office	15.6.2006
10. Senior marketing and PR officer, Nakheel.	018	Male	35+	Office	20.6.2006
11. Tourism and VIP Delegations Executive, Nakheel.	019	Female	50+	Office	18.12.2005
Transnational Corporations (TNCs)					
1. 10. Director of Van Oord.	020	Male	45+	Office	30.11.2005
2. Senior officer in Skidmore, Owings & Merrill.	021	Male	30+	Office	24.5.2006
3. Project Manager, Parsons International.	022	Male	35+	Office	14.11.2007
4. Project Management & Claims Consultant in Hill International.	023	Male	35+	Office	13.11.2007

Economic Development Department (EDD)					
1. Head of Studies and Statistics Section, EDD, Sharjah.	024	Male	50+	Office	10.2005
2. Senior Economist in the EDD.	025	Male	35+	Office	23.10.2005
3. Economic Consultant, EDD.	026	Female	30+	Office	23.7.2006
4. Economic Researcher, EDD.	027	Female	35+	Office	22.11.2005
5. Administration Officer, EDD.	028	Male	30+	Office	15.6.2006
6. Head of studies and statistics, EDD.	029	Male	40+	Office	18.12.2005
7. Expert in the EDD.	030	Male	45+	Office	9.6.2006
Construction Developer					
1. Quantity Surveyor, Emmar.	031	Male	45+	Office	23.10.2005
2. The General Manager of the Etqan Construction Company.	032	Male	40+	Office	21.12.2005
3. Senior member of Tameer Holding Investment.	033	Male	30+	Office	19.7.2006
Real Estate Agents, Investors and Brokers					
1. Property Consultant.	034	Female	40+	Office	30.10.2005
2. Property Consultant.	035	Female	30+	Office	8.11.2007
3. Property Investor.	036	Male	45+	Home	15.6.2006
4. Property Investor.	037	Male	50+	Office	14.6.2006
5. Real Estate Broker.	038	Male	25+	Home	26.12.2005
6. Property Investor.	039	Male	40+	Office	9.11.2005
Local Government Institutions					
1. Properties Department					

Director on the Development Board.	040	Male	45+	Office	23.7.2006
2. Senior Official, Utility Services.	041	Male	35+	Office	4.7.2006
3. Senior Official.	042	Male	30+	Office	11.11.2007
4. Director of Public Relations Department of Customs.	043	Male	40+	Office	10.7.2006
5. Executive Director of the Statistics Center.	044	Male	40+	Office	3.10.2007
Journalist in Newspaper and Magazine					
1. Journalist, Al Bayan Newspaper.	045	Male	35+	Office	17.7.2006
2. Journalist at Al Aqarria Magazine.	046	Male	40+	Office	21.11.2005
Architects					
1. Architect, Dar Al Handasah.	047	Male	35+	Office	2.7.2006
2. Architect, Khatib & Alami.	048	Male	30+	Office	10.7.2006
3. Architect, Khatib & Alami.	049	Male	35+	Office	27.6.2006
4. Civil Engineer, Mazaya Co.	050	Male	40+	Office	27.6.2006
Local Residents					
1. Local resident from Jumeirah.	051	Male	20+	Emirate Mall	17.6.2006
2. Local inhabitant.	052	Male	35+	Home	25.6.2006
3. Local inhabitant.	053	Male	45+	Naif Market	12.7.2006
4. Local inhabitant.	054	Male	40+	Office	10.7.2006
5. Local inhabitant.	055	Male	25+	Coffee shop	11.7.2006
6. Local interviewee.	056	Male	40+	Mina Al Slam Hotel	5.7.2006

Labourers in JPI and Al Quze area					
1. Three Indian and Pakistani workers in Al Quze area.	057	Male	30+	At home	11.7.2006
2. A group of Indian and Pakistani workers in JPI	058	Male	25-45	Working area	9.7.2006
3. Indian worker in JPI.	059	Male	35+	Working area	9.7.2006
4. Pakistani worker in Al Quze	060	Male	40+	Home	12.7.2007
5. Group of Pakistani and Indian workers in Al Quze area	061	Male	25-45	Home	11.7.2007
6. Indian Worker in JPI.	062	Male	30+	Working area	9.7.2006
Others					
1. A member of staff from the United Nations working in Dubai.	063	Male	40+	Emirate Mall	18.7.2006
2. University lecturer.	064	Male	40+	Office	13.7.2006

Appendix II

Interview questions used for JPI and other Dubai UMPs

The questions aimed to provide an understanding of the specific context and reasons for the urban mega projects in Dubai from individual perspectives of the Palm Island projects at Nakheel, and in private corporations. The interviews involved senior policy makers from different government departments and agencies concerned with economic and urban policy formulation and implementation. The researcher tried to present some background information before the interviews on the profound influence of globalisation on urban development.

The research questions fell under eight broad categories:

A) Attitudes towards Dubai's mega projects strategy

1. What is the local urban development strategy?

2. What is the vision of Dubai in terms of the new urban policy strategy?

3. How is the power of economic globalisation reflected in what is happening in Dubai?

4. What are the economic strategies behind the projects? These can be explained through answering sets of questions such as:

     4.1 Why is Dubai's government undertaking such ambitious activity?

     4.2 Why is it doing this so fast?

     4.3 Why is Dubai launching dozens of urban mega projects all at the same time?

     4.4 What are the significant qualitative changes in the organisation of the state of Dubai?

     4.5 What are the factors in the policy making process?

     4.6 Dubai has a lot of empty territory, so why has offshore development been a focus?

     4.7 What is the main purpose of such unique projects?

5. Is there anything you would like to add?

6. Are there other people whom you suggest I see? Who would be most helpful?

B) Examination of the impacts of globalisation on Dubai UMPs

1. Where is the investment in Dubai coming from?

2. Is the JPI mega project dependent on local, national, regional or global capital?

3. How do transnational organizations work together? On single issues? Multiple issues?

4. Globalisation flows of thoughts and concepts have had effects on the projects and their unique designs in Dubai. To what extent do you think that this is true?

5. What are the strategies of the organisations involved in the JPI project?

6. How does economic globalisation reflect on what is happening in Dubai?

7. In what ways do new urban trends and globalisation affect Dubai's new urban policy paradigm?

8. What is the relationship between the rapid transformations in urban development in Dubai and the role of globalisation on these transformations?

9. Is there anything you would like to add?

C) The dynamics that have accompanied the implementation of Dubai UMPs.

1. What are the aims of the government in offering various support and attracting global capital?

2. What was the major motivation for urban mega projects in Dubai?

3. How do local government departments facilitate the new policy of the city?

4. How has local government collaborated with private sector organisations?

5. What is the role of transnational corporations in the JPI project?

6. What is the role of different players in the urban development process?

7. Is there anything you would like to add?

8. Are there other people whom you suggest I see? Who would be most helpful?

D) Discussion about Dubai's UMP impacts in the economic, social and political contexts.

1. What is Dubai's experience of economic growth?

2. In what way does the international property market affect Dubai's property market?

3. Where does Dubai stand in terms of international trade and foreign capital flows?

4. What is the average price of properties in JPI?

5. Are JPI properties targeted at the high income bracket only?

6. What are the social impacts of the project?

7. What are the financial resources for these projects?

8. How many international property developers are involved in JPI?

9. What were the greatest inducements for developers and investors to participate in the project?

10. What was the role of local companies in developing JPI?

11. How many national, local companies have participated in it?

12. How many people will live on the island?

13. Has the estimated cost of the project has changed since 2002?

14. What is the role of the mega project in developing urban space?

15. Some argue that Dubai, as a model of urban development for contemporary Arab cities is based primarily on images and icons rather than on sustainable concepts, and approaches/strategies. To what extent is that true?

16. What discourse has taken place to date on the issue of JPI?

17. What impact does the project have on existing social networks in the community?

18. Will there be any population-specific issues with respect to the effects of the project?

19. What is the impact of the UMPs on housing stock in the city?

20. Is there anything you would like to add?

E) Technical and architectural aspects

1. Why was JPI conceived in the shape of a palm tree?

2. Do you consider the architectural design of the JPI to be regional, national, hybrid, global … other?

3. Have designers added touches from global or own local environment?

4. To what extent do the Dubai mega projects differ from those to be found elsewhere?

5. Are there other people whom you suggest I see? Who would be most helpful?

F) The ways in which Jumeirah palm island project is planned and implemented.

1. How was the JPI mega development project proposed, planned and designed?

2. What are the interests and motivations of the various actors involved in the palm island

project process?

