THE GROWING PAINS OF GLOBAL CITIES

STRUGGLES IN THE URBAN ENVIRONMENT OF DUBAI AND SINGAPORE

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ABSTRACT

This Master's thesis explores the validity of current theories of globalization through the analysis of two prominent second level global cities, Dubai and Singapore. The hypotheses of global homogenization and hybridization are studied according to their prominence and influence on the architecture of the commercial, entertainment and central business districts of these two cities.

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INTRODUCTION I.

"Nothing will be done anymore, without the whole world meddling into it."
- Paul Valery in Lesourne 1986:103.

"What marks out the successful city is the sense of the possible."[1]

As the second millenium draws to a close, the elusive subject of globalization has placed a new focus onto the plight and development of cities and society. With the concretization of the global economy at the beginning of the 1980's, many different scholars have rushed to evaluate the effect it has had on social culture and architecture. The intent of this thesis is to question the validity of their hypotheses through the analysis of two global cities, Singapore and Dubai. The mutual interest towards the propagation of globalization and local culture and tradition by the governments and designers of both these cities have made their urban developments a representation of increasing complexity and confusion in the global environment. The reasons for the perpetuation of local culture in these global cities, as will be discussed later, have undoubtedly influenced the ultimate extent of its representation.

Just as the demands of the industrial age in the late eighteenth century and early nineteenth century transformed the built environment of Europe and America, there is once again, at the end of the twentieth century, a new, denser urban skyline that can be witnessed in cities across the globe. The factory smoke stacks and chimneys that were the physical representations of a new means of manufacturing have now been replaced in the post-industrial, post modern city by the overabundance of ambitious skyscrapers differentiated only by their corporate logos. These overwhelming statements of corporate wealth, economic power and advanced systems of engineering do not only signify the success and wealth of private institutions, but a new political, economic, social and urban environment. As commented by Deyan Sudjic, the 80's was the

[1] Deyan Sudjic, The 100 Mile City. (London: Andre Deustch Limited, 1992), 103.

decade in which the industrial city mutated from its nineteenth century self into a new species.[2]

In the past two decades, the world's economic activity has entered a period of significant transformation. The rapid growth in the world's population and the dramatic changes in the world's economic system have forced and created new parameters for cities to operate within the urban scale. These interrelated developments in the urban world have encouraged the expeditious growth of what is now known as globalization. In the 1980's the fall in the prices of primary commodities led to a decline in the role of material resources in production. Industrially advanced economies shied away from the production of material inputs. This in turn was accompanied by the rise in the internationalization of capital as the driving force in the world economy. Capital mobility became an integral part in the new international division of labor (NIDL). Cities now played crucial roles in the interconnected network of multinational firms and cities.[3]

The 1980's also witnessed significant technical developments. Innovations in micro-electronics and communications altered the structure of telecommunications, bringing in a new era of information technology. These advances in telecommunications also expanded the transborder trade of services. Capital, products and services now easily transcend national boundaries. This is made all the easier through deregulations and product innovations, foreign direct investments, international currency and the securitization of finance.[4] Direct foreign investments have allowed for an internationalization of economic activity. The transformation of different types of financial debts and assets into marketable instruments has been the driving force for the massive expansion in the overall volume of the financial markets. The world is becoming a more coherent and integrated whole through globalization of its economy and social activity. Yet it is also simultaneously becoming more dispersed with the relocations of many industries of production into cities of greater distances, with the greater transferals of labor. Place and distance have been

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[2]ibid., 8.

[3]Fu-chen Lo and Yue-Man Yeung, Globalization and the World of Large Cities. (Tokyo: United Nations University Press, 1998), 133.

[4]Saskia Sassen, The Global City. (Princeton: Princeton University Press, 1992), 67-70.

fundamentally altered through globalization and the complex and intense networks of human interactions across-borders.[5]

Prior to the development of this new economic system, the majority of the financial markets were geared towards domestic investors and were subject to considerable foreign exchange controls. In the past couple of decades, these new changes in the economy have placed new pressures on cities to play an active and strategic role within the global environment. According to Saskia Sassen, a leading scholar on globalization, to function and succeed within the world economy as global cities, they now need to operate in four new ways.[6] First, they have to become concentrated command points for the distribution of the world economy. Between 1986 and 1989, they accounted for eighty percent of the world's capitalization. Secondly, these specific urban nodes are also the key sites for the location of finance and specialized service firms. They house a disproportionate number of the world's headquarters of transnational corporations (TNC's)[7] and international institutions. Thus, as a result, they experience a rapid growth in the business-service sector. Thirdly, global cities also serve as sites for product innovations and production, in addition to providing the markets for these products. Lastly, as hosts of the critical players of the world economy, they are also a springboard to further economic and cultural developments that can now have far-reaching global repercussions.

Another function of global cities, left relatively unexplored by Sassen is their role as poles of international tourism. Hamilton Tolosa explains that a considerable part of their urban development is focused on entertainment industries, luxurious lodgings and airport facilities.[8] These cities have everything to do with circulation, movement and power. Since they accommodate an increasingly mobile and transient global community, they have also become major transportation nodes not only for their countries, but their surrounding regions.

This new speed and intensity so characteristic of new technology and the current economic system have encouraged an alternate vision and focus in the urban

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[5]Ankie Hoogvelt, Globalization and the Post Colonial World. (Baltimore: John Hopkins University Press, 1997), 114.

[6]Sassen, Global City, 166.

[7]TNC's are considered to be any firm that owns or controls income generating assets in more than one country. [This definition is taken from Henry Wai-Chung Yeung, Transnational Corporation and Business Networks. (London: Routledge, 1998), 1.]

[8]Hamilton C. Tolosa, "Rio de Janeiro as a world city," in Fu-chen Lo and Yue-Man Yeung, Globalization and the World of Large Cities. 214.

development of the global cities. The increase in highly skilled workers and the expansion of multi-national corporations are creating demand for a certain building type - the office building, more specifically the corporate high rise. This has involved massive rebuilding, rehabilitation and refurbishment of existing office space in addition to extensive new construction. In Los Angeles, between 1972 and 1982, thirty million square feet of office space was constructed, a fifty percent increase in ten years. Diverse urban centers have been cleared for new office space and other various forms of 'cultural' consumption to provide for the global population. Infrastructures of advanced telecommunication have been built and improved extensively to facilitate a computer literate workforce. The intent, ultimately, is to create an extraordinary environment to attract new investments and headquarters of multi-national corporations. So much so that the new skyscraper office buildings attempts to lift the urban identity of a city from the modern to the spectacular.

As the influence of the global economy continues to expand, the competition between cities also becomes more acute. The constant drive and effort to draw geographically mobile finance inevitably changes the priority and focus of development. This notion is expanded by Manuel Castells and Jordi Borja. They present that the process of globalization and the informationalization of the processes of production, distribution and management, are greatly changing the spatial and social structure of societies all over the world.[9] Yet it is important to note that while globalization is a new creature, the changes in the urban environment still have to occur within the fractures and shifts of existing development. While these new and extensive urban developments may not yet engender a completely new and altered social urban geography, they are, nevertheless, making their mark within the existing spatial patterns of cities. Globalization is not and cannot create a new urban entity overnight. Nevertheless, global pressures are forcing a new intensity and focus on the urban development of cities.

Sassen proposes that the redevelopments of waterfronts, the increases in hotel construction and convention complexes, large scale commercial, retail and residential developments all have to do with this global transformation. Her analysis is justified. This is extremely evident of the types of projects that are under construction currently in numerous cities, such as Hong Kong, Singapore, London, Seoul, San Paulo and

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[9]Jordi Borja and Manuel Castells, Local and Global. (London: Earthscan Publications Ltd., 1997), 16.

Dubai. Local governments are forced to search for a balance to accommodate local needs with those of international finance. However, this in many cases is becoming a very uneven struggle. The central areas of many cities have come into the control of the international property market. In the 1980's, New York and London land prices were increasingly unrelated to conditions of the overall national economy.[10] Thus, global theorists are increasingly confident in their argument. They concur that urban form in the last two decades has been driven purely by the spatial reorganization in support of economic activity. This is supported by the mere fact that different cities are showing the same concentration of function in central parts of the city.

Sassen's argument continues with the advocation that this space in the city is now dominated by an overwhelming corporate culture.[11] This is perhaps understandable since the high costs of telecommunication networks and their infrastructure can only be maintained and supported at specific nodes in the global network. While the number of cities that can sustain this type of development is expanding, it nevertheless requires financial firms that are involved in the greatest exchange of information to be located in these specific cities to make this form of investment worthwhile.

Since regional branches of transnational corporations tend to settle in the cities that offer them the greatest access to information and various facilities, this inevitably creates a competitive ranking of the cities that are most appropriate for global developments. John Friedmann was the first to suggest a hierarchical relationship between the different global cities. This ranking set London, Tokyo and New York apart in a league of their own as *global financial institutions*. Los Angeles, Singapore, Hong Kong, Frankfurt and Dubai can be considered *multinational articulations*. While Paris, Mexico City and San Paulo are *important national articulations*.[12] There are three levels of global cities, the international or global, the subglobal or regional hub and the ordinary world city. Singapore, Hong Kong and Dubai have sub-global status as they serve as central points in the exchange and transfer of information.

This listing, however, is not rigid. Cities in time may become more significant or less important in the global network depending on their focus, interests and

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[10]Sassen, Global City, 186.

[11]Saskia Sassen, "Analytic Borderlands," in King, Anthony, ed. Re-presenting the City. (New York: New York University Press, 1996), 191.

[12]John Friedman, "The World City Hypothesis," Development and Change. v. 17 n. 1, 69-83.

economic situations. Cities do not merely grow in importance because of their demographic weight but instead their ranking in the global economy is evaluated by the number and range of functions they can individually perform within the global economy that would eventually affect the entire network of nodes. "The collation of the different functional networks of a city serves to define the city's external linkages with the world economy and its status within the world city system."[13] Hence, a city grows in importance when it can perform effectively numerous key functions that another city cannot. This becomes evident, as cities invest heavily to improve physical infrastructures to forecast and accommodate the possible increase in traffic and telecommunication needs. Hong Kong, Osaka and Singapore for example have all recently completed extensive construction of airports to provide for the anticipated increases in transnational traffic in the next few decades.

All these technological and economic changes are inevitably going to affect the analysis, perception and form of the city. The effects of globalization on urbanity and society inevitably address deeper issues of culture, tradition and identity. Ayse Oncu and Petra Weyland write that "space is never 'empty' but always culturally inscribed with meaning."[14] This is because the urban environment does not only address the culture and beliefs of a society, but it actually constitutes much of its social and cultural existence. Society to a considerable degree is represented through the spaces it creates.[15] For it serves as an imprint of what was, what is and what is to come.

In the global city, the urban environment and built form in the central business districts are the clearest representations of the effects and pressures of globalization on society, culture and architecture. Spatial changes based on the ongoing evolution of the economic and social character of the cities are most often expressed through the change in land use now dominated by the new industries. While the representation of cultural identity has always been a critical influence in the development of cities, the apparent homogenous and technical guise of globalization has increased the complexity in the reading of the city. However, delineations of urban space still serve as an important and fascinating indicator of the direction and focus of local governments and society, especially when roused with such powerful global influences. This is evident in the

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[13]Yue-man Yeung and Fu-chen Lo, "Globalization and the World City Formation in Pacific Asia," in Globalization and the World of Large Cities, 141.

[14]Ayse Oncu and Petra Weyland, eds. Space, Culture and Power. (London: Zed Books, 1997), 14.

[15]Anthony King, "Architecture, Capital and Globalization of Culture," in Featherstone, Mike, ed. Global Culture. (London: Sage Publications, 1990), 404.

analysis of Singapore and Dubai, the two cities that I have selected to study. Even within the very controlled environment of the global economy, the ability of local interests to manipulate space and design remains very prevalent.

Many different scholars have theorized on the effects these new global pressures have placed on the urban make-up of the city, society and culture. It is undeniably a very far reaching phenomenon. However, it is equally important to note that in formulating a uniform global theory, not everyone is equally affected by globalization and the global economy. The diversity that has colored the world in the past is still present in the world today, despite the growing presence of global uniformity. Therefore, among the numerous global scholars, there are equally numerous theories that have been proposed.

Saskia Sassen presents a very distinct, decisive image of the global city. She adamantly believes that there have been significant changes in the cultural, urban and spatial organization that parallel the developments in the economy. This transformation of the urban environment is one that has unified the form of global cities.[16] This notion is supported and developed further by Arif Dirlik through his references to Frederic Jameson and David Harvey in his writing. Global capitalism, he perceives, is representing the further deterritorialization, abstraction and concentration of space and capital. Global capitalism has reached new heights in penetrating of local society by global influences and the financial culture. So much so, he argues, that the need for the local to be defined in 'traditional' terms is becoming less relevant and unnecessary than ever.[17] This interpretation of globalization is perhaps taken to the extreme by Deyan Sudjic, who boldly argues that global cities like, "Paris and London now have much more in common with each other than they do their respective nations."[18]

This analysis is heightened by the introduction of technology, media and advancements in telecommunications. New developments in telecommunications, such as satellite transmission and fiber optics can now transfer huge amounts of information across the globe, almost instantaneously. Global communication in the form of the television has been crucial in bringing people instantaneous images of distant activities,

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[16]Saskia Sassen, "Rebuilding the Global City," in Anthony King. Re-presenting the City, 28.
[17]Arif Dirlik, "The global in the local," in Wilson, Rob and Wimal Dissanyake, eds. Global Local - Cultural Production and the Transnational Imagery. (Durham: Duke University Press, 1996), 28.
[18]Sudjic, The 100 Mile City., 5.

peoples and events. This inevitably widens and relativizes local experiences.[19] There has been a democratization and popularization of forms of knowledge, images and cultural production and dissemination which may have been previously monopolized or controlled by certain groups.[20] This is once again leading to the homogenization of cities.

This theory of the uniform appearance of globalized urban development is also aided by steeper land prices and the rehabilitation of marginal areas as well as the central districts of global cities. Built on these sites are a distinct series of socio-spatial forms that are arising out of global pressures. These are the flashy commercial and retail projects, hotels and convention centers. The agglomeration of these high rise corporate offices and luxury shopping centers, imbued with the neutrality of technology and built by world-name architects are homogenizing the urban form of cities, according to Sassen, despite great variations in history and culture. This is an inevitable wave of development since homogenous quality of the global corporate techno culture is so overwhelming. Examples of such developments are numerous and more often globally connected to the same players. They are modeled after each other. These urban developments in the various cities are almost always created with implicit internationalization strategies in mind, often supported by local governments. "A city that aims to be a world financial center makes deals with Olympia and York and Kumagai Gumi, welcomes Citibank," and other transnational corporations and international banks, and "transplants Cesar Pelli as well as Skidmore Owings and Merill and Kohn Pederson Fox."[21] More importantly perhaps, this new intensity of development is designed to represent a universal "urban utopia" for the twenty-first century.[22] The flood of such developments can be seen in New York in Battery Park and Times Square, Docklands and Canary Wharf in London, Makuhari Messe, Teleport City and in Tokyo itself, along the coast in Vancouver[23] and in the Pudong

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[19]Alan Scott, ed. The Limits of Globalization. (London: Routeldge, 1997), 259.

[20]Mike Featherstone, "Localism, Globalizm and Cultural Identit," in Wilson, Rob and Wimal Dissanyake, eds. Global Local. 59.

[21]Sharon Zukin, "The City as a Landscape of Power," in Budd, Leslie and Sam Whimster, Global Finance and Urban Living. (London: Routledge, 1992), 204.

[22]K. Olds, "Globalization and the Production of new Urban Spaces," in Environment and Planning A. 27 (November, 1995), 1713-1743.