3. What actions were undertaken by the government, private developers and global capital investors to implement this project?

4. How many construction companies are working in the Palm?

5. What is the size of the JPI workforce?

6. How many villas and apartments were built on the JPI?

7. What is the role of the property market and government institutions on JPI project implementation?

8. Which company was responsible for the reclamation process? How long did it take?

9. What is the total area of the Palm?

10. What are the main elements of the Palm Island master plan?

11. In light of Nakheel's goals, what are its chief accomplishments? Failings?

12. What are the impediments to achieving the goals?

13. How would you evaluate the overall results?

G) Decision making processes

1. What is Sheik Mohammad's vision for Dubai?

2. Was the decision making process sensitive to pressure from various local interest groups and the government, or federal political power and policy?

3. Were goals complex and subject to change?

4. What were the main risks that JPI faced (cost overruns, environment risk, political risk, etc)?

5. Is the government's behaviour bold or risk averse?

6. Why did Dubai adopt – as some call it – a highly risky mega project policy?

7. What is the greatest political risk that the mega projects can face?

8. To what extent do managers have a clear understanding of the city's economic objectives?

9. What was the role of different public/private institutions in adopting urban mega project strategies?

10. Does the city face competition from similar projects in other cities?

11. To what extent is there cooperation between different organizations in the city?

12. To what extent do local establishments participate in the project?

13. To what extent does public participate in decision processes?

14. What do you think are the aims of both local and federal government through offering various support and attracting global capital**?**

15. What is the future potential of the project?

16. What are the facilitating factors?

17. What are the constraints?

18. Is there any thing you would like to add?

H) Environmental considerations

1. What are the impacts of the following elements following the construction of the Island?

- site conditions;

- the hydrodynamic flow model and its application to the existing situation;

- the initial layout and alternative layouts;

- nearshore wave modeling;

- water quality;

- flushing studies;

- shoreline modeling and offshore morphology;

- dredging scenarios.

2. What different actions were undertaken to prevent current and future negative impacts on the environment?

3. What were the reasons for the success and/or failure of constructing an artificial island in the Arabian Gulf?

4. What are, or could be, some of the long-term implications of such development on the city's urban space?

5. What is the long and short term environmental and ecological sustainability of JPI?

References

Abbott, J. (1996), *'Sharing the City, Community participation in urban management'* London, Earthscan.

Abdullah, A. (2001), UAE University as quoted in *The New York Times*, 14 October 2001, 'Sweeping a tale under Gulf land's pretty rug'.

Abdullah, A. (2004), *'In the love of home'*, Al Khaleeg Studies Centre, Dar Al Khaleeg Press, UAE, Sharjah.

Abdul Hamid, A. (2006), *'Economic globalisation, its organisations, corporations and Repercussions'*, Al Dar Al Jamiea'a, Alexandria.

Agnew, J. and Corbridge, S. (1995), '*Mastering Space: Hegemony, Territory and International Political Economy'*, London: Routledge.

Ahmed, Akbar, S. (2002), *'Discovering Islam: Making Sense of Muslim History and Society',* Routledge, London.

Ahwal, (2005), The Property Market of Dubai, issue 92, August 30.05: 32.

Alarabiya.net, (2007), Scenes and views, http://www.alarabiya.net/programs, accessed on 24.3.2007.

Al Bayan, (2003), Interview with Sheikh Muhammad bin Rashid, 25th October, 2003: 7.

Albrow, Martin, (2000), *'A New Paradigm for Development Studies, globalisation and development studies'*, Rozengracht 176A, 1016NK Amisterdam, The Netherlands.

Al Fara, A. (1996), *'Zayed and the Emirates'*, Dar Al Bashaer, Damascus.

Al Jasim, Sulaiman, Moosa, (1990), PhD thesis, the University of Exeter, Faculty of Social Studies.

Al Khaleej, (2006), Interview with Managing Director of the National Bank of Dubai, 28.5. 2007: 5.

Al Maktoum, Mohammed bin Rashid, (2006), '*My Vision, Challenging in the Race for Excellence'*, Motivte, Dubai.

Al Raouf, Ali, A. (2006), *'Dubaization vs. Glocalization: Territorial Outlook for Arab/Gulf Cities Transformed'*, The 9th Sharjah Urban Planning Symposium (SUPS) April 2-4, 2006 Sharjah, United Arab Emirates.

Al Shaheen, Abdel Latif. (1997), The system of government and administration in the United Arab Emirates, Al Ain.

References

Al Sheriani, M. (2007), *'The identity in the United Arab Emirates 1971-2004'*, PhD thesis, University of Cairo, Faculty of Political Sciences.

Altshuler, Alan and Luberoff, David (2003), *'Mega-Projects: The Changing Politics of Urban Public Investment'*, Washington, DC: Brookings Institution.

AME info, (2005), Middle East Finance and Economy. http://www.ameinfo.com/54238.html, accessed on 11.5.2005.

Amin, A. and Thrift, N. J. (1994), 'Living in the global' *in* Amin, A. and Thrift, N. (eds) *Globalisation, Institutions and Regional development in Europe*, Oxford: oxford University press, p.1022.

Amin, A. and Thrift, N. J. (1995), *'Globalisation, Institutions and regional development in Europe*. Oxford, Oxford University Press.

Arabic CNN (2007), 'Shiites in Emirates, http://arabic.cnn.com/2007/middle_east/, Accessed on 23.6.2007.

Archibugi, Danièle (1999), '*The Globalisation of Technology and the European Innovation System'*, Prepared as part of the project 'Innovation Policy in a Knowledge-Based Economy' commissioned by the European Commission Paris, 16-17 September 1999.

Asa Fitch, (2008), Gulf leads world wealth growth, The national, http://www.thenational.ae/article/BUSINESS/32266899/1001/NEWS, accessed on 1.7.2008.

Ashworth, G.J. and Voogd, H. (1988). 'Marketing the city: concepts, processes and Dutch applications', *Town Planning Review*, 59, (1), pp.65-79.

Avramovic, Dragoslaw (1992) Developing Countries in the International Economic System, UNDP, Occasional Paper No. 3.

Azlinah, Mohamed and Syed Helmy, (2004), *Evolution of Information Systems in Malaysia*, Faculty of Information Technology and Quantitative Sciences, MARA University of Technology, Selangor, pp. 543–546.

Bailey, Paul et al. (1993), *'Multinationals and Employment: The Global Economy in the 1990s,* Geneva: ILO.

Bailly, A. and Lever, W. F. (1996), 'Introduction' in Liver, W. F. and Bailly, A., (eds), *The Spatial Impact of Economic Change in Europe*, Aldershot: Avebury, pp. 1-9.

Bailly, A., Jensen-Butler, C. and Leontidou, L. (1996) 'Changing Cities: Restructuring,

Marginality and policies in Urban Europe' , *European Urban and Regional Studies*, 2(2), pp. 161-167.

Ball, M. (1994), 'The 1980s property boom', *Environment and Planning A*, 26(5), pp. 671-695.

Bauman, Z. (1998), *'Globalisation. The Human Consequences'*, Oxford: Polity.

Beaverstock J. V., Smith R. G. and Taylor P J (1999), 'A roster of world cities, Cities', *The International Journal of Urban Policy and Planning* 16 (6):445-458.

Belbin, C. (2002), 'A personal piece of paradise'. *Identity*, November/December.

Bello, Walden (1998), 'The End of a Miracle', *Multinational Monitor*, Volume XIX, Nos 1 & 2.

Bianchini, F., & M. Parkinson (eds.), (1993), '*Cultural Policy and Urban Regeneration: The West European Experience*', Manchester University Press, Manchester.

Boddy, M. (1999), 'Geographical Economics and Urban competitiveness: A Critique', *Urban Studies*, 36(5-6), pp.811-842.

Boyer, R. (1992), *La Théorie de la Régulation*. Paris: Economica.

Bradley, John R. (2005), 'Al-Qaeda and the House of Saud: Eternal Enemies or Secret Bedfellows?' *Washington Quarterly*, vol. 28, no. 4, Autumn, 2005.

Brookes, Alan J. and Poole, Dominique (2003), '*Innovation in Architecture'*, Spon Press, London.

Bruzelius, Nils, Bent Flyvbjerg and Werner Rothengatter, (2002), '*Big decisions, big risks, Improving accountability in mega projects*', Lund University, Sweden, Aalborg University, Denmark, Institute for Economic Policy and Research, University of Karlsruhe, Kollegium am Schloss, Bau 4, 76128 Karlsruhe, Germany.

Budd, L. (1992), 'An Urban Narrative and the Imperatives of the City. *In* L. Budd, and S. Whimster, (Eds), *Global Finance and Urban Living*, London: Routledge. pp. 260-281.

Budd, L. (1995), 'Globalisation, territory and strategic alliances in different financial Centres, *Urban Studies* 32. 345-360.

Budd, L. (1998), 'Territorial Competition and globalisation: Scylla and Charybdis of European Cities', *Urban Studies,* 35(4), pp. 663-685.

Bunnell, T. (1999), 'Views from above and below: The Petronas twin towers and in

contesting visions of development in contemporary Malaysia', Singapore *Journal of Tropical Geography* 20(1): 1-23.

Bunnell, T. (2004), 'From nation to networks and back again: Transnationalism, class and national identity in Malaysia. *In*: B. Yeoh, K. Willis and S.M.A.K. Fakhri, Editors, *State/nation/transnation: perspectives on transnationalism in the Asia–Pacific*, Routledge, New York (2004), pp. 144–160.

Bunnell, T., Drummond L.B.W. and Ho, K.C. (2002), '*Critical reflections on cities in southeast Asia*, Brill Times Academic Press, Singapore pp. 185–214.

Cairns, Stephen (2004),'*Drift - Migrancy and Architecture',* Routledge, New York.

Castells, M. (1989), '*The Informational City: Information Technology, Economic Restructurinng, and the Urban-Regional Process'*, Oxford, Blackwell.

Castells, M. (1991), '*The University System: Engine of Development in the New World Economy'*, Paper for the World Bank Seminar on Higher Education and Development.

Castells, M. (1993), 'European cities, the informational society, and the global economy', *Tijdschrift voor Economische en Sociale Geografie*, 84(3).

Castells, M. (1997), *'The Rise of the Network Society'*, Oxford: Blackwell.

Castells, M. (1998), 'The Information Age*: Economy, Society and Culture'*, Volume 3, Oxford, Blackwell.

Castells, M. (2000), 'The Rise of the Network Society - The Information Age*: Economy, Society and Culture'* New York: Blackwell Publishers.

Cernat, Lucian and Radu Vranceanu. (2002), 'Globalisation and Development: New Evidence from Central and Eastern Europe', *Comparative Economic Studies*, XLIV, N° 4.

Chamber of Commerce and Industry, Dubai, (2006), The Economic bulletin, Vol. 3, p. 19.

Chamber of Commerce and Industry, Dubai, (1984), The Economic bulletin, Vol. 9, p. 18.

Chambers Dictionary of Etymology, 3d ed, s.v. "mega".

Chang, Ha-Joon (2003), Globalisation, economic development and the role of the state, Penang: Third World Network; and London: Zed Books.

Chase-Dunn, C. (1989) '*Global Formation: Structures of the World Economy'*, Blackwell

Publishers. Oxford.

Clark, D. (1996), *'Urban world/global city'*. Routledge, New York.

Clark, G. and O'Connor, K. (1997), 'The informational content of financial products and the spatial structure of the global finance industry', *In* Cox, K., *'Spaces of globalisation: reasserting the power of the local,* London: Guilford.

Clarke, S. E. and Gaile, G. L. (1997), 'Local Politics in a Global Era: Thinking Locally, Acting Globally', *Annals of the American Academy of Political and Social Science, 551.*

Clarke, S. E. and Gaile, G. L. (1998), *'The Work of Cities: Globalisation and Community'*, Minneapolis, MN: University of Minneapolis Press.

CNUCED, (2002), *'Globalisation and development'*, United Nations Conference on Trade, Development, twenty-Ninth Session Brasilia, brazil, 6-10 may 2002.

Cochrane, A. and Jonas, A. (1999), 'Reimagining Berlin: world city, national capital or ordinary place?', *European Urban and Regional Studies*, 6(2): 145-64.

Cook, Andrews. (1990), 'Survey of the shores and islands of the Persian gulf 1820-1829', *Archives editions,* volume 1.

Cooper, Peter J. (2005), 'Oil prices and Dubai property', January 23 – 2005, http://www.ameinfo.com/52554.html, accessed on 9.3.2006.

Corsi, Jerome (2006), 'What about Iranian investments in Dubai?' http://www.worldnetdaily.com/news/article.asp? Posted: February 23, 2006

Couch, C., C. Fraser and S. Percy (eds) (2002), *'Urban Regeneration in Europe'*, Oxford, Blackwell.

Cox, R. (1991), Programme on Multilateralism and the United Nations System, 1990-1995. Tokyo: United Nations University, Unpublished.

Czarniawska-Joerges, B. (1995), 'Narration or science? Collapsing the division in organization studies', *Organization*, 2(1): 11-33.

Davis, Mike (2006), 'Fear and money in Dubai', *New Left Review* 41, September-October 2006, http://www.newleftreview.org. Accessed on 14.1.2007.

Department of Economic Development, (2003), 'Business Sector & Development Division', Dubai.

Department of Economic Development, (2006), Dubai Emirete Socio-Economic Development Indicatores, Dubai.

References

Department of Statistics, unpublished data

Der Spiegel, (2003), Spiegel Special, February, 2003: 126-129.

Dixon, B. and T. Boswell, (1996), 'Differential Productivity, Negative Externalities, and Foreign Capital Penetration: Reply to Firebaugh' *American Journal of Sociology*, 102, (2) pp. 576-584.

Dollar, D. (1992), 'Outward-oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCS: 1976-1985', *Econimic Development and Cultural Change,* 40, 1992, pp. 523-544.

Dollar, D. and A. Kraay, (2000), *'Growth Is Good for the Poor'*, Washington, DC: World Bank.

Dore, Lucia. (2008), 'UAE achieves eighth rank on global FDI Confidence Index', http://www.zawya.com/Story.cfm/sid, 15 February 2008, accessed on 12.5.2008.

Douglass, Mike. (1989), 'The future of cities on the pacific Rim', *In* M. P. Smith (ed.), *'Pacific Rim Cities in the World Economy: Comparative Urban and Community Research ii,* New Brunswick and London', Transaction Publishers 9-67.

Douglass, Mike (1998a), 'Beyond Dualism: The Global-Local Context of Work and Urban Poverty in Asia', *In* Bert Helmsing and João Guimarães, eds, *Locality, State and Development* (The Hague: Institute of Social Studies), 295-311.

Douglass, Mike (1998b), *'Globalisation, Inter-City Networks and Rural Urban Linkages: Rethinking Regional Development Theory and Policy'*, Paper presented at the UNCRD sponsored Global Forum on Regional Development Policy, 1-4 December, Nagoya, Japan.

Douglass, Mike (2000), 'Mega-urban regions and world city formation: globalisation, the economic crisis and urban policy issues in Pacific Asia', *Urban Studies* 17(12), 2317-2337.

Doxiadis, (1985), 'Comprehensive Development Plan for Dubai Emirate', Vol. 2.

Duffy, Hazel. (1995) Competitive cities: succeeding in the global economy. Spon, London.

Dutta, S. Shalhoub, and Z.K. Samuels, G. (2007), Arab World Competitiveness Report, weforum.org.

Dyreson, Mark. (1998), *'Making the American team: Sport, culture, and the Olympic Experience'*, Urbana: University of Illinois Press.

Eaton, J. and A. Tamura, (1996), 'Japanese and US Exports and Investment as Conduits of Growth' NBER Working Paper No. 5457.

ECLAC, (2000), 'Equity, development and Citizenship (LC/G.2071/Rev. 1-P), Santiago, Chile, United Nations publication, Sales No. E. 00.II.G.81.

Economic Intelligence Unit (EIU), (2001), UAE: Country Risk Summary, http://home.aiginline.com/country_view, accessed on 6.3.2007.

Edwards, A. and Talbot, R. (1994), *'The hard-pressed researcher'*, Longman

Ehrenfeucht, Renia (2004), 'Megaprojects and Risk: A Conversation with Bent Flyvbjerg', *Critical Planning,* Summer 2004.

El-Masri, Souheil and Mandeel, Fa'eq (2005), 'Urban Planning Institution in Bahrain: Coordination, Capacity Building and Information Management' SUPS8, Sharjah, p. 214.

Elsheshtawy, Yasser. (2004), *'Planning Middle Eastern Cities: An Urban Kaleidoscope in a Globalizing World',* Rutledge.