[23]Vancouver's development along the north shore of False Creek is to be completed in ten to twelve years. It will provide 8500 residential units, 650000 square feet of retail space and 1.76 million square feet of office space and 600000 square feet of hotel space. This project will cost three billion Canadian

area[24] in Shanghai. It is interesting to note that despite the obvious differences between the cities listed above, their new landscape of corporate and economic power is strikingly similar, with the same tall, ambitious silhouettes. This desire to emulate is found in the need to stay abreast with the hundreds of millions of square feet of office space and entertainment facilities that other global cities may already have. And so it seems that the shape of great cities at the close of the twentieth century is determined and restricted only by economics and market tolerance.[25]

The possible homogenization of global cities is also influenced by an increase in mass migration and in a capitalist transnational population. These people symbolize the accelerated momentum of globalization. While extensive migration from more disadvantaged countries into all of the global cities has been increasingly restricted, it does nevertheless, exist. Cities like Dubai have seventy-five percent of their population made of migrants and other transnational population. In this increasing circulation of different ideas, cultures and traditions within cities, supposedly a new globalized culture is being forged.

While there is some validity in the analysis of a homogenous urban development, it does, however, expect the realization of the most extreme consequences of the global economy. Undoubtedly the high rise building is not an invention of global economy. Nevertheless, corporate high rises, proudly displaying all the advancements of technology have become the benchmark of globalization. Many of the buildings from New York to Singapore to Dubai to Tokyo seem interchangeable. This type of architecture constantly increasing in complexity, is made possible only through the development of advanced technology. Technology however, is cultureless and its neutrality gives it a greater sense of homogeneity. This is especially true when built by the same architect from city to city. Yet this theory of global homogenization extends past the skyline of the city to society and culture. Here it allots too great a power to the phenomenon of globalization to distort centuries old

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dollars. This project like Shanghai's Pudong area will offer the finest communication and electronic monitoring systems. This will be North America's first fibre optic community.

[24]The Pudong Area of Shanghai over the next three to four decades will be transformed into a financial services center. The first stage of development is estimated to cost approxiamately ten billion dollars. An amount that will swell to seventy to eighty dollars upon completion. Money for this project has been raised world-wide. Designs for this area have been awarded to a multitude of international designers. Richard Rogers being one of them. [taken from - K. Olds, "Globalization and the Production of New Urban Spaces," Environment and Planning A. 27 (November, 1995), 1713-1743.]

[25]Sudjic, 100 Mile City., 44.

beliefs, traditions and constructs. The transnational corporate and migrant population have served to perhaps widen the cultural sensibilities and options within the global city. However, this should not assume the inevitable consumption of local forces and traditions by global influences. This would be a rather limited interpretation of globalization and the entrenched power of culture. It greatly underestimates the importance that local cultures and ethnicities continue to play even within the global city. In the examples of Dubai and Singapore, not only does this become evident in the propagation of cultural activities by the government and its people but it also becomes clearly visible in the forms of architecture and urbanism.

There are, however, other scholars, who concur with the economic effects on global cities yet disagree with Sassen's vision of urban, social and cultural homogeneity. They question the sense of powerlessness of the local governments, society and culture to react to globalization, leaving no choice but to be consumed by it. They doubt the possibility of a city to transform so completely by economics that it only speaks of abstract financial processes and consumption. Instead they propose that society in global cities is becoming more multi-polar and multi-cultural. National and international migration and a greater flow of an educated transient population have led to an interpenetration of diverse populations with dissimilar ways of life. Mike Featherstone agrees with this analysis. He maintains that to see globalization as a process that would transform the world into one place is to misunderstand the nature of the globalization process and to give it a false sense of unity.[26] Instead there is a potential for a variety of possibilities to occur. He acknowledges Sassen's position. The deregulation of markets and capital flow can produce a degree of homogenization. There are points of convergence in the lifestyles, habits and practices of various groups of professionals. He entertains the possibility of a global culture, a transnational culture or third culture, wherein sets of practices, knowledge, conventions and lifestyle are increasingly independent of nation-states and national boundaries. Yet the unification of all the world's cultural diversity into one single culture seems unreasonable and unlikely to Featherstone. Instead he supports the notion of global cultures in plural. While territorial cultures are not disappearing, there is perhaps the growing need in some cases to seek new systems and structures to relate to the global media, technology and economic presence. For Featherstone, it is important to note

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[26]Featherstone, "Localism, Globalism and Cultural Identity," 60.

that globalization is not necessarily a one way process and does not necessarily come from a single source.

This in turn leads to the issue of hybridization. With national borders becoming more permeable and with the constant evolution of national identities combined with the increased traffic and transfer of global influences, Ayse Oncu and Petra Weyland argue that we are witnessing is a process of *creolization* and *hybridization.*[27] Ulf Hannerz has focused a considerable portion of his work on the subject on cultural creolization in the global ecumene. He believes in the capacity of the world system to shape culture. For him the cultural processes of creolization are not merely a constant pressure from the center to the periphery, but instead a complex and creative interplay.[28] Hybridized cultures are created from multi-dimensional cultural encounters and possess the ability to mediate and reconstruct images and guiding influences in new ways.

It is undeniable that the subject of global culture and its physical manifestations in urban form and architecture is huge and complex and perhaps too ambiguous to fully grasp at the present stage. Many scholars have attempted to make sense of the developments in the new global environment. While all the global theorists may not agree on the extent of change in the urban environment and its architecture, they, nevertheless, almost all agree that globalization is altering the city and our perceptions of it.

When considering the effects of globalization on the urban environment, it is important to recognize that this is a phenomenon that has taken rapid flight only over the past twenty to thirty years. While it is already becoming an even greater force, it is not as yet an omnipresent phenomena. Therefore, with the effects of globalization only being felt over the past twenty years, it seems premature to suggest that any true form of hybridization is occurring. This is not an occurrence that can evolve hastily. The complexity of different cultures, influences and images cannot be so easily dissected, merged or incorporated. While cultural interactions are undeniably greater now, creolization can only occur if those in power in global cities represent that diversity, feed from it and nourish it. This theory may however, be realized in future decades as globalization continues to compress time and space and blur differences between cultures and borders.

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[27]Oncu and Weyland, eds. Space, Cultura and Power, 11.

[28]Ulf Hannerz, Cultural Complexity. (New York: Columbia University Press, 1992), 265.

The seemingly stronger appeal of homogenization and the lack of a hybridized global architecture may perhaps be due to the sudden haste and speed with which the global economy and globalization have developed. This has left many cities racing to partake, keep up and lead in the global economy. In the span of just over twenty years, new critical concerns of economy and society have been forced onto urban environments. The leaders of these cities have raced to build the appropriate accommodations for the global economy, if they wished to play a critical role in the future of economic development. Therefore, all global cities, including those in the forefront such as New York, Tokyo and London, have not had the luxury of time to reflect fully on the type and quality of developments. The construction boom witnessed almost worldwide in the 1980's did not allow for critical distance and contemplation as land prices drastically increased. Global cities did not only feel the pressure of development within their own country and region but also from the competition of other cities worldwide. Therefore, to copy what already existed in other leading cities was perhaps in haste easiest. Technology and the standardization of parts also allowed for greater ease and speed of construction. The look and appeal of modernity was and perhaps still is another explanation for the success of homogenization of the urban environment in the business districts of most global cities.

Sassen's analysis, however, does not take into account the multiple facets of culture, identity, language, customs and habits that also contribute to the unique character and culture of cities and the people who live in them. These elements remain very powerful in defining a city, its culture and identity and making it livable for its local people. Therefore, "we need a theory of culture at the level of the international which is sensitive to the ways in which identity is constructed and represented in culture and social relations."[29] Beneath the apparent neutrality of glass and steel, there is an effort by the people who live in the city to claim the space, to reevaluate and redress it with an identity and culture that is their own. "In the face of globalization and the transcending power of the media, the role of architecture in place making has been questioned."[30] Dubai and Singapore, as second level global cities, have exemplified the promotion of their own cultural ideals in the formation of their

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[29]Janet Wolff, "The Global and the Specific," in King, Anthony, ed. Culture, Globalization and the World System. (Minneapolis: University of Minnesota Press, 1997), 171.

[30]William Lim and Tan Hock Beng, The New Asian Architecture. (Hong Kong: Periplus Editions, 1998), 12.

architecture and urban development. Thus, what is perhaps occurring in global cities currently is a deviation from the theories of global homogenization and a turn towards the cultural sensitivity that marks the theories of hybridity.

This attempt to redirect the urban environment from the purified global image may become an even greater force with the recent calming of the economy within Asia. Cities like Dubai in the Middle East will also be running out of their oil surplus that has allowed them to build as fast as they have, within the past twenty to thirty years. This forced decrease in the pace of construction may perhaps allow for a greater reflection on the development thus far as the first wave of globalization comes to pass. In the past few years, planners and architects of Dubai have been raising issues of concern about the direction of their urban development. They are beginning to question what their city presently says about the Arab culture of its people. Yet this dilemma is not unique to Dubai alone. There seems to be a an awareness amongst the planners and designers in global cities of the need for a critical reflection on the message of the architecture and urban developments of their cities.

The theories of global homogeneity as described by the various global theorists have yet, as a result, to become the true unifying force that they deem of globalization. What "we have [is] a globalizing but not necessarily homogenous culture."[31] Instead there is an increasing effort in global cities to claim back their environment from the abstract world of global finance and to mark it with elements they consider their own cultural heritage and identity. This phenomenon is visible in as varied cities as Dubai and Singapore. Both cities turn to familiar aspects of their traditional architecture and cultural beliefs to symbolize their local influences even within the environment of globalization they so adamantly support.

The decision to use Singapore and Dubai as case studies in the analysis of these various theories on globalization is motivated by to several reasons. Both are leading second tier global cities that are constantly attempting to push their own limits in all aspects of social, cultural, urban and architectural developments. Their unique cultural complexity is even more poignant when set against the extreme speed with which they both evolved. Their conception as modern cities has been formulated solely during the rise and establishment of the global economy. As urban settlements, they were minimal in size and significance even up until the 1970's. The boom that has occurred

[31] Janet Abu-Lughod, "Going Beyond Global Babble," in King, Anthony, ed. Culture, Globalization and the World System, 135.

in both these cities has been absolutely phenomenal, turning them from underdeveloped cities to second level global cities, a notch below the global giants, London, Tokyo and New York, in a couple of decades. If one is to evaluate the conditions of the urban environment under the pressures of globalization, there are few other cities that so purely display the constructs of global economy as Singapore and Dubai do, essentially because of their youth and drive.

. While the residents of these cities are proudly from very different cultures, traditions and backgrounds, they are all similar in their thirst to partake and succeed within the global economy. Singapore and Dubai have been extensively planned to accommodate this function through the facilities they offer, the companies they host and their infrastructure. Singapore, for example, serves as hub for several functional networks, such as imports and exports, telecommunications, international airlines and international finance. Its continued growth and success as a hub city is not only vital for itself but also for the region as a whole. Its rapid and effective transition away from its initial basic manufacturing activities towards a greater reliance on tertiary and quaternary sectors of the economy, has made it a model in effective development policy. Its push to gain world city status by developing various strategies to lure operational headquarters and multinational corporations has proven to be a successful. Reuters, Union Carbide, Matsushita, Hitachi, General Electric, Toshiba Nixdorf, Nomura and Data General are all located in Singapore.[32] By the end of 1996, one hundred and forty-nine commercial banks were located in Singapore, only twelve of which were local.

These forms of globalized development are similarly visible in Dubai. Dubai's pace of development after the creation of United Arab Emirates and the discovery of oil is unsurpassed. In two decades, Dubai has turned from a small fishing village and port to a city that is leading its region in superior telecommunication facilities, infrastructure and global finance. The size of the economy measured by the nominal GDP has grown more then twenty-two folds in the course of just over twenty years.[33] Over fifty local and international banks are now headquarters in Dubai. The demand for commercial property in Dubai has become so great that despite non-stop construction, the cost of

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[32]Fu-Chen Lo and Yue-Man Yeung, Emerging World Cities in Pacific Asia. (Tokyo: United Nations Press, 1996), 437-438.

[33]Edmund Ghareeb and Ibrahim Al Abed, eds. Perspectives on the United Arab Emirates. (London: Trident Press, 1997), 213.

rent in many areas have reached unprecedented levels, putting Dubai on par with London.[34]

The role of Dubai and Singapore as global cities are heightened by their ports that are vital in the transportation and shipping of goods worldwide. Dubai's port places in the top twenty-five. Although Dubai may not seem initially to have a significant geographical advantage, it has been extremely effective in attracting major container operators to use them as a hub port for transshipping cargo to feeder ports. Singapore, meanwhile, has the busiest port in the world in terms of tonnage. It is a focal point for three hundred and sixty-six shipping lines with links to over six hundred other ports.[35] Singapore's and Dubai's significance as global cities is also heightened by their advocation of technology in urban development. Their infrastructure and telecommunication abilities are constantly expanded and refined. Singapore plans by the year 2000, to become the world's first digitized society.

Their roles as global cities have opened them up to a host of new and foreign images and ideals, customs and cultures. Yet despite this barrage of global influences, Singapore and Dubai remain extremely protective of their own cultural identity. The population of three million in Singapore, is mainly Chinese, then come the Malays, Indians and a host of other nationalities, each with a very strong cultural heritage. Dubai likewise is equally complex. Its society is divided between a twenty-five percent local Arab population and a seventy-five percent expatriate population made up of people from India, Pakistan, the Philippines, America and the various countries of Europe and the Arab world. The local population, however, minimal, associate itself with a rich Islamic and Bedouin heritage centuries old. This intensity and intermingling between global cosmopolitanism and local ambitions and culture have fostered a heightened duality and complexity in the urban environment of Singapore and Dubai. This is one of the prime reasons for their selection as the case studies for this analysis. The comparison between these two cities, each with their own rich and diverse cultural history and heritage, allows for a more encompassing view of current development.

The another reason is based on their relative youth as modern cities. Their success as global cities has made much of their urban development essentially products of the global economy. This allows for a clearer perception of globalized development, untainted as much as possible by historical influences and developments.

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[34]Diane Darke, Discovery Guide to the UAE. (London: Immel Publishing, 1998), 162.

[35]S. B. Balachandrer, ed. Singapore 1997. (Singapore: Ministry of Information Arts, 1997), 122

As they continue to evolve and expand their roles within the global economy, the pressures stemming from their own individual successes will inevitably become greater. Singapore with its Chinese majority and Dubai with its domianat Arab minority, will continue to struggle as they are now with the appropriate significance and place of culture in their contemporary developments. However, as culture and tradition have proven to be ever evolving constructs, the plight of 'local culture' within these two global cities is becoming an even more complex creation of apparently timeless references and new dogmas. These cities are attempting to propagate two distinct directions of growth, one global and perhaps more homogenous, another more localized and varied. Many would consider the preservation of local culture and the advocation of globalization completely disparate visions for a city. However, as Dubai and Singapore both continue to entice the players of the global economy, they are simultaneously reaching back to their visions of their own culture in the hopes of creating a urban environment uniquely their own.

DUBAI II.

"Almost overnight the greater part of the population has been displaced from traditional rural (and/or maritime) modes of existence to a setting of artificially sustained vegetation, broad boulevards, luxury hotels, 7-11's, Burger Kings, where only a scattering of barasati huts might be found a generation ago,"[1]

In a period of twenty years, Dubai (fig. 1D) has transformed from a small desert enclave to a second level global city. For the Arabs of Dubai, the discovery of oil marked a significant transition in the path of their development as a third world country. Modernization and globalization occurred simultaneously as their entrance onto the world scene coincided with the rise of the global economy. The barasati huts of the local Arabs, made from the leaves of palm trees were soon replaced with curtain wall high rises. Existing port facilities were expanded as was Dubai's role in the global economy. This led to the intense propagation of corporate and commercial highrises, huge and luxurious retail complexes and superior entertainment facilities. A considerable number of these projects were designed and built by North American and European consultants. Foreign architects were invited to Dubai to compensate for the initial lack of local experience but their work also symbolized Dubai's new global appeal and economic success.

This unrivaled pace of development however, placed local Arab culture and traditions in tremendous flux. The minimal size of their population in comparison to the growing throngs of foreign migrant workers in conjunction with the over abundance of air-conditioned glass blocks in a desert environment seemed to make the local Arabs, tourists in their own city. Thus, after two decades of unquestioned development a voice was intensifying within the Arab minority of Dubai who desired the acknowledgment of local Arab culture within their built environment. Their interest was in generating a sense of belonging by replicating through built form, the attributes

[1]Malcolm Peck, The United Arab Emirates: A Venture in Unity. (Boulder: Westview Press, 1986), 66.

of local cultural identity.[2] These physical representations took shape in the urban environment through the manipulation and recreation of traditional architectural elements in building form and facade. Issues of preservation were also addressed. These attempts served to solidify an increasingly fragile cultural identity in an urban environment most intently geared towards all aspects of the global economy.

In the eighteenth century, Dubai was a mere little fishing village, consisting of a small cluster of barasati huts. The village started to grow in 1833, when eight hundred members of the Bani Yas tribe decided to settle at the mouth of the creek. Dubai like Budapest, is a town split in two by a waterway. The people of Dubai initially survived by exporting pearls and dried fish and importing basra rice, sugar, pepper and cereals from India. Wood and cane came from Africa. The pearl and gold trade brought many Indian and Persian merchants to live along the coast of Dubai.

It is in the early nineteenth century that the tribes of the Trucial Coast first encounter the British. The British interest in the Gulf was based on protecting their seabourne trade and prized colony India. Through a series of treaties with the various Shaikhs of the region, they eventually came to control the pearling industry and the rights to oil concessions. This was essentially the extent of their contact with the people of the region. They were not interested in involving themselves with the people and the plight of Trucial coast, despite their presence there. However, in the 1950's the British interest increased tremendously, with the impending discovery of oil. Ironically, while offshore oil was struck in 1966, the British withdrew from the Gulf in 1968 due to worldwide cut backs. In 1971, the creation of the United Arab Emirates, merged the seven Trucial States, Abu Dhabi, Sharjah, Dubai, Ras al Khaimah, Ajman, Umm al Qaiwain, Fujairah into one country ending the separate existence of the Trucial States and a century and a half special treaty with the British.

In the early twentieth century, Dubai was a small town, spanning three kilometers by one kilometer. Aided by the initial success of the pearl trade, a mix of various tribes also settled along the coast. The lack of customs and duties made Dubai an important port in the transshipment of gold and other goods mined elsewhere. Initially, the different tribes lived separately, forming their own quarters. The barasati huts of the prior century, made out of palm fronds, were slowly replaced with houses

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[2]Mohammed Abdullah Eben Saleh, "The use of Historic symbols in Contemporary planning and design," in Cities. v. 15 n. 1 (February 1998), 41-47.

made of coral and stucco with windtowers, a cooling system introduced by the Persian immigrants. Whether people lived in the coastal towns, the mountains or the desert, families and groups were welded together by their tribal background, common religious practices and Arabic language. They ate the same food, wore the same style of clothing. Before the advent of oil, the population formed a rather homogenous society. Their limited 'urbanity' was heightened by the vast expanse of desert around them. In 1943 the first clinic was constructed and three years after that the first bank was built. The Al Maktoum bridge, that connected Bur Dubai to Deira, the two sections of Dubai, was built in 1962. Yet the city still lacked adequate roads, medical services, electricity and sewage facilities.[3] Any form of transportation facilities or communication systems were non-existent.

Dubai's first commercial discovery of oil was made by a US subsidiary of Conoco in 1966, in the Fateh offshore field. By 1990, Dubai in conjunction with Abu Dhabi (the main oil producer within the UAE) were exporting 2.2 million barrels of crude oil per day. Oil revenues increased from six million dollars in the 1960's to sixteen billion dollars in the 1990's. Undoubtedly, Dubai's extraordinary growth has been extremely dependent on the discovery and exploitation of oil. Oil money set in motion an extensive program of modernization and development in Dubai and in the rest of the Emirates.

In 1959, Ruler Sheikh Rashid commissioned John R. Harris and Partners to draw up a town plan. Harris in his final document suggested a height restriction of five stories. This was obviously a proposal that was not followed very closely if considering current development in Dubai today. Nevertheless, this document instigated the establishment of the municipality council to help implement public services and to control building development. This organization was to become highly necessary for the construction boom that was about start in the 1970's. The oil wealth introduced new building materials such as cement, steel, glass and electricity which then brought air conditioners into Dubai, completely revolutionizing the building industry. The windtowers along the Creek that stood so proudly were now dwarfed by the concrete and glass high rises. The new modern shopping centers replaced old souks, once the heart of the city. Wide orthogonal boulevards cut through clusters of

[3]Edmund Ghareeb and Ibrahim Al Abed, eds. Perspectives on the United Arab Emirates. (London: Trident Press, 1997), 11.

barasati huts. The World Trade Center and the Hyatt Hotel Galleria became the new symbols for future development of Dubai.

This intense boom in construction and other facets of the economy brought a sizable number of foreign laborers and workers from Southeast Asia and Eastern Europe to fill many of the new jobs that were being created. Multinational corporations eager to take advantage of the free trade policies adopted by the government sent expatriates to do business in the thriving new economic environment of Dubai. "Commitment to an extremely rapid pace of development accelerated by the mid-1970's led to nearly unchecked growth in the number of foreigners. Europeans and Arabs from other countries beyond the Gulf did work that the Emirians were not trained for, and Asians did the kind of work that natives were unwilling to do."[4] What started as a rather homogenous society was by the 1990's, anything but homogenous.[5] Currently, the local Arab population makes up only twenty-five percent of the three quarter of a million people that live in Dubai.

The necessity for Dubai's entry into the global economy was greatly influenced by its minimal population and lack of agricultural and manufacturing capabilities. Oil, Dubai's one considerable natural resource that has financed so much of its growth is not limitless in supply and is estimated to run out within the next thirty to forty years. This has made acute the need to economically diversify into the tertiary and quaternary sectors. The success of Dubai's port has eased this transition into the global environment. Much like Singapore, the leaders of Dubai have been very proactive in designing a city that would not only participate in the global economy but would easily attract its significant players.[6] This necessitated the growth of office buildings, superior telecommunication capabilities and the propagation of hotels to accommodate the growing transnational population. The majority of which are located in the central business district (fig. 2D). The north shore of Dubai is lined with these shiny glass walls of commercial and corporate high rises and luxury hotels, mostly designed by European and American firms. This concentrated form of urban development is common for global cities, according to Saskia Sassen. The spatial representation of

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[4]Malcolm Peck, The UAE, 69.

[5]Ghareeb and Al Abed, eds. Perspectives on the United Arab Emirates, 270.

[6]Dubai's success as a regional banking center was also aided by the civic unrest experienced in Bahrain in the early 1990's.
[Camerapix, ed. Spectrum Guide to the United Arab Emirates. (Nairobi: Camerapix Publishers International, 1998), 306.]

this notion is most evident in the high density within the business districts.[7] This intensity of development is exemplified by the availability of commercial space. It is estimated that 2.5 million square feet of commercial space is to be completed by 1999. These numbers will be added to the already existing 3.5 million square feet of office space in Dubai.[8] While there are many who are skeptical about the need for so much commercial space in Dubai, Mohammed Al-Shamsi and Hashim Kammoona of the Planning Department of the Dubai Municipality claim that need is on par with development. They remarked that to a considerable degree, plans for the future are made anticipating the growth and effects of globalization in the city and its surrounding region.[9] This concentration of function has drastically increased the rent rates in the central business district by sixty percent, in the past ten years, making Dubai's central business district on par in cost with that of London.

As the global economy continues to influence how things are done locally in Dubai, government planners and designers make no qualms about being influenced by the development and designs of the urban environments of Hong Kong, New York and London. The influx of international designers, mostly North American and European, is a clear demonstration of this interest. The considerable numbers of foreign architects and contractors practicing in Dubai are excused by local planners and leaders by referring to their own shortage of trained professionals in every field due their own natural limits of population. Ibrahim Jaber Al-Husseiny, the Head of Construction and Contracts in the Dubai Municipality went so far as to say, that it was fine for foreign architects to bid for the larger more complex projects, such as high rises, hotel, hospitals and airports. His conclusion was based on his belief that locally trained architects lack the experience to design such buildings and therefore, require the participation of more internationally trained designers. Mid-Rise buildings however, should be left to local Arab designers. There is no interest, he said, to give these smaller scale projects to foreign architects as local firms are fully capable handling them. While the growing numbers of local architects accept foreign assistance in the building of their city, there is however, an increasing frustration amongst these

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[7]Saskia Sassen, The Global City. (Princeton: Princeton University Press, 1992), 5.

[8]Brigette Scheffer, "United Arab Emirates," in World Architecture 65. (April 1998), 31-43.

[9]All references to comments made by Mohammed Fayez Al Shamsi and Hashim Kamoona, both heads of the Planning and Survey Department and Ibrahim Jaber Al-Husseiney, Head of the Construction and Contracts department were collected during interviews with them on January 25, 1999 at the Dubai Municipality, Dubai UAE.

designers and planners that their vision of the city has been blurred and homogenized to a purely global vision in the haste of development.

Many of the high rises and mid rises built of concrete frame and curtain wall are not designs that are sensitive to a local cultural or climatic conditions. Yet these buildings are mushrooming throughout Dubai. While they are not always constructed with the complete support of the municipality, new construction is occurring at such an impossible pace that the implementation of new laws or guidelines to influence and direct design, construction and development seems to be coming too late. Other local Arabs also fear that such dramatic transitions in the built environment, technology, economics and the rapid influx of foreign influences are drastically and unsympathetically altering the age old tribal society. It may seem when wandering through the malls and the busy streets of Dubai that the contemporary tastes of the West is slowly obliterating what exists of conservative indigenous culture. Yet this would completely overlook the resilient nature of local cultural identity.

In the early 1990's, after two and half decades of an unrivaled pace of development, a greater awareness, respect and appreciation for local perceptions of culture was developing. Dubai was now a successful global city proudly advertising leading technological capabilities and the finest amenities and luxuries in the world. The leaders of Dubai had built a city most desirable to the transnational population. Yet its wide boulevards, air conditioned shopping centers and fancy boutiques and glossy technologically driven high rises lacked any signification of identity. In a city with such a diverse population, as Dubai, built form became the only means through which the local Arab population could instill a representation of local identity. This became essential, since not only was Dubai completely unrecognizable from what it was twenty years ago, there was also no sense of the people who directed its growth. The local Arab population was not only becoming a rather invisible minority in a large migrant and transnational population, their built environment was devoid of any sense of cultural identification. Dubai's free trade policy allowed a barrage of foreign influences to flow freely into the city. The intense promotion of the world wide web and the infinite capabilities of the internet to coalesce cultures and differences also heightened this need for cultural identification and distinction. The sudden leap in rapid economic development and the general affluence that followed was creating a generation of Arabs increasingly removed from the circumstances of their parents' existence more than any other society. Thus, within the continued development and

success of Dubai's role in the global economy, this desire to create an architectural vocabulary that would be more sympathetic to Dubai's environmental, economic, cultural and social situation became increasingly potent.

While the designers and planners of the Municipality support the creation of an environment that fosters the growth of the global economy, they are equally critical of a homogenized environment. There is a sad acknowledgment on the part of Mohammed Fayez Al-Shamsi and Hashim Kammoona in the Planning and Survey Department, on the weakness of local culture in light of global influences. In the haste to globalize, Dubai has often been too easily impressed by the examples of urban and architectural development seen in America and Hong Kong. Within that admiration, there was the desire to emulate. In conjunction with this is the speed with which the policy makers have been pushing the completion of numerous projects, hoping to outsmart the drop in oil prices and the inevitable shortage in supply. The planners in the Dubai Municipality claim that the haste of urban development has not allowed time, until recently, for meaningful reflections on cultural identity within globalization. All of these concerns are heightened by the limited size of the local Arab population.

Yet in the recent past, Mohammed Fayez Al-Shamsi and Hashim Kammoona agree that there has been a greater consciousness concerning this loss of cultural identity and representation. There is a very strong desire to redress the wave of development in the public realm amongst the designers and planners in Dubai. "A living culture needs constant reference to the 'collective memory' which is largely embodied in the built form of cities."[10] The planners and architects in the local municipality, concerned with this growing disjuncture have taken various approaches to deal with this increasing chasm. This interest in cultural definition is evident the passing of new laws concerning architectural development and preservation. It is also visible in the facades, the forms, adaptations and interpretations of space in new building and building types. It is seen in new urban developments. Greater attention has been paid to the architecture of the past as a guiding influence. In all cases there is an attempt to allude to local and regional history, Bedouin culture or Arab/Islamic identity in the representations of this new architecture.

While manifestations of local culture would perhaps be more easily represented and defined within the constructs of homes or more socially driven buildings or in open

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[10]Abdulaziz Y. Saqqaf, ed. The Middle East-Ancient Traditions Confront a Modern World. (New York: Paragon House Publishers, 1987), 6.

spaces with the performances and celebration of festivals, the interest remains nevertheless, to imbue the technological and economically driven environment of the commercial and business districts with such notions of culture and tradition. This concept of adopting rather prominent and universal urban developments and endowing it with the icons and beliefs of local heritage and culture is also seen in Singapore, another of such global cities struggling with similar issues of culture and identity in an increasingly homogenizing environment. The reasons for such displays of cultural heritage are numerous, as will be discussed in the final conclusion. The most outstanding reason for these depictions of cultural identity in the commercial and corporate environment is undoubtedly the prominence and visibility of the area. Local manifestations on the architecture of this district clearly insinuates the strength of local culture and its dominance in Dubai's society despite the overwhelming diversity in foreign influences and population.

It is important to note, however, that in Dubai there seems to be a greater freedom to draw from other Islamic and Arab sources for references in architectural style. There are a couple explanations for this. Dubai remained for most of its early existence a minimal settlement, without an extensive resource of traditional architecture. This architectural freedom may also be due to the fact that with economic success, the Arabs of Dubai are more conscious of the greater potential of their role within the Arab world, possibly underlying a wider identification of Pan Arabism.

In the initial stages of Dubai's urban, architectural and social development, egged on by the forces globalization, the barasati huts of their origins and the windtower houses of the Persian merchants were widely disregarded to make room for newer buildings. Dogan Kuban describes this destruction of the built past as proof of a city's or country's preparedness for modernization. "The more historical the environment they will destroy, because only in this sacrificial rite can they prove themselves worthy initiates of the modern world."[11] Yet in the past ten years this decision has been seriously questioned. As traditional cultural values are increasingly jeopardized by the constant influx of migrants and other foreign influences, there is a growing desire to preserve the history of Dubai through its architecture with the

[11]Dogan Kuban, "Conservation of the Historic Environment for Cultural Survival," in Aga Khan Award for Architecture, Architecture and Community: Building in the Islamic World Today. (New York: Aperture, 1983), 35.

intention of permanently distinguishing Dubai's Arab cultural identity and heritage. Inevitably, there is also the interest to create a greater consciousness of local culture within the transient, transnational population. The planners and architects within the Municipality hope that the interest in local historical buildings will impart a greater consciousness of Dubai's cultural heritage to the foreign architects and designers that practice in Dubai, to inspire more sensitive design.

The rising interest in historic preservation is also influenced by economic considerations, specifically tourism. The exportation of oil currently makes up eighteen percent of Dubai's income. However, as the supply of oil reserves starts to dwindle, tourism is forecasted to replace the profits from oil within the next five years.[12] While the infrastructure for tourism has been laid in abundance in the form of hotels, transportation and telecommunication, the planners are afraid Dubai's lack of local 'authentic' character maybe a deterrent for potential visitors. The power of tourism to influence the direction of preservation is extremely evident in the conversion of historical buildings into museums and other tourist sites.