Elsheshtawy, Y. and Abul Nagga, M. (2000), Sustainable urban development in an age of globalisation: towards a co-existence model in Dubai, UAE. Proceedings of IAPS: Cities and Sustainability. *International Association for People-Environment Studies.* Paris.

Espy, Richard (1979), *'The politics of the Olympic games'*, Berkeley: University of California Press.

Evans, P. (1997), *'State-Society Synergy; Government and Social Capital in Development, International and Area Studies',* University of California at Berkeley, pages 1-11.

Evans, P. (1998), 'Transnational Corporations and Third World States: From the Old Internationalization to the New', *In* R. Kozul-Wright and R. Rowthorn (eds) *Transnational Corporations and the Global Economy,* Helsinki: UNU/WIDER.

Fainstein, Susan, (1994), *'The city builders: property, politics and planning in London and New York'*, Cambridge MA. Blackwell.

Fainstein, S., Gordon, I., and Harloe, M. (1992), *'Divided Cities, New York and London in the Contemporary World'*, Oxford, Blackwell.

Fainstein, S. & Judd, D. (Eds). (1999), *'The tourist city'*, New Haven, CT:
 Yale University Press, pp. 35-53.

Feenstra, Robert C. (1998), 'Integration of Trade and Disintegration of Production in the
 Global Economy', *Journal of Development Economic Perspectives,* vol. 12, fall.

 Fernand Braudel, (1993), *'Civilisation matérielle, économie et capitalisme'*, XVe –
 XVIIIe, Paris: Le Livre de Poche, p. 96.

Ffrench-Davis, Ricardo and Jose′ Antonio Ocampo, (2001), 'Globalisation de la
 volatilidad financiera: desafios para las economias emergentes', Crisis financiers
 en paises 'exitosos', Ricardo Ffrench-Davis (ed), Santiago, Chile, Economic
 Commission for Latin America and the Caribbean (ECLAC)/McGraw-Hill.

Financial Times, (2005), 'Emirate rebrands itself as a global melting pot' 12 July 2005.

Finn Biz Newsletter, (2006), GCC to invest $ 700 billion by 2010: IMF, volume 1, issue
 # 4, http://www.kauppapolitiikka.fi/netcomm, accessed on 12.3.2007.

Fiori, Christine and Kovaka, Molly (2005), '*Defining Mega Projects: Learning from
 Construction at the Edge of Experience'*, Research Congress,
 https://commerce.aip.org/jsp/reget.jsp, accessed on 8.6.2006.

Firebaugh, G. (1996), 'Does Foreign Capital Harm Poor Nations? New Estimates Based
 on Dixon and Boswell's Measures of Capital Penetration', *American Journal of
 Sociology*, 102, (2), pp. 563-576.

Fistola, Rosa and Anna La Rocca (2001), 'The virtualization of urban functions, Romano
 Networks and communication studies', *Netcom*, vol.15, 1-2-2001, pp. 39-48.

Flyvbjerg, B. (2003), 'Delusions of success: Comment on Dan Lovallo and
 Daniel Kahneman', *Harvard Business Review*, 121–122.

Flyvbjerg, B. (2005), Design by deception, the politics of megaproject approval, *Harvard
 Design Magazine,* Spring/Summer 2005, 50-59.

Flyvbjerg, Bent, Bruzelius Nils & Rothengatter, Werner (2003), *'Megaprojects and Risk:
 An Anatomy of Ambition'*, Cambridge University Press.

Flyvbjerg, B. (N.D), What is a Megaproject?
 http://flyvbjerg.plan.aau.dk/whatisamegaproject.php, accessed on 24.9.2006.

FNC, Federal National Council, home page, http://www.majles-uae.com, accessed on 21.
 2.2007.

Forkenbrock, David J. (2004), 'Mega-Projects: The Changing Politics of Urban

References

Public Investment', *Journal of the American Planning Association*, Volume: 70. Issue: 2, p. 229+

Frans, J. (2000), 'The nation-state, emancipatory spaces and development studies in the global era' *globalisation and development studies*, Rozengracht 176A, 1016NK Amsterdam, The Netherlands.

Friedmann, John (1986), 'The world city hypothesis', *Development and Change* 17, 69-83.

Friedmann, John, (2002), *'The Prospect of Cities'*, University of Minnesota Press.

Gause, Gregory (2005), *'Wahhabism, bin Ladenism, and the Saudi Arabia Dilemma,'* UCLA International Institute, Lippmann, op. cit.

Gedikli, B, (2001), 'Interurban Competition within the Circumstances Created by Global Capitalism', GaWC. http://www.lboro.ac.uk/gawc/rb/rb65.html, accessed on 28.7.2006.

Gellert, Paul K. and Lynch, Barbara D. (2003), *'Mega-projects as displacements'*, Blackwell.

Gereffi, G. (1996), 'Commodity chains and regional divisions of labour in East Asia', *Journal of Asian Business,* 12(1): 75-112.

Ghorashi, G. Reza (2003), *'Economic globalisation and the prospects for democracy in Iran',* Routledge Courzon, New York.

Global Envision, (2006), "In Dazzling Dubai, a Superlative Struggle for Rights" May 29, 2006. http://www.globalenvision.org/library/3/1080/Articles, accessed on 29.4.2008.

Graf, King (1990), 'International Design and Practice', Unpublished transcript of a discussion at the American Institute of Architects, Washington, D.C. *In* Jeffrey, W. Cody, (2002), *'Exporting American Architecture, 1870-2000'*, Routledge, London.

Graham, S., and Marvin, S. (2001), *'Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition'*, London and New York: Routledge.

Griffin, Keith (2004), 'Globalisation and Global Governance: A reply to the Debate', D*evelopment and change,* Vol. 35 issue 5, Blackwell.

Grosfoguel, R. (1995), 'Global logics in the Caribbean city system: the case of Miami',

In P. Knox and P. J. Taylor eds, *World Cities in a World-System*, New York: Cambridge University Press, 156-170.

Gulf News, (2005), 'Trump enters Dubai real estate, October 6, 2005, p. 6

Gunaim, A. (1993), *'Studies in urban geography and environmental planning of the United Arab Emirates',* Dar Al Qira'aa liljame, Dubai [In Arabic].

Gutman, R. (1988), *'Architectural practice: a critical view'*, Princeton Architectural Press, New York.

Hagel, John (2005), 'Dubai - Global Talent Magnet' http://edgeperspectives.typepad.com/edge_perspectives, accessed on 16.6.2006.

Haila, Anne (2000), 'Real Estate in Global Cities: Singapore and Hong Kong as Property States', *Urban Studies,* Vol. 37, No. 12, 2241– 2256.

Hall, C. Michael (1992), *'Hallmark tourist events: Impacts, management and Planning',* London: Bellhaven Press.

Hall, C. Michael (1996), 'Hallmark events and urban reimaging strategies: Coercion, community, and the Sydney 2000 Olympics. *In* Lynn C. Harrison and Winston Husbands, ed. Practicing responsible tourism*, International case studies in tourism planning, policy, and development*, New York: John Wiley, 366–379.

Hall, P. (1993), 'Forces Shaping urban Europe' *Urban Studies,* 30(6), pp. 883-898.

Hall, P. (1995) 'Towards a general urban theory', *In* J. Brotchie, M. Batty, E. Blakely, P. Hall, and P. Newton (eds), *Cities in Competition: Productive and Sustainable Cities for the 21st Century,* Melbourne: Longman Australia, 3-31.

Hall, T. (1994), 'Urban regeneration and cultural geography: The International convention Centre Birmingham', PhD thesis, university of Birmingham.

Hall, T. and Hubbard, P. (eds) (1998), *'The Enterpreneurial City: Geographies of Politics, Regime and Representation'*, Chichester: John Wiley.

Hammersley, M. and Atkinson, P. (1983), *'Ethnography, principles in practice'*, London, Routledge.

Hannigan, J. (1998), *'Fantasy City: Pleasure and Profit in the Modern Metropolis',* London: Routledge.

Harding, A. & Le Gales, P. (1997), 'Cities, Sub-national decision-making and the global-local debate' *In* A. Scott (Ed), *The Limits of Globalisation: Cases and Argument,* London & New York: Routledge.

References

Harris, John (1971), 'Dubai Development', Municipality of Dubai.

Harvey, D. (1982), *'The Limits to Capital'*, Oxford, Basil Blackwell.

Harvey, D. (1985), 'Monument and Myth: The Building of the Basilica of the Sacred Heart'. *In* D. Harvey, *Consciousness and the Urban Experience*. Oxford: Blackwell.