This increased appreciation for traditional architecture also coincided with the intensification of globalization. In this complex environment the "Committee for the Preservation of Architectural Heritage," was created on September 14, 1994. This organization is made up of a collection of people from the Public Work Agency and the Planning and Maintenance Agency. The mission, as laid out by the Preservation Committee is to identify historic areas that represent their architectural heritage and to mark them out for preservation. They would also review requests presented to the committee concerning the destruction, reconstruction and maintenance of buildings in the historic areas.

The majority of architecture preserved to this date consists mainly of buildings that were built in the late eighteenth century to the early to mid twentieth century. Buildings such as Shaikh Saeed Al Maktoum's House (1896)[13], Al Faheidi Fort

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[12]Diana Darke, The United Arab Emirates. (London: Immel Publishing, 1998), 162.

[13]It was built as the residence of the ruler. It had a huge courtyard and four windtowers for each section of the house. It was built along the edge of the creek to monitor the flow of bosts. Above the doorway of the two majlis are Qaranic inscriptions. Also present in the decoration of this house are the pireced gypsum screens carved with floral motifs. It is currently used as the Museum of Historical Photographs and Documents of Dubai Emirate.

(1799)[14] (fig. 3D), the Almadiya School (fig. 4D) and surrounding areas (1912)[15], Al Wakeel House (1934)[16] are all considered by the Committee on Preservation to be buildings that represent the architectural, social and cultural heritage and urban growth of Dubai.[17] The majority of these buildings are linked to history of trade and commerce in Dubai. They were built with traditional materials of construction which included mud, gypsum and coral.

Under preservation currently is the Bastakiya quarter (fig. 5D), Dubai's only remaining section of traditional windtower houses. A large number of these buildings were torn down in the early 1980's to make room for the Diwan's office. Now with most of the houses abandoned, the entire area has been marked for conservation by Dubai's Historic Buildings Section. Most of these houses were built by Persian merchants who moved to Dubai at the turn of the twentieth century, after high custom dues were forced on them in their own country. The district is named after the area of southern Persia where most of them came from. The windtowers that have become so representative of Dubai's traditional architecture were initially introduced by the Persian immigrants. Three of these houses have recently been restored and converted into tourist centers.

The souqs (fig. 6D) that were once the commercial and social centers of Dubai have also undergone a Dh 30 million (dirhams) restoration by the Historic Building Section of the Dubai municipality. Paving and lights have been improved. The roofs that were covered with *areesh* or palm branches before have been replaced by new wooden structures. Tacky neon signs were replaced by more 'traditional' stone plaques for a greater 'authentic' feel. New and old buildings constructed around the souq now need to follow certain guidelines and restrictions, so not to detract from the overall more *'traditional'* environment.

The Historic Building Section of the Dubai Municipality currently has two hundred and fifty projects registered with them. They have projects lined up until the

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[14]The fort is the oldest surviving structure in Dubai. It is distinguished by its three different watch towers around a huge courtyard. It reopened as a Museum of Dubai's History in 1995, after the rather successful completion of an extention to the fort underground by Iraqi architect Mohammed Makiya.
[15]The school itself was built by Shaikh Ahmed bin Dalmouk for children of elite traders who lived in the area. The building had teak wood doors and windows and decorations carved in gypsum alongside Arabic caligraphy of verses from the Q'uran. The school is be restored as a Museum of Education.
[16]This house takes its name from the British agent of the British India Stem Navigation Company. He had used it as a house and office. It stands as the first administration building in Dubai. The buildings is to be used as a Marine Museum of Dubai.
[17]All the buildings listed above completed the process of preservation by around the mid 1990's.

year 2008. The majority of these buildings preserved made a very harsh climatic situation, bearable through the choice and construction of local materials. The windtowers and thick walls of coral and stucco successfully cooled and shaded the interiors from the hot blazing sun. Hence, "the hope is that such projects of preservation may lead to a questioning of current designs in housing and office buildings, and maybe one day some young local engineer may reject the power guzzling imported air-conditioners and invent a wind tower with a solar cooling capacity."[18]

Dubai's interest in preservation and conservation has been extremely recent and intense. In the past few years it has become an influential force in the Municipality's forecast of future development. Preservation has become an embodiment of the social and cultural traditions of Dubai. It is a reaction to the need for greater cultural awareness. For the planners in the Municipality, these buildings represent a cultural identity that goes beyond the flashy high rises and foreign boutiques. The buildings that are preserved are often indicative of centuries old system's of construction, accentuating a seemingly timeless and traditional Arab culture of Dubai. These buildings are viewed as the architecture that is unique and authentic to the local Arabs alone, before the influx globalization and the foreign population. For the planners, the propagation of a local Arab identity through preservation is also intended to heighten the appeal of Dubai as a destination for tourists searching for an unique Arab experience.

For many of the local inhabitants of this desert city, cultural identity has also been greatly affected by and integrally tied to their Islamic heritage. This is evident in media programming, in social practices and customs and in the reappropriation of public spaces. The pervasive influence of religion on local cultural identity is also supported by the sheer numbers of mosques that are found in this city. Mosques, according to Mohammed Al-Shamsi in the Planning and Survey Department of the Dubai Municipality is the most representative marker of an Islamic city. The mosque also serves as a significant and timeless symbol of an Islamic identity that is separate and powerful in a global environment. The significance of its presence is noted by "a law that no one should need to walk more than half a kilometer to reach one."[19] The density of mosques in Dubai is higher than most Arab countries despite its minimal

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[18]Darke, United Arab Emirates, 177.

[19]ibid., 185.

population. The influence of religion on cultural identity is extremely visible in the eclectic collection of small mosques found on almost every street corner. In the Bastikiya quarter, the streets are lined with small fabric stores leading to the souqs. In this district which would be heavily frequented by tourists and locals, there is an amazingly high number of mosques built side by side. Just minutes walk from the very large Ali bin Abitaleb Mosque and Grand Mosque are two other sizable mosques recently completed right beside each other on the same street (fig. 7D, fig. 8D).[20] Since the creation of the United Arab Emirates as a political entity, there have been over two thousand new mosques built. The considerable numbers of mosques in Dubai is perhaps used as physical representation of the 'universal and deep Islamic faith' that still influences so much of their identity despite the gross commerciality of the global economy within their environment.

In addition to referencing the architecture of previous decades and centuries in the search of a greater sense of cultural identity, a new generation of architects and planners are turning their focus to modern architecture, to the mid and high rises. Concerned about this lack of cultural identity within the physical structure of their city, they are striving for and demanding from foreign designers a better marriage between modern architecture and traditional influences.[21] Greater efforts have been made to incorporate perceptions of traditional Islamic influences into contemporary buildings in the highly trafficked central business districts and other commercial and recreational areas.

In Dubai's business district, certain aspects of traditional 'Islamic' domestic architecture have become powerful influences in the design of commercial buildings. Masharabiyyas or wooden window screens are lattices made of jointed turned wood, particular to the domestic architecture in Egypt. Initially they were used to shield the sun while allowing for air circulation. They were also used for segregation purposes, to allow women to look out within being observed.[22] However, as architecture,

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[20]The architectural styles of the mosques are as varied as the numbers of mosques. "Recent constructions combine the artistry of the past with imaginative modern innovations derived from Syrian, Egyptian, Turkish, Persian and Spanish architecture. Architectural solutions reflect the power of money after a period of frantic development." [John Wheelen, ed. UAE- a MEED Practical Guide. (London: EMAP Business Information Ltd., 1990), 81.]

[21]Daruish Zandy, "Development of Aarchitecture in the Gulf," in Arts and the Islamic World- Architecture, Archaeology and the Arts in UAE. (Special Issue No. 23, 1993), 28-32.

[22]Ronald Lewcock, "Architects, Craftsmen and Builders: Materials and Technology," in Michell, George, ed. Architecture of the Islamic World. (London: Thames and Hudson, 1995), 121.

technology and society have changed in time, the purpose of the incorporating masharabiyyas into building facades has also altered significantly. In contemporary architecture, they now serve more ornamental, nostalgic or symbolic functions.

The re-creation of these wood screens is commonly incorporated into the interior designs of hotels in Dubai to give a sense of place within the universal look of the hotel. The InterContinental Hotel[23] on Baniyas Road in the central business district utilizes a considerable amount of wood paneling for their interiors. Each panel is lined with different geometric patterns in different colors of wood, attempting to refer to arabesque geometric patterning in other forms of Islamic architecture. The ceilings of the hotel reception is also covered with deep carvings of wood, a feature reminiscent of traditional architecture buildings of Dubai. Before entering the hotel proper, there is a ramp that leads to the sliding glass doors of the hotel itself. This sloping walkway while sheltered on the top by wood paneling, is left exposed to exterior weather conditions since the entrance is left open. On either side of the walkway are two white walls punctured with a series of large windows. In front of these huge panels of glass are the wood screens carved with a repetitive geometric pattern (fig. 9D). While the sealed window prevents the circulation of air through these screens, they still serve as successful sun filters. The entire space is animated by the geometric patterns formed by the sunlight seeping through the wood screens. This is an example of the loose abstraction of the masharabiyya in contemporary architecture. It no longer serves its original purpose as a protective screen and as tool for greater air circulation.

The use of wood screens is also seen in the Hilton Hotel by John Harris and Associates. While the interior spaces of the lobby and reception tend to be darker, and guarded from sun light, geometrically patterned wood screens, alluding to the masharabiyyas, are found throughout the hotel lobby, often used as dividers of space. There original functions of filtering light, reducing the visibility of women, and encouraging air flow are once again all lost in these adaptations.

The visual and technical appeal of the masharabiyyas were also found in traditional window grilles made out of stucco or marble. From the 1970's onwards, in the age of globalization, when in search of an architectural language that addressed a more indigenous culture, the ornate wooden or marble grilles of the past came to be

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[23] The InterContinental Hotel was designed primarily by Neuhaus and Taylor in conjunction with a local designer. The hotel interior was recently renovated. Work was completed by Peirre Rochon and Oussama Chaar (a local interior designer based out Of Dubai.)

represented in concrete forms for high rise and mid rise buildings.[24] The most prominent example of this is Dubai's World Trade Center by John Harris and Associates (fig. 10D). These concrete grilles set against plainer concrete walls provide an interesting perception of layering and depth of the facade. Perhaps inspired by this example, an increasing number of buildings exploring a similar interpretation of design, can be found in the central business district.

A government mid rise (fig. 11D) located on the corner of Omar bin Al Khattab Road and Baniyas Road, at the mouth of the central business district incorporates a series of wooden masharabiyyas spread on top of a concrete structure that holds it in place. Each of the seven stories of the building is clearly delineated by the use of separate screens aligned vertically on its facades.

In another midrise located on Al-Maktoum road (fig. 12D, fig. 13D), the various offices of the airlines are hidden behind individual concrete screens, carved in various geometric patterns. Placed below the operable windows of each floor, these screens are not even visible from the interior, which is a complete distortion of the purpose of these screens. They have in this example essentially become merely surface applications, serving no purpose but to associate some form of a traditional 'Islamic' identity to a glass and concrete mid rise building.

Aside from the World Trade Center there are numerous other high rises located in the corporate and commercial districts that have incorporated some form of the traditional window grilles or masharabiyyas into the design of their facades. Deira Towers (fig. 14D) found just behind the prominent Baniyas Road parallel to the creek, is another such example. This building consists of three curved facades and a flattened cylinder on top, all resting upon a rectangular podium. Much like the world trade center, the concrete screens add an extra depth to the facade of the building. The podium which houses parking, has quite successfully utilized this notion of the large window grille by providing an effective screen for the parking structure. However, since the Deira Towers are broken into three parts, three different patterns mark the different sections of the building. The expanded window grille is much less successful in central portion of the building. The pattern that is repeatedly carved out of this concrete screen as that of a compressed or flattened pointed arch. The openings are so large that they do not provide any form of shade. In addition, the windows on red

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[24]Shirley Kay and Dariush Zandi, Architectural Heritage of the Gulf. (Abu Dhabi: Motivate Publishing, 1991), 90.

facade beneath the grilles do not even coincide with the concrete openings. They are randomly aligned with the wall serving no purpose but a mere allusion to a historical architectural type. It is a rather weak attempt in suggesting cultural sensitivity.

The Arrift (Arab Bank for Investment and Foreign Trade) Building (fig. 15D) on Baniyas Road, is another example of a contemporary interpretation of the window grilles. In this building, the endless windows of the curtain wall are given some protection from the sun through the incorporation of the concrete screen. Its openings forming elongated pointed arches, are an attempt to allude to another familiar representation of traditional Islamic architecture. The surface of the concrete itself, is also carved with various geometric patterns. These sculptural applications on high rise buildings such as this one, seem to serve no other reason then to mark the environment of a global economy with a perception of local culture

One last example of this attempt to refer to the traditional architectural elements in commercial and corporate high rises returns us back to the district of the World Trade Center. Within the complex of the World Trade Center, Hilton Hotel and Convention Hall, are a series of residential buildings (fig. 16D) that are built for the transnational population. On these buildings, the carved concrete screens do not form a separate layer on the facade but is merged with it. A long singular strip of carved patterning, spanning the height of either ends of the building, allows natural air to circulate within the building. The pattern on the sides of the buildings, can also be found on the front and rear facades of the apartment complexes. On a smaller scale, these concrete grilles, form parallel walls of a protruding series of balconies. While the original intent of these screens was to shield women from public view, this purpose is inapplicable since the front of the balcony is completely open. They do however, provide some form of privacy between the balconies of each apartment. They may also serve as a sun filtering device since these screens face north east and south west. In addition to the geometrically carved concrete screens, the repeated pattern of pointed arches is also pressed into the concrete slabs that form the top and the bottom of the balconies.

All these representations and allusions to traditional Islamic architectural elements serve no real functional purpose. Their application is merely the attempts by the architects to somehow mark high rise architecture, with what is considered local representations of identity. However, these attempt to acculturate the architecture built for the transnational population and multinational corporations are often lacking.

Complex understandings of culture and identity seem to have been reduced to mere surface applications that are devoid of any original significance. Centuries of cultural representation have been reduced to simplistic interpretations and pastiche not unlike those examples found in Disneyland. Some adaptations are weaker, some more successful, but in all cases there are the beginnings of a re-evaluation of the built environment while still embracing the needs of the global economy.

The search for applicable representations of identity in high rise buildings are not limited to window grilles or geometric patterning alone. Many other references to the forms of Islamic architecture have been utilized in this search for representation of cultural identity within the city. The re-application and interpretation of arches, minarets, muqarnas into the designs of current buildings are another means through which local architects attempt to make some form of connection between the architecture and the heritage and cultural identity of the people of Dubai.

The Emirates Bank International building (fig. 17D) has attempted to incorporate this notion of arches in its facade, albeit superficially. The uppermost floor of this building is represented in the facade by a series of fifteen rounded arches. This incorporation of the arches and muqarnas into the facades of buildings is more commonly seen in mid-rise buildings since the smaller scale allows a greater freedom for such experimentation and application. It may also be due to the fact that mid-rises are assigned only to local architectural firms. The need to create a separate identity and market from the foreign architects that design in Dubai, inevitably influences the style of architecture they choose to propagate. Nevertheless, in all cases, the focus for such cultural display is found only in the facade. While this concentration on the facade alone may be criticized, Diana Agrest counters this by stressing the importance of the facade in formation of the urban space. "Facades are not only the frontal place of the building. It is also the surfaces defining a theatrical space."[25] For her the public place is where the configurations and complexity of a certain culture is most densely manifested.[26]

Unfortunately, the facades of most mid-rises speak more of a superficial interpretation of 'traditional' architectural forms. Mid rises are often wrapped in glass and made distinct by applications of stucco in a series of arches and other 'Islamic' architectural references. The attempts are often peculiar. However, once again they

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[25]Diana Agrest, Architecture from Without. (Cambridge: MIT Press, 1991), 114.
[26]ibid., p. 17.

represent a distinct attempt towards some sort of self definition even within the climate of the global economy.

The offices of the Dubai Ministry of Agriculture and Xerox (fig. 18D) are housed in a mid-rise building on Al-Maktoum road. This street is lined with mid-rises rented to smaller corporations. It has yet to reach the density of development on Baniyas road although it is located only minutes from the central business district. The Ministry of Agriculture building is ten stories high. The design of the two sides that face the street is a little more unusual and awkward than most buildings in this vicinity. These two main facades are wrapped in blue glass. Laid on top of these glass walls is a random pattern of boxy concrete balconies. The balcony openings form a variety of rounded arches, rectangular or square openings. The tops of the different balconies are lined with an allusion to the crenallation of fortresses, a reference to the military might of the Islamic past.

The Habib Bank AG Zurich building (fig. 19D) in the very lively Baniyas Square also draws from iconic representations of Islamic architecture. It is, as most mid rise buildings in Dubai are, made of a concrete frame. The main facade of the building facing the square is paneled in blue reflective glass. The top of the building is lined with white staggered arches that spill down the glass facade of the building. The pattern is broken up to allow for openings for the deep balconies behind it. At the base of these arched openings are sculptural elements protruding from the facade that resemble the forms in fortress architecture. The bottom of the arches continue to taper down the buildings, splitting into two dimensional representations of a muqarnas, another architectural element often identified with the great traditions of Islamic architecture. However, its initial function of bridging supports between the dome and a square base is lost here. The intricacies, technique and craft that were needed to sculpt the muqarnas in the extraordinary architecture of earlier centuries has become stylized in the age of material standardization and hasty construction.

A few buildings down, along the same street in Baniyas Square is a new building designed by the local architectural firm Dubarch (fig. 20D). On this facade a tremendous number of pointed arches of all sizes fill the front of this twelve story building. The majority of the arches frame balconies that shade for the interiors and create a more three dimensional facade. Additional arches are scattered throughout the front of the building elongated into long linear strips filled with carved window grilles that allow light to filter into the building. The top of this mid-rise building is

crenellated, another superficial allusion to fortress architecture of the early Islamic empires.

The building that houses the Department of Economic Development of Dubai (fig. 21D), in the central business district, incorporates another architectural element traditionally associated with the plan of Islamic house, the courtyard. However, unlike the traditional courtyard house, where the courtyard is hidden from public view, a huge open entrance allows passerbys peaks into the inner space. The facade of the building once again is covered with windows in form of pointed arches, but this time in extremely rigid geometric forms.

The Dubai Creek Tower (fig. 22D) is another of the many commercial high rises recently completed in the central business district. Basically square in plan, it is anchored on its four corners by slender cylindrical structures wrapped in glass, alluding to the architecture of minarets. Since they obviously serve no religious function, they are hollow applications. The glass panels on the four sides of the facade also culminate in the increasingly standard application of the pointed arch.

The applications on the facade of these mid rise buildings are the limited opportunities for local designers to imbue their perceptions of their cultural identity onto the public face of Dubai. Their superficial adaptations of the crenallations of traditional fortresses perhaps is their attempts to associate their own cultural identity and society to the physical, cultural and spiritual strength of past Islamic empires. It is important to note however, that these designs are also influenced by government regulations. While there are no official laws currently regarding the facades of buildings in the central business district, the municipality has played an active role in the design of the facades. A guide known as the "Elements of Traditional Architecture of Dubai - Reference Book' has been published to help designers in the central business district perpetuate a style believed to be in line with the traditional Islamic architecture of Dubai. A special committee has been formed to review the building facade proposals. The members of the committee use the same reference guide on Dubai's traditional architecture in conducting their review. Designers and consultants who are working in the central business district have to get this committee's approval to attain a permit for construction. The desire to localize or 'Islamicize' the facades of the central business district is currently being studied by the Traditional Building Unit of the Municipality in the hope of establishing more coherent standards and regulations for building in this area.

The purpose of this 'Reference Book' actually presents an interesting dichotomy. In the most technologically advanced area of Dubai, the government is attempting to encase its buildings with images of traditional architecture. Many of the examples cited in this guide are the buildings that are under preservation in Dubai. The designs have not been reformulated to take into consideration the new forms and demands of architecture and technology. Without further guidelines and proposals for a more updated and appropriate display of local cultural heritage, the government is at least currently perpetuating pastiche on the facades of mid rise and high rise buildings.

The cultural or historic references that influence the design of the buildings described above address a broader and more general interpretation of what is considered elements of traditional 'Islamic' architecture in Dubai. Local designers have freely drawn from a variety of sources. However, when some foreign architects are invited by the state to design large projects in Dubai, their attempts to be sensitive to the culture of the city turns them to the Bedouin history of the area. The architecture of the nomads was the tent. This notion of the tent, in all its various forms and possibilities have proven to be the inspiration for numerous buildings and interiors. When the need arises to localize the architecture of Dubai, to mark it with the character and history of the place, tent-like forms have been freely used as markers of localized cultural identity. Now in the age of globalization, this basic structure used formerly for nomadic survival has been incorporated into the forms of leisure and sports clubs.

The first of such examples is the Grandstand of the Camel racetrack in Dubai. It follows the tradition and structure of the black nomadic tent. It is long and low, supported in the middle with central roof poles, giving the illusion of a multiple peaks. Another example is the first of Dubai's golf clubs. In the effort to make Dubai appeal to travelers and transnational workers, as a resort and leisure destination, the rulers of Dubai have been extremely active to creating extraordinary facilities in what was a desert environment. The Emirates Golf Club built in 1988 (fig. 23D, fig. 24D), was financed by Shaikh Mohammed Bin Rashid Al Maktoum. The project created by American golf course designer, Karl Litten, cost ten million dollars to build, as it covered seven hundred thousand square meters of desert sand with grass. The clubhouse with all its possible amenities of fine restaurants, swimming pool, tennis courts, takes the form of a more stylized version of a cluster of tents. The form is a

mixture between the black and white tents used by Bedouins.[27] More recently, Karl Litten completed a second golf course in Dubai, known as the Creek Golf Club (fig. 25D, fig. 26D). The architecture of the club alludes to an extremely abstracted image of a tent surrounded with the modern luxuries of pools, fine restaurants and lush almost tropical greenery. While the architecture attempts to refer to the Bedouin tents of the past, it is constructed of a steel structure with glass paneling on all sides that allows for views straight through the building.

Other references to Bedouin tents are also found in the interiors of hotels in the form of rather plush set ups of the interiors of a tent, often placed immediately beside the portraits of the rulers of Dubai and the United Arab Emirates. Within a very globalized and homogenous exterior presence, these hotels attempt to address their location through simpler, rather understated means. The Sheraton Hotel on Riggat Al Buteen Road, along the creek, the Hyatt Hotel along the Corniche (fig. 27D), and the Jumeirah Beach Hotel all have Bedouin tent displays at the entrance of their lobbies. In almost all cases, while they may vary in size, a rectangular frame is covered with a rich red patterned fabric and cushions are scattered around the inner corners of the tent on top of a special carpet. At the Jumeirah Beach Hotel, an abstracted series of tent structures form the setting for the coffee shop in the lobby serving only Arabian coffee (fig. 28D). While these displays seem to be mere decoration, they are a representation of what the controlling parties of Dubai wish foreign travelers and business people to consider an integral part of local culture. Displays in hotels more often than not are representations of what a city holds dear as their cultural identity.

In other efforts to re-appropriate an environment that is becoming increasingly foreign from that which it was thirty years ago, architects, designers and planners have made analogies that relate the most abstract architectural forms to traditional and cultural elements in desperate attempts to make sense of the Arab streets lined with KFC, McDonalds, T.G.I. Fridays, Hard Rock Cafe, Pizza Hut, Cheesecake Factory and Wendy's and billboards advertising Gianfranco Ferre jeans and Versace dresses. Tensile structures, as they are made of stretched fabric could be interpreted as an abstraction of the Bedouin tents. Thus, tensile structures incorporated into the design of local buildings are meant to reference the past of Dubai's indigenous people.[28] This

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[27]Kay and Zandi, Architectural Heritage, 92.

[28]I was informed of this analogy by Abad Al-Radi, a practising architect in Abu Dhabi for a considerable number of years now. In his repeated encounters with the Heritage Board of Abu Dhabi, he was informed of this analogy of utilising tensile structures to 'Islamicize' new buildings.

notion however, is not unique to Dubai alone. A similar explanation was given by Skidmore Owings and Merill in their description of their design of a fabric tension structure for the Hajj Terminal in Saudi Arabia. In designing the terminal, they turned to what they claimed as the Middle Eastern vernacular for inspiration. The tensile "structure reflects the traditional abode of the desert nomad."[29] It is "a twenty-first century echo of the traditional tent structures that have worked so well in desert climates."[30] With this in mind, the tensile structures added to buildings around Dubai such as the roof of the City Center Mall (1995) or on the ocean facade of the Jumeirah Beach Hotel take on another level of understanding.

Similar analogies are also found in respect to dhows, the traditional Arab sail boat. This image of the boat is closely tied to representations of Dubain culture, as so much of its history has been tied to the port and the creek.[31] When Carlos Ott in conjunction with Adel Almojil, were commissioned by the board of directors of the National Bank of Dubai (fig. 29D) to design their new headquarters, this notion of the dhow apparently influenced their final design solution. The bank consists of a glass office tower suspended by two vertical giant granite clad piers above a transparent podium. Ott claimed that the convex vertically-faceted curtain wall of the tower represented the billowing sail of the dhows that line the creek before it.[32] Another reference to dhows in architecture is found in the new conference center which is part of the Jumeirah Beach hotel complex (fig. 30D). The entire form of the conference building takes its shape and design from that of a dhow. Three stories high, it is made of steel, timber and glass. The new and extremely flashy Chicago Beach Hotel (fig. 31D) sitting on a man made island in the Arabian gulf also adopts the form of the dhow's sail in its design. The sail or convex curtain wall of the facade on one side is connected on the opposite side to a giant steel post, that signifies the mast of the sail. This technologically driven project was designed by the same British firm which constructed the Jumeirah Beach Hotel, W. S. Atkins and Partners Overseas. The soaring heights of the Chicago Beach hotel at three hundred and twenty one feet, not

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[29]Anon., "Huge Soaring Tents on the Desert." in AIA Journal. v. 72 n. 5 (May 1983), 276-81.
[30]Anon., "A Field of Tents in the Sky," in Architectural Record. v. 171 n. 5 (September 1983), 84-85.
[31]"The sailing boat are symbols of life in coastal areas." [taken from: Mohammed Abdullah Eben Saleh, "The use of historic symbols in Contemporary planning and design," in Cities. v. 15 n. 1 (February 1998), 41-47.
[32]Barry Jordan, "Reflecting an Image-National Bank of Dubai Headquarters," in World Architecture 65. (April 1998), 48-53.

only make it the tallest hotel in the world currently, but also the new landmark or icon of Dubai. As this new hotel assumes this symbolic role, it is interesting to note that it takes over from the World Trade Center as the image of Dubai. The concrete adaptation of the masharabiyyas in Harris's World Trade center is now replaced with an extraordinary curtain wall structure in an even more localized form, the sail of a dhow.

While both the dhow shaped conference center of the Jumeirah Beach Hotel and the billowing sail of the Chicago Beach hotel patronized by Shaikh Mohammed, attempt to associate their design with recognized local forms, they are still buildings driven by the global economy. The purpose of commissioning such hotels is their ability to awe and attract the transnational population. The finest sports facilities are located on these grounds to attracts the world's athletes in training. These hotels, the luxurious golf and yacht clubs, the fine boutiques and technological advancements and superior telecommunication capabilities are all part of the ruler's mission to make Dubai a prominent and leading global city.

Other attempts to acculturate the environment of a global economy is visible in the adaptation and interpretation of spaces. Shopping centers and malls have become a significant part of the urban landscape in Dubai. Huge air conditioned blocks selling any item found world wide have become places of social gathering and family outings. The physical design of these prominent shopping centers are homogenous in appearance to others seen worldwide. The stores with the exception of a few are imported from Europe, America and Japan. The food courts offer all the diversity of international cuisine. The presence of multi-national corporations are visible throughout the food court. Arab men and women line up to purchase the 'Big Mac Meal' or a BLT submarine sandwich from Subway, only this BLT is made of beef bacon. As simple as this change is, there are quite a few of such adaptations within this commercial environment that hints at the needs, traditions and culture of the Arab users. The large shopping centers such as City Center, Bur Jaman and Wafi have private spaces set aside for the shoppers to perform ablution before prayers (fig. 32D). Within all these shopping centers are huge halls one for men and one for women to say their prayers. Bur Jaman Shopping center located at the end of Khalid Ibn al Waleed Road, the financial street of Dubai, even calls shoppers for prayers through the mall's PA system.

The City Center shopping mall has also adapted the children's play area surrounding the food court. A miniaturized city has been recreated to animate the zone of play for the little children, while adults have big screen televisions to entertain them. This cartoon like city, in all its brilliant colors forms gazebos with onion shaped domes. The arches beneath are round and flattened with pointed tips. Colorful displays of geometric patterns line the wall beneath rows of pink semi-circular or lobed form arches. It seems very much like an Arabian nights fantasy.

The final attempts to localize the urban environment of Dubai are in the development of parks. The ninety-nine hectares of Dubai's largest beach park Al-Mamzar is surrounded on three sides by the sea. In the center of this beach park is the *Traditional Cafe* enclosed in a series of large of barasati huts, referring to the original architecture of the Arabs of Dubai.[33] The use of theme parks for entertainment, education, cultural markers has recently been taken a step further in Dubai. The 'Magic World Theme Park,' located at end of the creek at a largely underdeveloped site, is set to open late 2001. This project currently handled by Bechtel International, will be divided into six different theme areas depicting ancient Arabian folklore.[34] In both cases these parks serve to symbolize the strength of the local culture even within the constructs of globalization. They serve as educational and entertainment facilities for the local and transnational population.

This process of visually representing identity and culture is a new practice for the designers and planners of Dubai. The implementation of a localized Arab identity is even harder when conflicting with the overwhelming issues of globalization. The conceptualization of cultural identity in Dubai is also made more complex when considering the relative youth of the city. Mohammed Al-Shamsi in the Dubai Municipality exemplified this when he said, "We (the Arabs of Dubai) are only starting to develop a (visual) culture." Therefore, architectural solutions are all to often in the form of numerous block towers that are "superficially Islamicized by arched entrances and exaggerated motifs."[35] These forms are a thoughtless almost mundane representation of Arab culture. It is a reduction of its original richness and complexity.

Change has been fast and unprecedented in Dubai, and to successfully transfer the essence of a culture onto contemporary architectural form requires time and study.

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[33]Darke, United Arab Emirates, 188.

[34]Brigette Scheffer, "United Arab Emirates," 31-43.

[35]Wheelan, ed. UAE, 80.

The planners in the municipality are aware of this and support the struggle and search for architectural identity. Hashim Kammoona and Mohammed Al-Shamsi acknowledged the time needed for culture to develop. "People need time to examine their ethical, technical and cultural values. Many times, plans are made anticipating the needs of the global economy. Often that will change the ways things are done locally. We have only recently started to focus on our traditions."[36]

Perhaps in time these efforts will develop a depth and intensity that is more appropriate for their intentions and away from the pastiche that is overabundant in the design of architectural facades and interiors currently. The nostalgic and economically driven interests for preservation may also lead to a deeper understanding and appreciation of local origins despite the rapidity of global change and development. This oscillation between the urban representation of local Arab culture and identity and that of the global economy will most likely continue. While the forces of the global economy may attempt to homogenize the business districts of a city, the need and essence of human identity and culture will continue as is. Globalization and localization are not necessarily two opposing forces, but both are powerful and parallel developments, occurring simultaneously. A similar phenomenon can be witnessed in Singapore.