Harvey, D. (1987), 'Flexible accumulation through urbanisation: reflections of 'postmodernism' in the American city', *Antipode* 19: 260-286.

Harvey, D. (1989a), *'The Condition of Postmodernity',* Oxford: Blackwell.

Harvey, D. (1989b), *'The Urban Experience',* Oxford: Blackwell.

Harvey, D. (1989c), 'From managerialism to entrepreneurialism: the transformation in urban governance in late capitalism', *Geografiska Annaler*, 71:3-17.

Helleiner, Eric, (1994), *'States and Reemergence of Global Finance'*, Ithaca, NY: Cornell University Press.

Henderson, J. (1991), 'Urbanization in the Hong Kong—South China region: an introduction to dynamics and dilemmas', *International Journal of Urban and Regional Research,* 15, pp. 169–179.

Hill, Christopher R. (1996), *'Olympic politics'*, 2nd ed. Manchester: Manchester University Press.

Hill, R. C. and KIM, J. W. (2000), *'Global Cities and Developmental States'*, New York.

Hirst, D. (2001), 'The emirs in the internet era: Dubai, a sheikhdom happy to embrace globalisation', Le Monde Diplomatique, http://mondediplo.com/, accessed on 9.3.2006.

Hirst, P. (1997), 'The global economy – myths and realities', *International Affairs* 73, 409–25.

Hirst, P. and Thompson, G. (1996), *'Globalisation in Question: The international Economy and the Possibilities of Governance',* Cambridge: Polity Press.

Holcomb, B. (1999), 'marketing cities for tourism', *In* D. R. Judd & S.S. Faintein (eds) *'the tourist city'*, pp. 54-70. New Haven, CT: Yale University Press.

http://en.wikipedia.org/wiki/Hellmuth, (N.D), Hellmuth, Obata and Kassabaum, accessed on 18.5.2005.

http://www.chessbase.com/images2/2004/dubai28.jpg, Burj Al Arab hotel images,

accessed on 23.3.2007.

Imai, S. (1993), 'The Tumen River Area Special International Economic Zone', JETRO *China Newsletter*, 104: 14-23.

Institute of Research and Arabic Studies, (1978), *'The United Arab Emirates a comprehensive survey study'*, Cairo [In Arabic].

International Labour Organization (ILO) (2001), 'The Social Dimensions of Globalisation', Adopted by the Management Board on 10 November 2001.

International Reports. Nets, (2003), Dubai is emerging as a textbook case of economic diversification, http://www.internationalreports.net/middleeast/dubai/, accessed on 10.4.2007.

James, David. (1999), Political Slow Malaysia's Multimedia Zone, Business Strategies International, http://www.bsicorp.net/hitech_articles/malaysia accessed on 27.4.2008.

James, H. Collier, (2004), *'Philosophy, Rhetoric, and the End of Knowledge: A New Beginning for Science and Technology Studies'*, Lawrence Erlbaum Associates, Mahwah, NJ.

Jeffrey, W. Cody, (2002), *'Exporting American Architecture, 1870-2000'*, Routledge, London.

Jensen-Butler, C. (1997), 'Competition between cities, urban performance and the role of urban policy: a theoretical framework', *In* Jensen-Butler, C., Shachar, A. and van Weesep, J. (eds.) *European Cities in Completion*, Aldershot: Avebury, pp. 3-42.

Jensen-Butler, C. (1999) Cities in Competition: Equity Issues, *Urban Studies*, vol. 36, nos. 5/6, pp. 865-891.

Jensen, Ole B. (2005), 'Branding the Contemporary City - Urban branding as Regional Growth Agenda?' Plenary paper for Regional Studies Association Conference, 'Regional Growth Agendas' Aalborg, 28th to 31st May 2005.

Jessop, Bob. (1994), 'Post-Fordism and the State', *In* A. Amin (ed). *Post-Fordism: A Reader*. Cambridge, Mass.: Blackwell, 251-279.

Jessop, Bob and Ngai-Ling Sum, (2000) 'An Entrepreneurial City in Action: Hong Kong's Emerging Strategies in and for (Inter-)Urban Competition', published by the Department of Sociology, Lancaster University at: http://www.comp.lancs.ac.uk/sociology/soc045rj.html, accessed on 21.5.2008

Jessop. B., Peck. J. and Tickell, A. (1999), 'Retooling the machine: Economic crisis, state restructuring and urban politics', *In* Jonas and Wilson (1999) op cit.

Judd, Dennis. (1999), Constructing the tourist bubble. *In*. Dennis R. Judd and Susan S. Fainstein, *The tourist city,* (ed). 35–53. New Haven: Yale Univerity Press.

Judd, Dennis. (2003), 'Reconstructing Regional Politics: Special Purpose Authorities and Municipal Government', A Great Cities Institute Working Paper June 2003, The Great Cities Institute, College of Urban Planning and Public Affairs University of Illinois at Chicago.

Judd, D. and Parkinson, M. (1990), *'Leadership and Urban Regeneration, Cities in North America and Europe'*, Newbury Park, CA: Sage.

Junemo, Mattias (2004), 'Let's build a palm island!' Playfulness in complex times', *In* Mimi Sheller, John Urry, *Tourism Mobilities: Places to play, Places in Play,* Routledge.

Junker, J. and Pennink, B.J.W. (2000), 'De Kern Van Methodologie: De Kern Van organisatieonderzek, Van Gorkum.

Katodrytis, George (2005), 'Metropolitan Dubai and the Rise of Architectural Fantasy', www.rut.com/misc/dubai.html, accessed on 17.6.2006.

Kavaratzis, M. and G. J. Ashworth (2005), 'City branding: An effective assertion of identity or a transitory marketing trick?' *Tijdschrift Voor Economische En Sociale geografie* 96(5), 506-514.

Kazim, A. (2000), *'The United Arab Emirates A.D. 600 to the Present: A Socio-Discursive Transformation in the Arabian Gulf'*, Dubai: Gulf Book Centre.

Keil, R. (1994), 'Global sprawl: urban form after Fordism?' Environment and Planning *Society and Space* 12, 131–136.

Keil, R. (1999), *'Los Angeles: Globalisation, Urbanization and Social Struggles'*, New York: Wiley.

Keil, R. and Lieser, P. (1992), 'Frankfurt: global city-local politics', In M.P. Smith ed., *After Modernism: Global restructuring and the changing boundaries of city life.* New Brunswick, NJ. Transaction Publishers, 39-69.

Keivani, R, Parsa, A, Younis, B, (2003). Development of the ICT sector and urban competitiveness: the case of Dubai. *Journal of Urban Technology*, 10 (2) 19-46

Keller, P. (1996), 'Globalisation and tourism', *Tourist Review* 4: 6-7.

Kelly, P. (1999), 'The geographies and politics of globalisation', *Progress in Human Geography,* 23(3):379-400.

Kim, S. J. (1993), 'Tumen River Area Development Project and inter-Korean economic cooperation', *East Asian Review,* 5(2): 65-86.

King, A. D. (1991), *'Global cities: post-imperialism and the internationalization of London',* New York: Sage.

Kitson, M. and Michie, J. (2000), *'The Political Economy of Competitiveness: Essays on Employment, Public Policy and Corporate Performance',* London and New York: Routledge.

Knox and P.J. Taylor (eds.), (1995), *'World cities in a world system',* Cambridge University Press, Cambridge.

Lambooy, J. G. (1993), 'The European City: From Carrefour Organisational nexus', *Tijdschrift Voor Economische En Social geografi*, 84(4), pp. 258-268.

Landais, Emmanuelle (2006), 'Burj Cranes of Dubai', fulfnews.com, 13th June 2006 http://archive.gulfnews.com/articles, accessed on 8.7.2006.

Lea, David (2001), '*A Political Chronology of the Middle East'*, Europa Publications, pp 267-268.

Lee. R. and Schmidt-Marwede, U. (1993), 'Interurban competition: financial centres and the geography of financial production', *International of Journal of Urban and Regional Research,* 17(4): 492-515.

Le Gales, P. (1993), *'Politique urbaine et développement local. Une comparaison francobritannique',* L'Harmattan, Paris.

Lehrer, Ute Angelika (1999), 'Case + Study =Case Study? A methodological inquiry into image production at Potsdamer Platz, Berlin', *Critical Planning*, Spring.

Lever, W. F. (1999), 'Competitive Cities in Europe', *Urban Studies*, 35(5-6), pp. 78-79.

Levi, Lucio. (2002), 'Globalisation and a World Parliament', World Federalist Movement, Institute for Global Policy, http://www.wfm.org/site/index.php/documents accessed on 11.7.2007.

Levine, M. (1989), 'Urban redevelopment : the case of Baltimore', *In*: R.V. Knight & G. Gappert (Eds) (1989), '*Cities in a Global Society',* Newbury Park, Sage.

Libyan Architects, (2005), Dubai, the architects' paradise,

http://www.libyanarchitects.com, accessed, 5.8.2005

Lipietz, Alain (1987), *'Mirages and Miracles: The Crisis of Global Fordism'*, London: Verso.

Loftman, P. and B. Nevin, (1996), 'Going for growth: Prestige projects in three British cities', *Urban Studies* 33(6), 991-1019.

Lo, Fu-Chen & Yue-Man Yeung (eds) (1998), *'Globalisation and the world of large cities',* Tokyo, United Nations University Press.

Looney, Robert (2003). 'Corruption in the Middle East: Challenges Posed for the United States', *Strategic Insights* 3, No. 11 (November 2004), www.ccc.navy.mil/si/2004/nov/looneyNov04.asp

Lorimer, J.G., (1984), *'Gazetter of Parsian Gulf, Oman and Central Arabic'*, Calcutta.

Mackinnon, Mark (2005), Dubai rising, insider edition, www.theglobeandmail.com, accessed on 9.4.2006.

Mannheim, Jarol B. (1990), 'Rites of passage: The 1988 Seoul Olympics as public diplomacy', *Western Political Quarterly* 43 (2): 279–295.

Marchal, Roland (2004), 'Dubai: global city and transnational hub', *In* Al-Rasheed, (2004), *'Transnational Connections and the Arab Gulf'*, Routledge, New York.

Marden, P and Clark, G. (1994), *'Money, Power and Space'*, Oxford: Blackwell.

Martin, R. (1994), 'Stateless Monies, global financial integration and national economic autonomy: the end of geography?' *In* Corbridge S, Martin R and Thrift N (Eds), *Money, Power and Space,* (Blackwell, Oxford) 253-278.

Marton, A., McGee, T. and Paterson, D. (1995), 'Northeast Asian economic cooperation and the Tumen River Area Development Project', *Pacific Affairs*, 68(1): 8-33.

Mathew, Burbank. J., Andranovich, Gregory D. and Heying, Charles H. (2001), *'Olympic Dreams: The Impact of Mega-Events on Local Politics'*, Lynne Rienner, Boulder, Colorado.

Mathews, M. (2007), 'Construction Projects in UAE', The USA commercial service, http://commercecan.ic.gc.ca/scdt/bizmap, accessed on 23.3.2008.

McBride, E. (2000), 'Burj Al-Arab', *Architecture*, 89 (8), 116-127.

McGrew, Anthony and Lewis, P.G. (1992) (eds), *'Global Politics'*, Cambridge: Polity Press.

References

McIntosh, A. (1997), 'Towns and Cities, Competing for Survival', London: E

Michael, Habib, (2005), 'Gate neighbouring areas: examples of Dubai',The Eighth
  Sharjah Urban Planning Symposium April 3-5, 2005 - Sharjah, UAE.

Ministry of Planning, (1991), Annual Statistical Abstract, 5th ed.

Mitchell, K. (1997), 'Transnational discourse: bringing geography back in', *Antipode*,
  29(2): 101-104.

Mitchell, K., and Olds, K. (2000), 'Chinese business networks and the globalisation of
  property markets in the Pacific Rim', *In Globalisation of Chinese business firms*,
  (ed), H. W. C. Yeung, and K. Olds, 195-215. Houndmills, U.K.: Macmillan.

Mollenkopf, J. and Castells, M. (1992), *'Dual City: Restructuring New York'*, New York:
  Sage.

Morshidi, S. and Suriati G. (1999), *'Globalisation of Economic Activity and Third World
  Cities: A Case Study of Kuala Lumpur',* Kuala Lumpur: Utusan Publications and
  Distributors Sdn. Bhd.

Mullins, Patrick, Kristin Natalier, Philip Smith, and Belinda Smeaton, (1999), 'Cities and
  consumption spaces', *Urban Affairs Review* 35 (1): 44–71.

Municipality of Dubai (1974), 'Dubai, the Pearl of the Gulf', Department of Information.

Municipality of Dubai (1998), 'Planning Studies', vol. 2, Planning and Survey
  Department.

Municipality of Dubai (2001), 'Planning Studies', vol. 3, Planning and Survey
  Department.

Municipality of Dubai (2003), 'Planning Studies', vol.1, Planning and Survey
  Department.

Naisbitt, J. (1994), *'Global paradox: the bigger the world economy the more powerful its
  smallest players',* New York: W. Morrow.

Newman, P. (1994), 'Urban Regime theory and Comparative Urban Politics', Cities
  Paper presented at conference on Enterprises and Society at the Eve of the XXIst
  Century, Lille, 16-18 March.

Newman, Peter, & Andy Thornley (1995), Euralille: Boosterism at the centre of
  Europe', *European Urban and Regional Studies,* 2(3), 237-246.

Nexus, (1997), 'The politics of globalisation', Paper posted on Nexus website:
  http://www.netnexus.org, accessed on 2.8.2005.

References

Nicolson, Adam (2006), 'Boom Town', Monday February 13. 2006
     http://www.guardian.co.uk/business/2006/feb/13/unitedarabemirates.travel,
     accessed on 10.5.2006.

Nilsson, J-E. and Schamp, E. W. (1996), 'Restructuring of the European Production
     System', *European Urban and Regional Studies,* 3(2), 121-131.

O'Brien, Richard (1992), *'Global financial integration: The end of geography'*, London:
     Chatham house/Pinter.

Ohmae, Kenichi (1990), *'The Borderless World: Power and Strategy in the Interlinked
     World Economy',* New York: Harper Business, London: Harper Collins.

Ohmae, K. (1995), *The End of the Nation State: The Rise of Regional Economies*,
     London: Harper Collins.

Olds, K. (1995), 'Globalisation and the production of new urban spaces: Pacific Rim
     megaprojects in the late twentieth century', *Environment and Planning A*
     27, pp. 1713-1743.

Olds, K. (1997), 'Globalizing Shanghai: the 'global intelligence corps' and the
     building of Pudong, *Cities*, 14, pp. 109–123.

Olds, K. (2001), *'Globalisation and Urban Change Capital, Culture, and Pacific,
     Rim Mega-Projects'* Oxford University Press.

Olds K. and Yeung, H. W. C. (2004), Pathways to global city formation: a
     view from the developmental city-state of Singapore, *Review of International
     Political Economy 11:3 August 2004: 489–521*

Oncu, A. and Weyland, P. (eds) (1997), '*Space, Culture and Power: New Identities in
     Globalizing Cities',* London: Zed Books.

Ó Tuathail G., (1997), 'Emerging markets and other simulations: Mexico, the Chiapas
     revolt and the geofinancial panopticon', *Ecumene* 4: 300–317.

Paddison, Ronan. (1993), 'City marketing, image reconstruction and urban regeneration',
     Urban Studies 30 (2): 339–350.

Pagano, M., & Bowman, A. (1995), *'Cityscapes and capital: The politics of urban
     development',* Baltimore: John Hopkins University Press.

Panitch, L. (1996), 'Rethinking the role of the state', *In* Mittelman, J., editor,
     Globalisation: critical reflections, London: Lynne Rienner.

Parker, S. (1999), 'Collaboration on tourism policy making: Environmental and

commercial sustainability on Bonaire', N.A. *Journal of Sustainable Tourism* 7:240- 259.

Park, Michael, Y. (2005), 'The Hippest city in the World', Fox news.com, 26th October, 2005, http://www.foxnews.com/story, accessed on 4.6.2006.

Parsa, A., Keivani, R., Sim, L.L., Ong, S.E., Agarwi, A. and Younes, B. (2003). Emerging

global cities: comparisons of Singapore and the cities of the UAE. *Journal of Real Estate Porfolio Management* 27 (3/4), pp.95-101

Patterson, A. and Pinch, P.L. (1995) 'Hollowing out' the local state: compulsory competitive tendering and the restructuring of British public sector services', *Environment and Planning A* 27, 1437-1462.

Pepe, Escobar (2006) 'Dubai lives the post-oil Arab dream', Middle East, Jun 7, 2006 http://www.atimes.com/atimes, accessed on 5.4.2007.