[36]taken from a conversation with Mohammed Fayez Al-Shamsi at the Dubai Municipality on January 25, 1999.

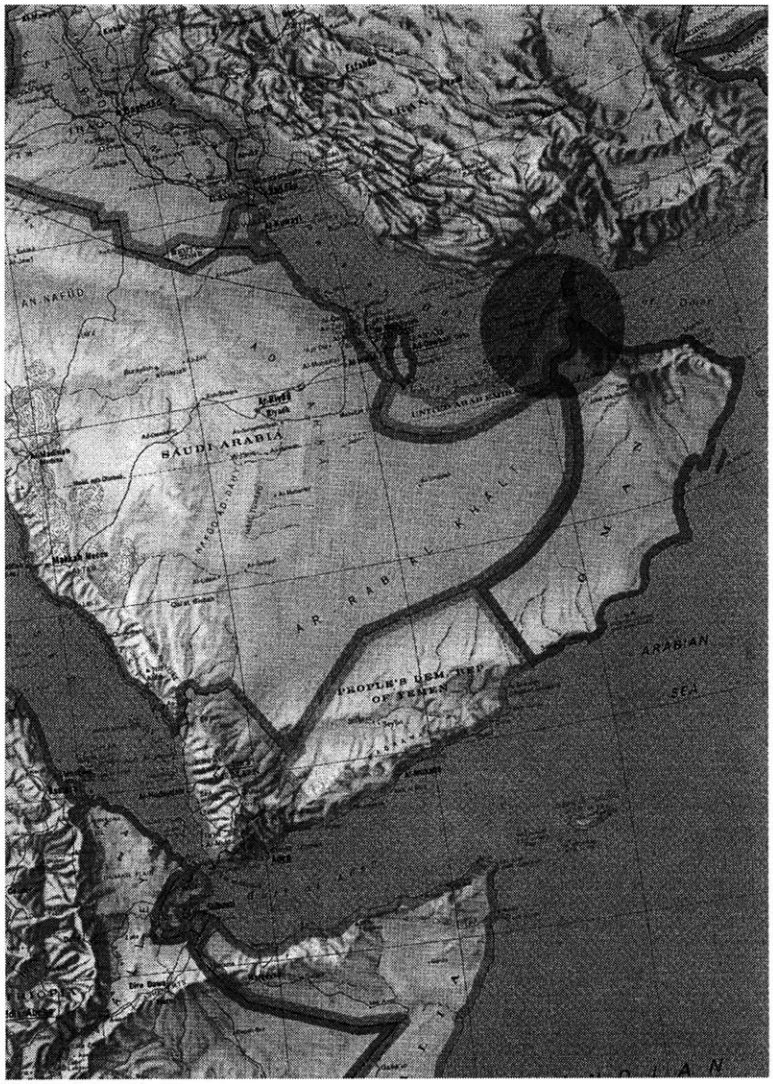

Fig. 1D Map of United Arab Emirates- Dubai

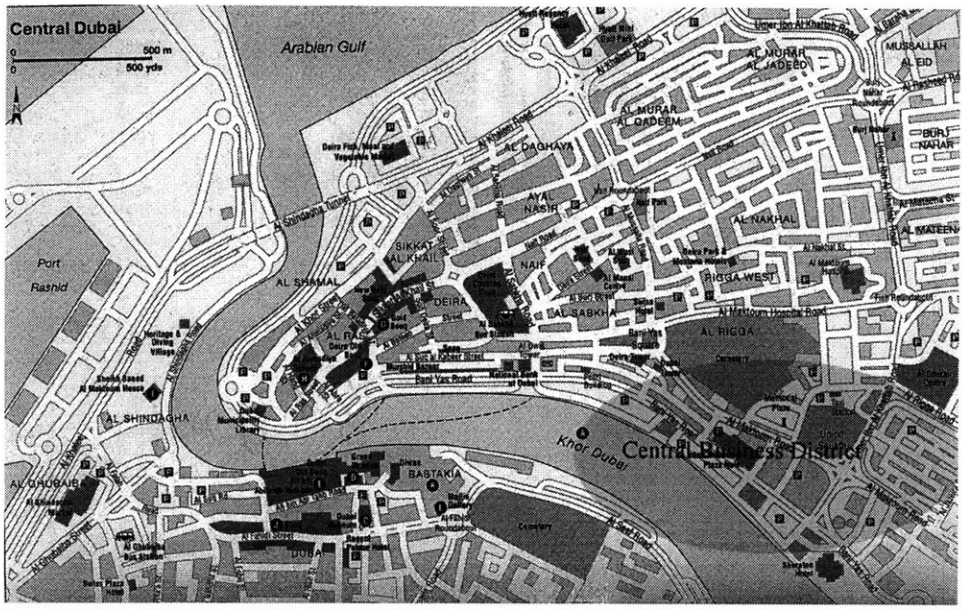

Fig. 2D Map of Dubai

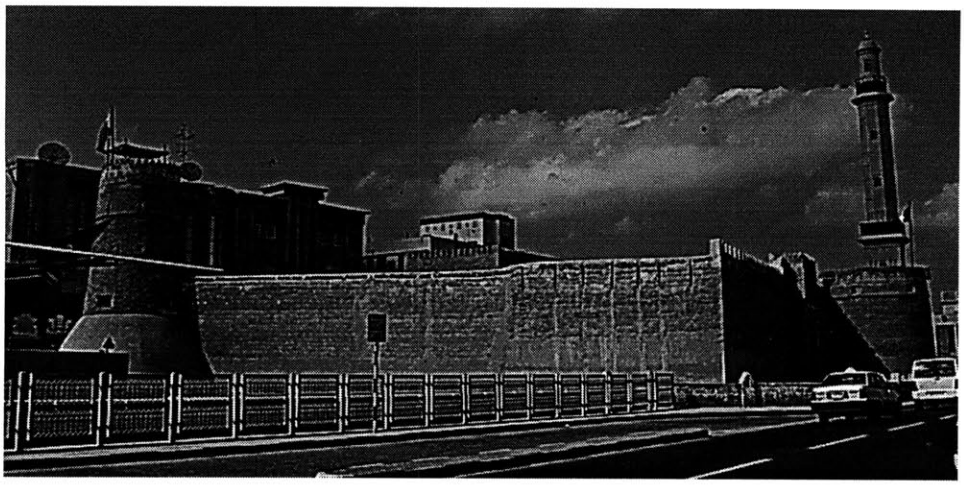

Fig 3D Dubai Fort- Dubai Museum

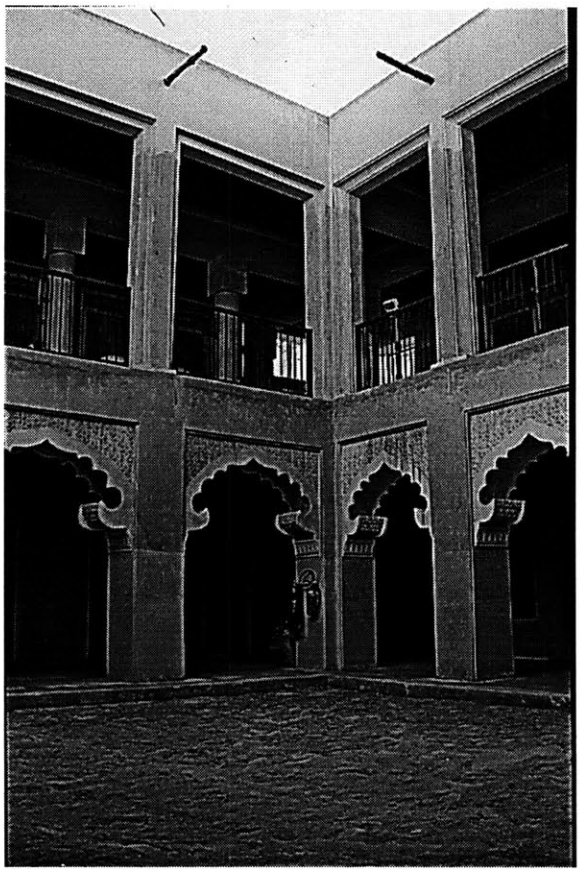

Fig 4D Almadiya School

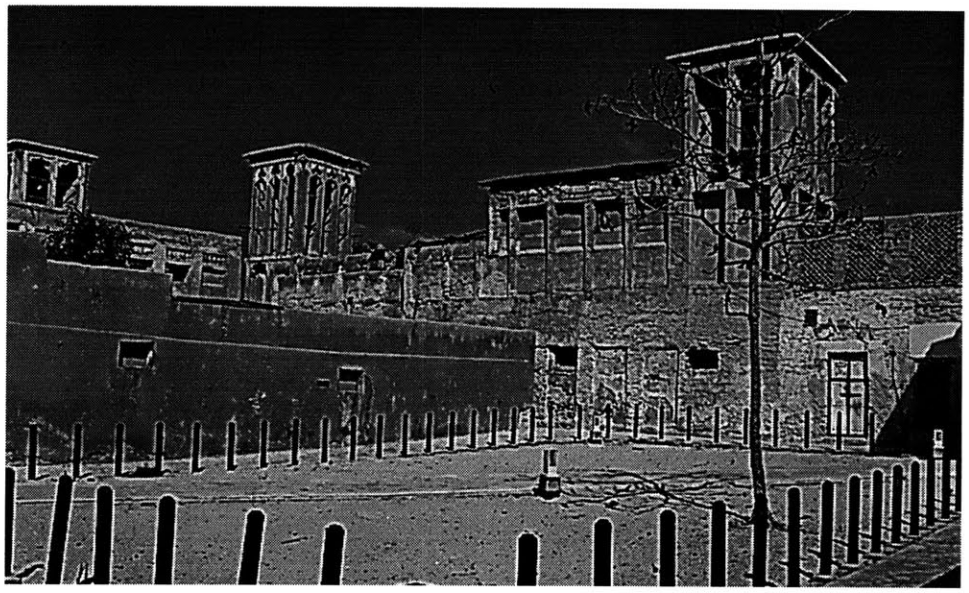

Fig. 5D Bastakiya Quarter - Windtower houses under preservation

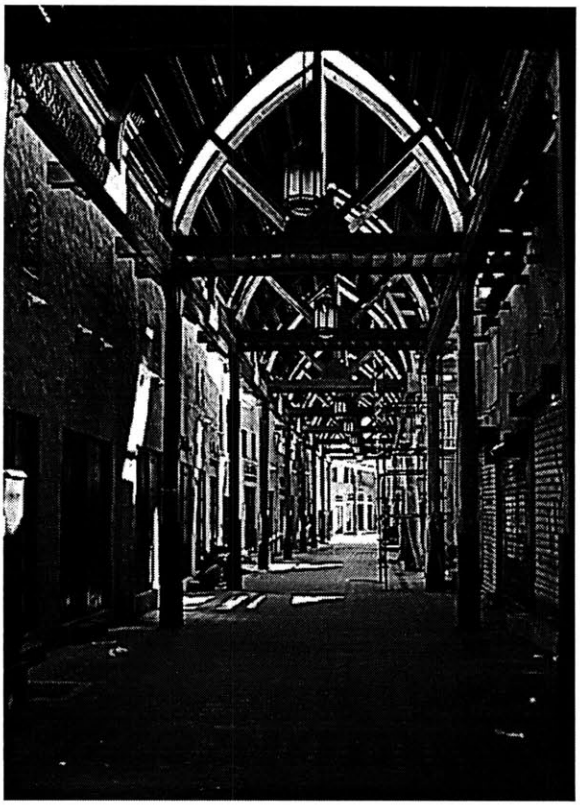

Fig. 6D Grand Souq

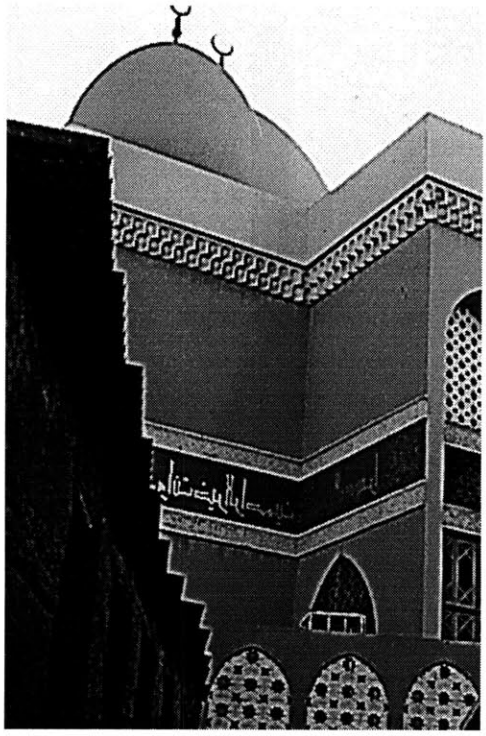

Fig. 7D New Mosque

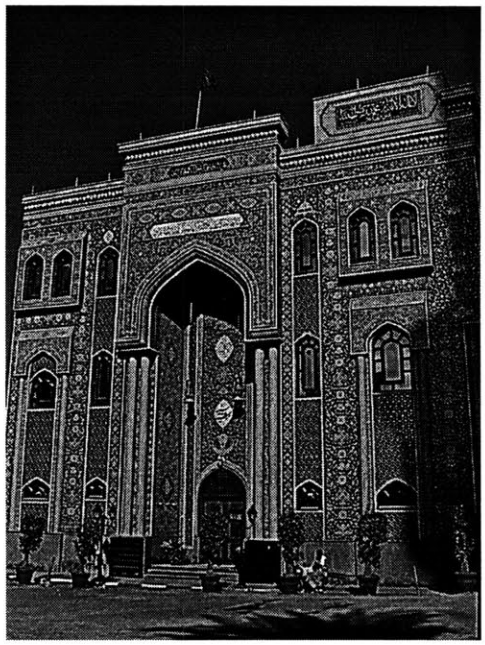

Fig. 8D New Mosque beside the one above

Fig. 9D Wood Screens- InterContinental Hotel

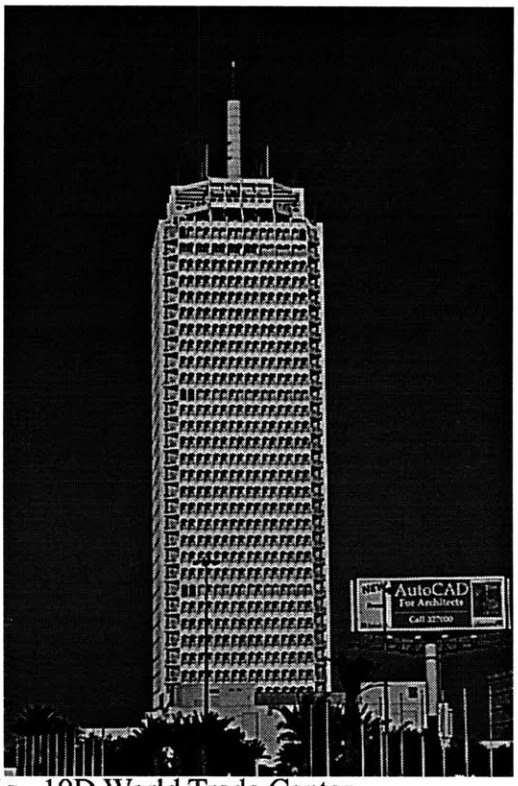

Fig. 10D World Trade Center

Fig. 11D Government Building on Baniyas Rd.