Pinch, Steven (1997), *'Worlds of Welfare: Understanding the Changing Geographies of Social Welfare Provision',* Routledge, London, p. 151.

Pinch, S. Henry, N. (1999), 'Discursive aspects of technological innovation: the case of the British motor-sport industry', *Environment and Planning A* 1999, volume 31, pages 665-682.

Pine, J. and Gilmore, J. (1999), *'The Experience Economy'*, Harvard Business School Press, Boston, 1999.

Pollard, Ailsa. Dean Rolfe, and Stuart Smith, (2006), 'The Gulf Region: An unparalleled growth curve led by Dubai', July 2006 edition of *PricewaterhouseCoopers Global Real Estate Now magazine.*

Pred, A. (1995), *'Recognizing European Modernities: a montage of the present'*, New York: Routledge.

Pred, A. and Watts, M. (1992), *'Reworking Modernity: capitalisms and symbolic discontent',* New Brunswick, New Jersey: Rutgers University Press.

Pryke, M. (1999), 'City rhythms: neo-liberalism and the developing world', *In* Allen et al. (1999): 321-38, London: Routledge.

Qasrawi, Sophia (2004), *'Foreign Direct Investment strategic options for the UAE',* Emirates Institute for Banking and Financial Studies, Sharjah, UAE.

Reichl, Alexander J. (2005), 'Rescaling Urban Politics: Structure and Agency in the

Global Era', *Polity*. Volume: 37. Issue: 1. P. 149+. Northeastern Political Science Association; Gale Group.

Rimmer, P. J. (1994), 'Regional economic integration in Pacific Asia', *Environment and Planning A* 26, 1731-1759.

Robins, K. (1991), *'Prisoners of the city: whatever should a postmodern city be?'* New Formations, 13.

Roche, M. (1992) 'Mega-events and micro-modernization', *British Journal of Sociology* 43: 563–600.

Roche, M. (2000), *'Mega-Events and Modernity: Olympics and Expos in the Growth of Global Culture Contributors',* Routledge, New York.

Roche, M. (2006), *'Mega-events and modernity revisited: globalisation and the case of the Olympics',* Oxford, Blackwell.

Rodrik, Dani (2001), 'Development Strategies for the next Century', paper prepared for the Conference 'Development theory at the threshold of the Twenty-first century'.

Rugh, William A. (1997), 'The United Arab Emirates: What Are the Sources of Its Stability?' *Middle East Policy*, Vol. 5, 1997.

Sadik, Rula (2005), 'The strategy which pushes Dubai: the mystery hand of global competitiveness, SUPS8, Sharjah.

Safell, David and Basehart, Harry, (2004), '*State and local government: politics and Public policies*' 8th ed. New York: McGraw hill Higher Education.

Sallott, Jeff, (1980), 'Oil Sands: Alberta's Wildcard in Pricing Battle with Ottawa', Globe and Mail, November 7, p. 9.

Sassen, Saskia (1990), 'Economic Restructuring and the American city', *Annual Rview of Sociology,* 16, 465-90.

Sassen, Saskia (1991), *'The Global City. New York, London, Tokyo'*, Princeton University Press.

Sassen, Saskia (1994), *'Cities in World Economy'*, Pine Forge Press.

Sassen, Saskia (1997), *'Losing Control? Sovereignty in an age of globalisation'*, Chichester: Wiley.

Sassen, Saskia (1998a), 'Introduction: Whose City is it? Globalisation and the Formation of the New Claims', *In*: Saskia Sassen, *'Globalisation and its Discontents'*,

New Press, 1988.

Sassen, Saskia (1998b), 'The impact of new technologies and globalisation on cities, *In* Lo, F. -C. and Yeung, Y. -M., (eds), *Globalisation and the World of Large Cities.*

Sassen, Saskia (1999), 'Servicing the global economy: reconfigured states and private agents', *In* Olds et al. (1999).

Sassen, Saskia (2000), *'Cities in a World Economy'* Second ed. Thousand Oaks, Calif Pine Forge Press.

Sassen, Saskia (2001), *'The Global City: New York, London, Tokyo',* Princeton University Press. New updated edition; originally published in 1991.

Sassen, Saskia (2002), *'Denationalization: Territory, Authority, and Rights in a Global Digital Age',* Princeton, NJ: Princeton University Press.

Savage, M., G. Bagnall & B. Longhurst (2005), *'Globalisation and belonging',* London: Sage.

Savitch, H. V. (1988), *'Post-Industrial cities: Politics and Planning in New York, Paris and London',* Princeton University Press.

Savitch, H. V. and Paul Kantor, (2002), *'Cities in the International Marketplace, The Political Economy of Urban Development in North America and Western Europe',* Princeton, N J: Princeton University Press.

Sayer, A. (1992), 'Method in Social Science: A Realist Approach', London, Routledge.

Schiffer, J. R. (1991), 'State policy and economic growth: a note on the Hong Kong Model', *International Journal of Urban and Regional Research*, 7, pp. 429– 438.

Scott A.J. and Storper M.J., (1992), (eds), *'Pathways to Regionalism and Industrial Development',* London: Routledge.

Şengül, T. (2000), *'Devlet ve kent mekanı',* Iktisat dergisi. Sayı:404. Istanbul: I.U. Iktisat Fakultesi Mezunları Cemiyeti Yayınları.

Shin K. and Timberlake, M. (2000), 'World Cities in Asia: Cliques, Centrality and Connectedness', *Urban Studies* 37:12. pp. 2257-2285.

Short, J. R. (1999), 'Urban Imagineers: Boosterism and the Representation of Cities', *In* A. E. G. Jonas & D. Wilson (eds.) (1999), *The Urban Growth Machine. Critical Perspectives, Two Decades Later,* New York: State University of New York

Press, pp. 37-54.

Short, J. R., L. M. Benton, W. B. Luce, and J. Walton (1993), 'Reconstructing the image of an industrial city', *Annals of the Association of American Geographers* 83 (2): 207–224.

Sirat, M. and Ghazali, S. (1999), *'Globalisation of Economic Activity and Third Worlds Cities: A Case Study of Kuala Lumpur',* Kuala Lumpur, Utusan Publications.

Sklair, Leslie (1997), 'Social Movements and Global Capitalism: The Transnational Capitalist Class in Action', *Review of International Political Economy* 4, no. 3 (Autumn): 514-38.

Sklair, Leslie (2005), *'The Transnational Capitalist Class and Contemporary Architecture in Globalizing Cities',* Joint Editors and Blackwell Publishing Ltd.

Sklair, Leslie. (2006), 'Iconic architecture and capitalist globalisation', *City* 10.1.

Smith, N. (2002), 'New globalism, new urbanism: gentrification as global urban strategy', *Antipode* 34(3), 427-450.

Soja, E. (1989), 'Economic restructuring and the internationalization of the Los Angeles region', *In* J. Feagin and M.P. Smith (eds), *'The Capitalist City'*, Cambridge, Mass.: Blackwell.

Spaans, Marjolein (2004), 'The Implementation of Urban Regeneration Projects in Europe: Global Ambitions, Local Matters', *Journal of Urban Design*, Vol. 9. No. 3, 335–349.

Stanley, B. (2003), 'Going Global' and Wannabe World Cities: (Re) conceptualizing Regionalism in the Middle East, Westport, CN: *Praeger*, 151-70.

Stappers, P.J. & Hennessey, J.M. (1999), 'Toward electronic napkins and beermats: Computer support for visual ideation skills', *In*: Paton, R, & Neilson, I. (Eds) *Visual Representations and Interpretations.* Springer, Berlin, 220-225.

Statistical Year book, (1984), Dubai Municipality.

Statistical Year Book (2003), Dubai Municipality.

Statistical Year book, UAE (2004), Ministry of Planning, Abu Dahabi.

Statistical Year book, UAE (2005), Ministry of Planning, Abu Dahabi.

Stensgaard, Anne Birte (2005), 'Dubai Internet City and Dubai Media City communities set for huge growth', http://www.ameinfo.com, accessed on 11.4.2006.

Stephen, Sharp, (2006), Aberdeen site will set new standards in the 'home of golf',
    Scottish enterprise, http://www.scottish-enterprise.com/sedotcom_home/news,
    accessed on 22.11.2006.

Strange, Suzan. (1996), *'The Retreat of the State: The Diffusion of Power in the World
    Economy',* Cambridge: Cambridge University Press.

Strauss, A. and Corbin, J. (1998), *'Basics of Qualitative Research, Techniques and
    Procedures for Developing Grounded Theory'*, Sage.

Swyngedouw, E. (1997), 'Neither global nor local: glocalization and the politics of
    scale,' pp. 137 – 166 *In* K. R. Cox (ed.), *Spaces of Globalisation: Reasserting the
    Power of the Local,* New York: The Guilford Press.

Swyngedouw E. Moulaert F. and Rodriguez A. (2002), *'Neoliberal Urbanization in
    Europe: Large-Scale Urban Development Projects and the New Urban Policy',*
    Blackwell.

Taylor, Julian, (1998), Can Dubai Survive the Global Challenge? Bent Business
    Network, Middle East, The, Nov, 1998 http://findarticles.com/p/articles, accessed
    on 28.1.2005.

Taylor P. J. (1997), 'Hierarchical tendencies amongst world cities', *Cities*, 14, 323-32

Taylor, P. J. (1999), So-called 'world cities': the evidential structure within a literature.
    Environment and Planning A 31.

Taylor, P.J. (2003), *'World City Network: a Global Urban Analysis'*, London: Routledge.

Taylor, Peter J., Jonathan V. Beaverstock, Michael Hoyler and Kathryn Pain (2001),
    'Comparing London and Frankfurt as world cities**:** A relational study of
    contemporary urban change', Anglo-German Foundation for the Study of
    Industrial Society .

TEN real estate home page,
    http://realestate.theemiratesnetwork.com/developments, accessed on 25.5.2007.

The Daily Al Bayan Archives unpublished data.

Thornley, A. (2000) 'Strategic Planning in the Face of Urban Competition', *In* Salet, W.
    and Faludi, A. (ed.), *The Revival of Strategic Spatial Planning. Proceedings of
    colloquium.* Amsterdam: Royal Netherlands Academy of Arts and Sciences.

Thrift, N. and Leyshon, A. (1994), 'A phantom state? The de-traditionalization of money,
    the international financial system and international financial centres', *Political*

Geography 13. 299-327.

Todd, G. (1995), 'Going global' in the semi-periphery: world cities as political projects: The case of Toronto', *In* P. Knox and P. J. Taylor eds., *'World Cities in a World-System',* New York: Cambridge University Press.

Tombesi, Paolo. (2003), 'Globalisation and Architectural Practice - Special issue of UAE', Conference Report: 39th International Planning Congress, held 17 -22 October 2003, Cairo.

Tomlinson, Alan (1996), 'Olympic spectacle: Opening ceremonies and some paradoxes of globalisation', *Media, Culture and Society* 18 (4): 583–602.

Torres, Raymond (2001), 'Towards a socially sustainable world economy: an analysis of the socialpillars of globalisation', Geneva: International Labour Office.

Transparency International Corruption Perceptions Index (2003), Berlin: Transparency International.

Trevor, Boddy. (2005), 'Portal Cities: Emerging urbanism and Architecture in Hong Kong, Miami, Vancouver, Dubai and Panama City', *SUPS* 8, Sharjah.

Tsenkova, Sasha, (N.D) 'Cities in a Globalizing World', http://www.ucalgary.ca~tsenkova, accessed on 15.3.2007.

Ullrich, Fichtner. (2006), 'Las Vegas in the Arabian Desert', Spiegel Online International, http://www.spiegel.de/international/spiegel, accessed on 21. 1. 2007.

UNCHS, (United Nations Centre for Human Settlements), (1996), *An Urbanizing World.* Global report on human settlements, Oxford University Press.

UNCTAD, (1995), 'Strategies for UAE's Integration in the World Economy, Geneva, United Nations Conference on Trade and development.

UNCTAD, (1999), 'World Investment Report 1999: Foreign Direct Investment and the Challenge of Development', New York: United Nations Conference on Trade and Development.

UNCTAD, (2003), 'Building Confidence in Commerce and Development'.

UNESCO, (2001), *The State of Science and Technology in the World 1996–1997*, UNESCO Institute for Statistics.

UNESCO, (2002), 'Globalisation, Drugs and Criminalisation: Final Research Report on Brazil, China, India and Mexico', UNESCO, Available at UNESCO's Website http://www.unesco.org/most/globalisation/drugs_1.htm, accessed on 16.3.2006.

United Arab Emirates, (2005) 'Introducing the top investor in Dubai property',
http://www.ameinfo.com, accessed on 11.5.2005.

Urry, J. (2000), *'Sociology Beyond Societies: Mobilities for the Twenty-First Century'*,
London: Routledge.

Van Brabant, J. M. (1994), 'Trade, integration and transformation in Eastern Europe',
Journal of International Affairs, 48, (1), pp. 165-92.

Van den Berg, L and Braun, E. (1999) 'Urban competitiveness, marketing and the need
for organizing capacity'. *Urban Studies,* 36, (5-6), 987-999.

Van Naerssen, Ton (2000), Cities and the Globalisation of Urban Development Policy,
Globalisation and development studies, Rozengracht 176A, 1016NK Amsterdam,
The Netherlands.

Wade, Robert (2003), *'Governing the Market'*, Princeton University Press. Second
Edition.

Warrack, Allan. (1993), *'Megaproject Decision Making Lessons and Strategies'*, Western
Centre for Economic Research, University of Alberta, Faculty of Business,
Edmonton, Alberta.

Warrack, Allan A. & Dale, Lynne (1982), 'Megaprojects and small communities: Do
they mean progress? Small Town.

Weiss, L. (1997), 'Globalisation and the myth of the powerless state', *New Left Review*
Sep–Oct 225: 3–27.

Weiss, L. (1999) 'Managed Openness: Beyond Neoliberal Globalisation', *New Left
Review,* Nov–Dec 238: 126–40.

Went, Robert (2002), *'The Enigma of Globalisation: A Journey to a New Stage of
Capitalism',* Routledge, London.

White, J. W. (1998), 'Old Wine, Cracked Bottle? Tokyo, Paris, and the Global City
Hypothesis', *Urban Affairs Review*, 33(4), pp. 451-477.

Whitson, D. and D. Macintosh (1996), 'The global circus: international sport, tourism,
and the marketing of cities', *Journal of Sport and Social Issues* 20 (August),
278–95.

Williamson, J. (1993), 'Democracy and the Washington Consensus', *World
Development,* 21, (8), pp. 1329-1336.

Williamson, J. (1994), '*The political economy of policy reform*', Washington, DC:

Institute for International Economics.

Wong, Hazel W. S. (2001), 'Planning and Architecture, The Emirates Towers' *In*: Council On Tall Buildings And Urban Habitat – orgname, *'Tall Buildings and Urban Habitat: Cities in the Third Millennium',* Spon Press, New York.

Woods, Ngaire (2003), 'The United States and the International Financial Institutions: Power and Influence within the World Bank and the IMF *In:* '*Foot*', MacFarlane & Mastanduno (eds.), US Hegemony and International Organizations.

World Tribune, (2007), 'Gulf states see trouble ahead; defense spending spikes', January 15, 2007.

WTO, (2000), 'Trade, Income Disparity and Poverty', Geneva, Switzerland: World Trade Organization.

Wu, C. L. (1989), 'Taxation of land and buildings', *in*: Ho, H. C. Y. and Chau, L. C. (Eds) *The Economic System of Hong Kong*, pp. 228– 242. Hong Kong: Asian Research Service.

Wu, F. (2000) 'The global and local dimensions of place-making: remaking Shanghai as a world city', *Urban Studies* 37(8): 1359-1377.

Wu, F. (2003), 'The (post-) socialist entrepreneurial city as a state project: Shanghai's reglobalisation in question', *Urban Studies,* 40:1673-1698.

Wu, F. (2005) *Globalisation and the Chinese City*. London: Routeldge.

Yeung, H. W. (1998), 'Capital, state and space: contesting the borderless world. Transactions', *Institute of British Geographers* 23, 291–309.

Yin, R. K. (1984), *'Case study research',* London, Sage.

Yin, R. K. (2003), *'Case study research: Design and Methods, Applied Social Research Methods Series'*, Valium 5, Thousand Oak, CA, Sage.

Zahran, M. (1979), 'Validity and illusions in Architecture', Beirut: Beirut Arab University.

Zukin, S. et al. (1998), 'From Coney Island to Las Vegas in the urban imaginary: discursive practices of growth and decline', *Urban Affairs Review,* 33, pp. 625–653.

Zunes, Stephen (2006), 'The Dubai Ports World Controversy: Jingoism or Legitimate Concerns?' March 13, 2006, http://www.fpif.org/pdf/papers/0603ports.pdf, accessed on 26.7.2007.