Fig. 12D Office Building on Al-Maktoum Road

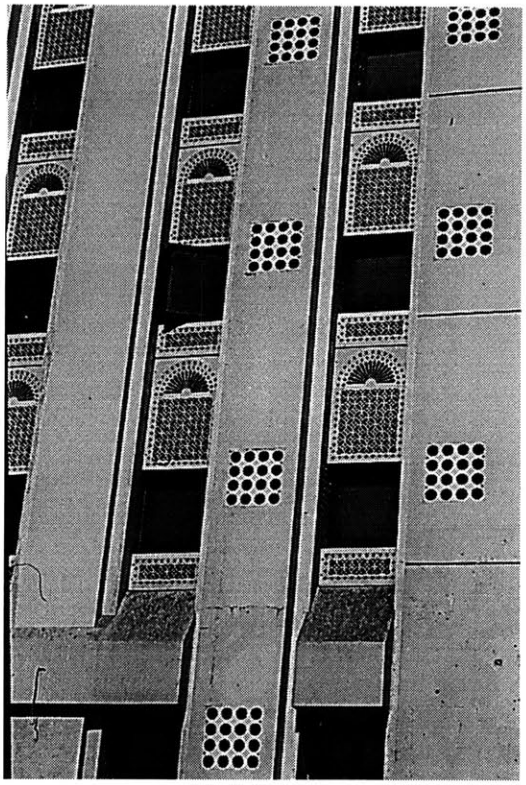

Fig. 13D Detail -Office Building on Al-Maktoum Road

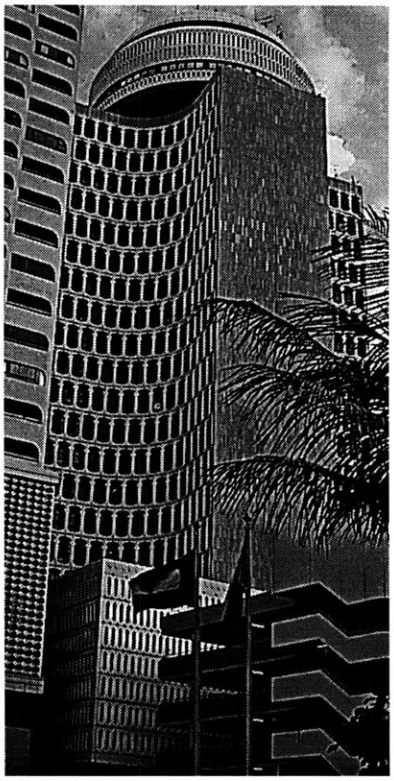

Fig. 14D Deira Tower

Fig. 15D ARRIFT building

Fig. 16D World Trade Center Apartments

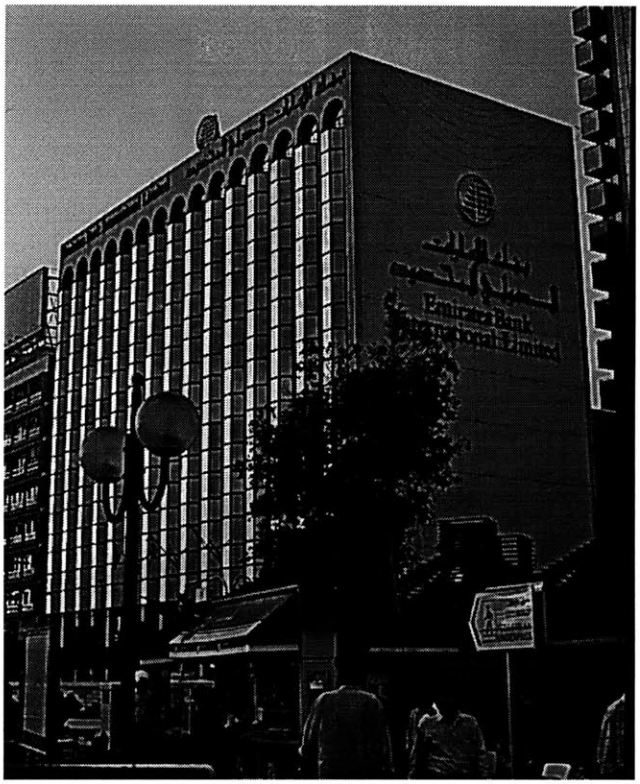

Fig. 17D Emirates Bank

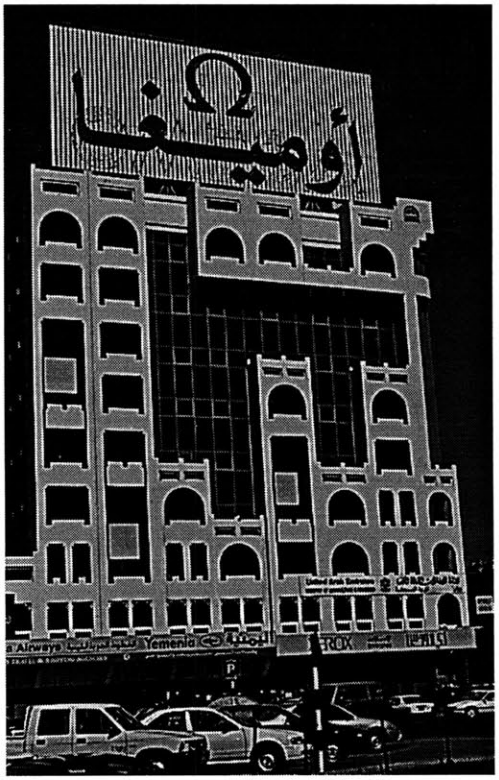

Fig. 18D Ministry of Agriculture/Xerox Building

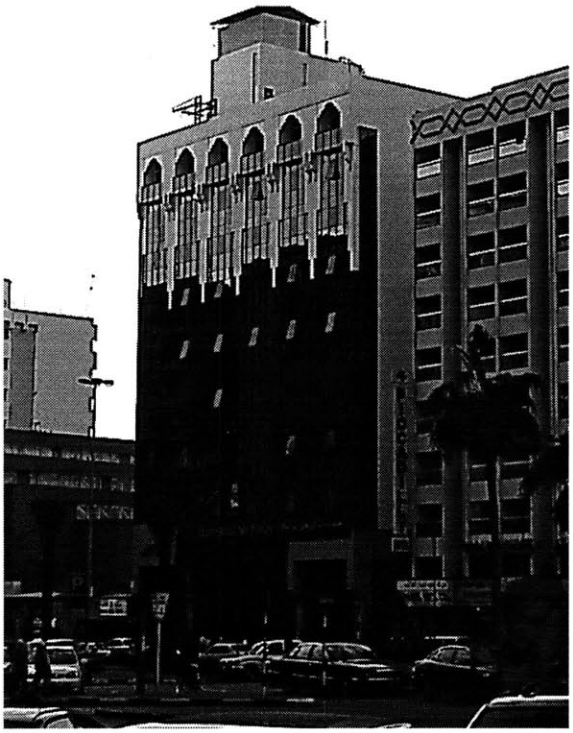

Fig. 19D Habib Bank Building- Baniyas Square

Fig. 20D Building by Dubarch - Baniyas Square

Fig. 21D Department of Economic Development

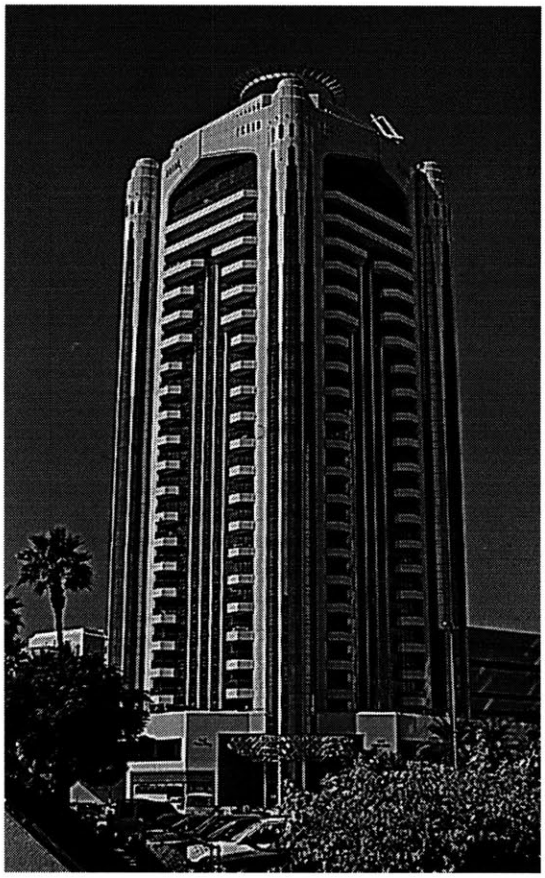

Fig. 22D Dubai Creek Tower

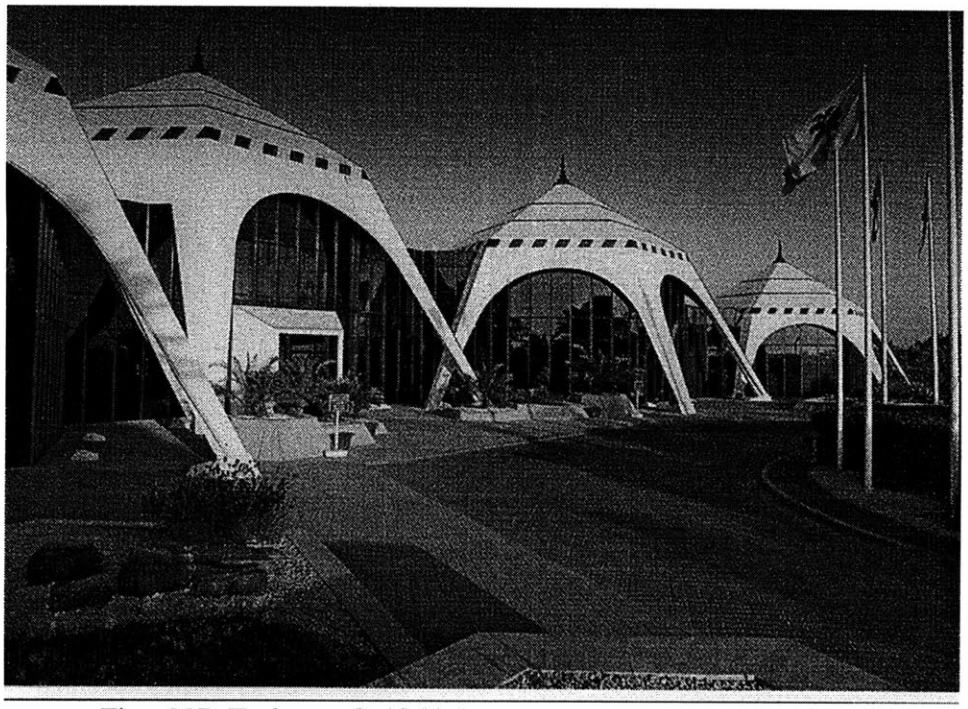

Fig. 23D Emirates Golf Club

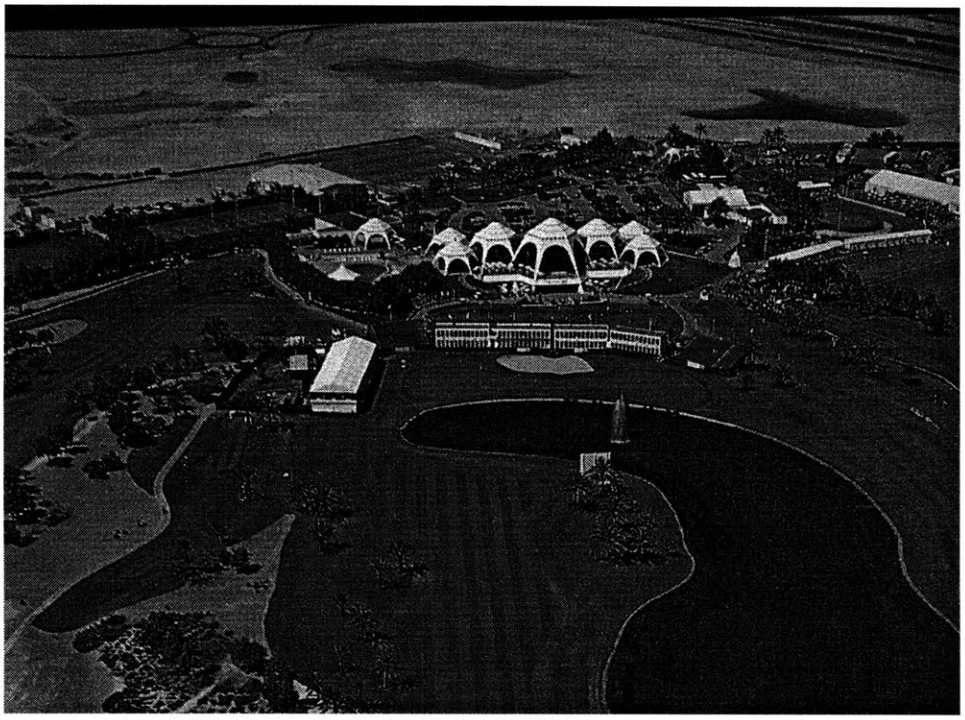

Fig. 24D Emirates Golf Club- Golf Course

Fig. 25D Dubai Creek Golf Club-Entrance

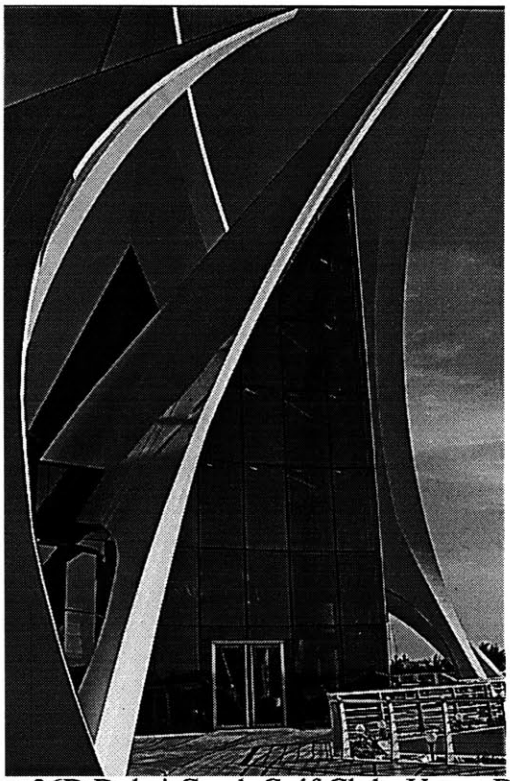

Fig. 26D Dubai Creek Golf Club- Upper Deck

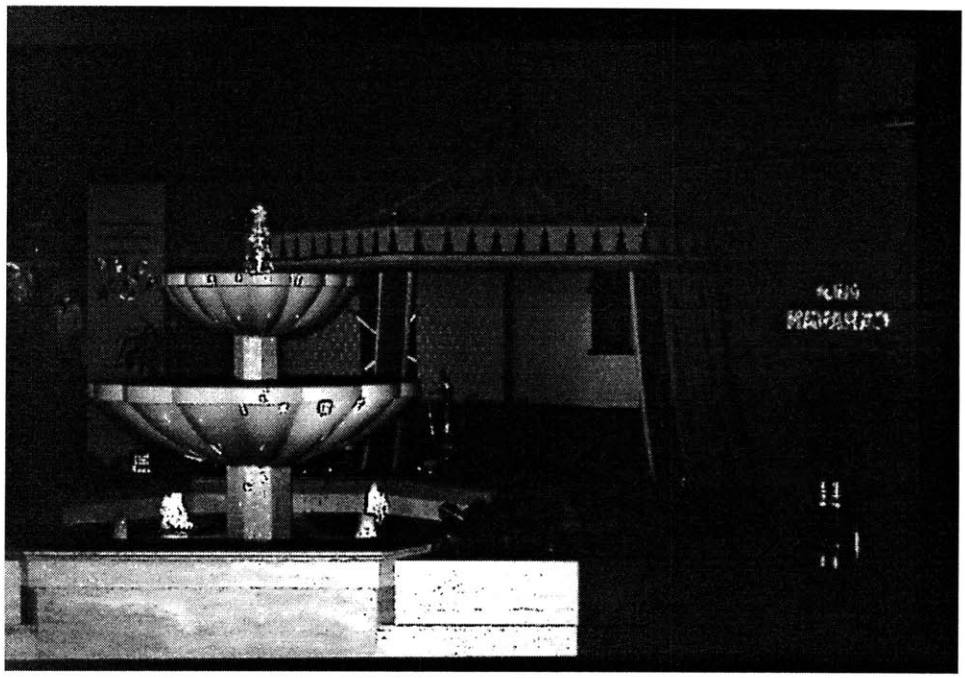

Fig. 27D Tent Display - Hyatt Hotel Entrance

Fig. 28D Tent Display Arabian Coffee Shop - Jumeirah Beach Hotel

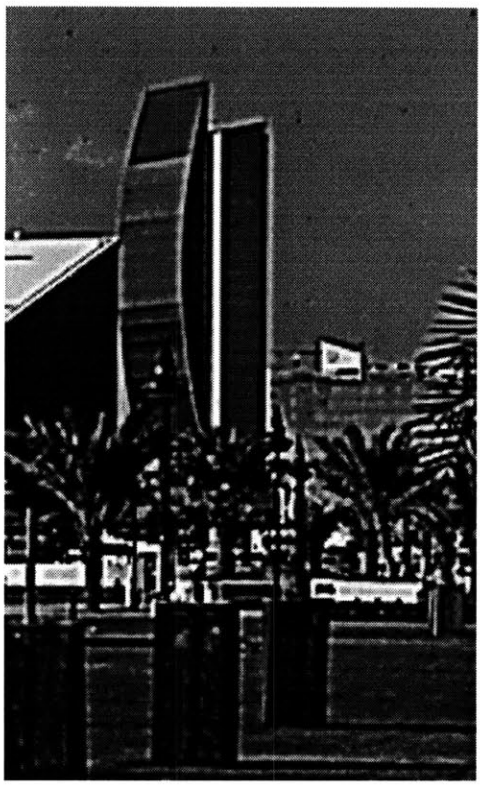

Fig. 29D National Bank of Dubai

Fig. 30D Convention Center- Jumeirah Beach Hotel

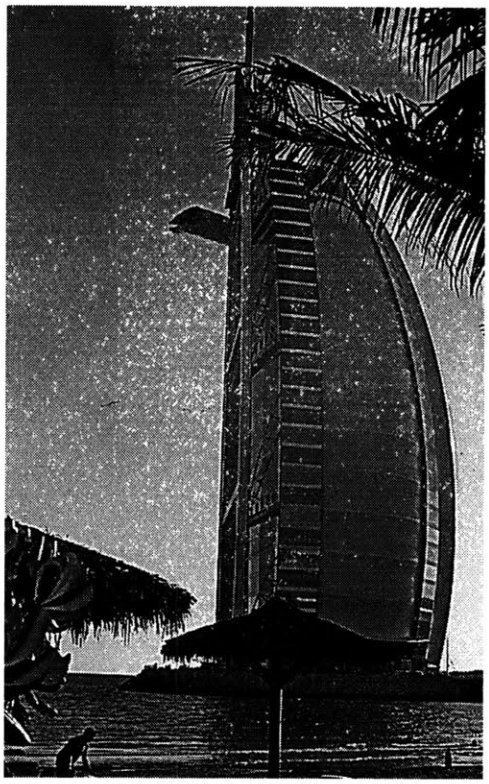

Fig. 31D Chicago Beach Hotel

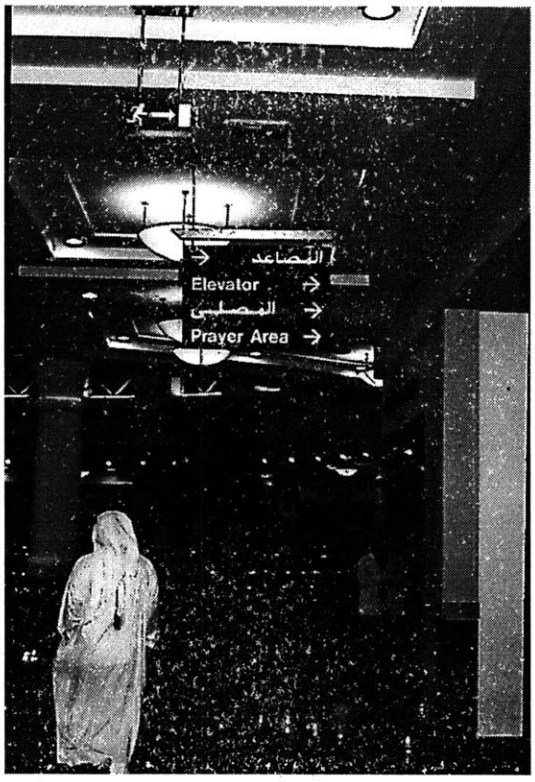

Fig. 32D City Center- Prayer Area Sign

SINGAPORE III.

"In reality design is itself an instrument of research into the problem posed and not simply a search for a solution."

- Pierre von Meiss, Elements of Architecture

From Form to Place, 1989.

"Chinese junks, Arab dhows, Indian vessels and Buginese schooner had long passed through the Straits of Singapore."[1]

In the early 1970's, the Singaporean government made official their long term plan of converting their small impoverished tropical island into a first rate global city. The desire became the foremost of ambitions and whatever sacrifices necessary were to be willingly made. Singaporeans from that point onwards were constantly urged by the ministers of the government and the media to improve the country's global competitiveness.[2] Since then foreign architects associated with multinational operations and corporate culture and style became the only choice when large projects came about in Singapore, as it struggled to make itself recognized in the international multi-national corporate business circles. Local corporations soon after followed this lead and employed foreign architects for the design of their headquarters. The more local firms were exposed to international life-styles, the more impatient they became with the local inexperience of local architects and spurned local tastes and styles.[3] The architecture in the areas that sustained the global economy within Singapore were supposed to have an international sensibility. The multitudes of technology driven high rises and huge multi use complexes were to symbolize the economic success and prosperity of Singapore. Inevitably, the constant flow of foreign architects into

[1]Thomas Sweeny, "Reclaiming Old Singapore," in Historic Preservation. v. 42 n. 3 (May-June 1990), p. 42-49.
[2]Robert Powell, "Country Focus - Singapore." in World Architecture. n. 56 (May 1997), p. 28-48.
[3]Kernial Singh Sandhit and Paul Wheatley. Management of Success: the Molding of the Modern. (Boulder: Westview Press, 1990), p. 871.

Singapore as 'design consultants' considerably alarmed local practitioners hoping to find a market in their own country.[4] Their concerns for the urban development of Singapore were not based solely on the importation of architects, but on the blind importation of design style as well. The majority of the 'foreign consultants' were initially hired to propagate the same style of architecture they had built in other successful global cities. It became evident that all too often the concern for environmental, social and cultural conditions would be overlooked

Yet after one and half decades of intense growth, success and rising national confidence prompted a growing national consciousness and greater cultural sensibilities. By the mid eighties the desire to express one's own identity and intrinsic cultural qualities became more acute and defined. This interest was not only propagated by the designers and planners but also by the top ministers of the government. They feared that the bombardment of global influences would eventually weaken the cultural bonds within their society. Thus, in the past fifteen years there have been attempts to reassert a localized identity within society and within the architecture which is endogenously affected by the cultural past and ecology of the region. While the influence of foreign architectural styles is still considerable, there is a strong local consciousness that is developing in contemporary forms of architecture.

The advocation of the this new localized identity has taken a rather significant slant in Singapore, as the diversity in the population is clearly dominated by the Chinese, as they make up 77% of the local residents. Their strength in representation is augmented by a very powerful Chinese majority within government. The policies of the People's Action Party have been unabashed in its advocation for greater Chinese cultural awareness, in the hopes of strengthening the Chinese communities of Singapore. The extensive numbers of cultural programs proposed by the government target the Chinese community who they consider the building blocks of Singapore's success. This pride in Chinese heritage and culture eventually began to modify the built environment, as will be seen through the design, re-creation, restoration, incorporation of traditional forms of architecture and symbolic practices.

While the British were expanding their control over India, they were simultaneously increasing their trade with China during the second half of the eighteenth century. A site was needed, they thought, located between the two

[4]There are 293 architectural firms registered with the Singapore Institute of Architects.

destinations, where they could refit, revitalize and protect their merchant fleet. Thus, in 1819 the island of Singapore was leased to the British East India Company by Sultan Hussein of Johor and Temenggong Abdul Rahman, the local Malay rulers. When Thomas Stamford Raffles, the British Lieutenant-Governor of Java, sailed up the coast of Singapore that same year, he found a small fishing village with a population of one hundred and fifty people. The hundred and twenty Malays and thirty Chinese, he encountered sustained their livelihood through pepper and gambier planting. Five years later the Sultan of Johore gave the British permanent possession of the land. The British ownership of the land was confirmed through two treaties. The urgency for control over Singapore also arose with the invention of the steamship in the mid 1860's and the opening of the Suez Canal. The status of Singapore increased for the British to become a duty free port, a major port of call for ships and the main sorting and export center for rubber.

When Singapore became a thriving port, the Malay and Chinese immigrants arrived. By 1824, eleven thousand people lived in Singapore, sixty percent of whom were Malays and thirty-one percent were Chinese. In 1827, the majority of the population were Chinese, who were coming into Singapore to serve as middlemen for the British in their development of entre-pot trade. This was followed by Singapore becoming a British Crown colony in 1867. The Indian population started to arrive with the British, in the form of indentured servants and as Raffles' soldiers and assistants for his entourage. The liberal policies of the administration and job opportunities brought more Indians to Singapore. Just before the outbreak of World War One, the Chinese population formed three quarters of the total population. At the end of the Second World War the island was returned to Malaysia.

On August 9th, 1965, this small island of six hundred and forty square kilometers became its own sovereign state (fig. 1s). Hereafter commenced Singapore's intense struggle to survive and prosper on its own. The succession from Malaysia greatly affected the economic situation in Singapore. It had based much of its economic planning on the development of this hinterland. This sudden change was also coupled with the British withdrawal of its naval bases from Singapore. This meant a loss of S$ 500 million a year. The economic crisis that hit Singapore in the 1960's increased the resolve of the state government to transform their plight. In a period of just over thirty years, Singapore went from a country stricken with a poor economy to a model city of economic and social success. In the past three decades,

Singapore's annual growth has exceeded that of most developed countries.[5] In 1992, Deng Xiaoping suggested that China should learn from the Singaporean example of development and success.[6]

Yet the process of transforming Singapore from an underdeveloped to a developed country required considerable social and cultural changes along with economic upgrades. It was necessary to reconcile the traditional lifestyles of the Indians, Chinese and Malays with the exploding changes and developments of modern technology. Singapore's main strategy for its development was linked to what the British colonialists had already known, its strategic location and excellent harbor. As a small island, natural resources would be limited and therefore, the logical path for their development was the expansion of the port, coupled with the growth of Singapore's role within the global economy. The Economic Development Board (EDB) formed in the early 1960's, is the sole government agency responsible for the formulation and implementation of Singapore's economic and industrial development strategies. Ten years after their formation, they put forth a statement enunciating their goals for Singapore. The "mission today is to develop Singapore into a global city with total business capabilities by attracting foreign investment, developing local enterprises as well as promoting outward investments into the region."[7] By encouraging multinational corporations to settle in Singapore for their homebase and development of local enterprises, this would reduce Singapore's own economic vulnerabilities. Their intent was clarified in the plan to turn Singapore into an International Business Hub by the year 2000 (IBH 2000) and a service gateway into the Asian Pacific.

This process began with the continued and more aggressive opening of Singapore to trade and investment. The EDB promoted a $1.5 billion investment into the service sector to build and support regional headquarters, communications and media service clusters. After 1978, the financial and business sector emerged at amazing growth. Over the next twelve years it was to become the fastest growing sector in Singapore. Located between the exchange markets of London, New York and Tokyo, Singapore also serves as a leading foreign exchange center due to its

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[5]Joseph B. Tamney, The Struggle over Singapore's Soul: Western Modernization and Asian Culture. (Berlin: Walter de Guyter, 1996), p. 1.
[6]ibid., 2.
[7]S. B. Balachandrer, ed. Singapore 1997. (Singapore: Ministry of Information Arts, 1997), p. 116.

bridged time zone gap. By the 1990's Singapore was the fourth largest foreign exchange market after the top three global cities.[8]

The integration of Singapore's economy into the international capitalist economy also allowed it to maximize its economic growth through the expansion of trade with developing countries. Singapore has become the fifteenth largest importer in the world. Much like Dubai, the majority of the goods, approximately seventy percent, are re-exported.[9]

The location and quality of Singapore's harbor proved to be another source of financial success. The production of bunker fuel (essentially a by-product of Singapore's oil refineries) heightened the success of this port. By the end of the 1980's Singapore was the largest supplier of ship bunkers. Its increased role in the provision of transportation services to the Asia-Pacific region and its ideal mid point location for offshore dealings in the Middle East and Pacific regions has made it the world's largest container port.

Singapore continues to attract considerable foreign investment for several reasons. Its state bureaucracy, while extremely heavy handed, is not corrupt. After the People Action Party's rise to power, they focused heavily on developing extremely advanced communication networks and financial institutions. Investors were also lured with tax breaks[10], subsidies, low wage scales and a stable political situation. The majority of Singaporeans also speak English. The government has also made it a point to constantly remind its people that economic development is the foremost national priority and they are educated to create the social conditions that aid such development. On October 13, 1991, the Economic Planning Committee released the following statement, "Globalization doesn't merely mean doing things overseas. Singaporeans have to embrace the global socio-economic space and endear themselves to the world."[11] The success of Singapore's efforts is visible in its disproportionate and increasing dominance over the global exchange of capital.[12] Singapore has

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[8]W. G. Huff, The Economic Growth of Singapore. (Cambridge University Press, 1994), p. 341.

[9]Geoffrey Murrey and Audrey Perena. Singapore: The Global City-State. (New York: St. Martin's Press, 1996), p. 69.

[10]Tax incentives include investment allowances up to 100% of the capital expenditure. [S. B. Balachandrer, ed. Singapore 1997, 139.]

[11]Murrey and Perena. Singapore, 25.

[12]David Meyers, " World Cities as Financial Centers," in Yeung, Yue-Man and Fu-Chen Lo, eds. Globalization and the World of Large Cities. (Tokyo: United Nations Press, 1998), p. 414.

demonstrated that in a global economy, one does not have to be a large country to be rich and successful.

This dedication towards globalization did much to alter the direction of architecture and urban development in Singapore at the time. Its increasing role as a global city eventually led to the concentration of service and financial activities in the city's central business district, thereby increasing the value of its land. This development is apparent in the growth of skyscrapers rising from the older colonial landscape and the gentrification of the city center that ensued. This has become an area that is well connected to the global communication systems and deeply imbedded in a complex network of activity and movement. Singapore, much like Dubai, is a city that is driven by the insistence of growth. Billboards and other signage are constantly advertising the coming of newer and larger projects. In the central areas of Singapore, the desire to sustain and attract the frenzy of the global economy has led to a proliferation of hotels, office buildings and shopping centers,[13] influenced by the architecture found in the financial districts in the economically advanced world. Public policies focused mainly on changing Singapore into an investor's paradise.

The initial zeal and freedom for the local architects to design a new national image, after independence, were soon after subdued and suppressed, not more than a few years later. The EDB's forecast of Singapore's future role as a global city, turned the focus away from local architects and to foreign practitioners. The desire to be marked as a prominent global city eventually led to the rampant construction of Singapore's skyline by a whole slew of famous foreign designers since the 1970's. The former desire for self-reliance was now replaced by an economic success that wanted 'all that money could buy.'[14]

The Singaporean government however, also played a critical role in the advocation of foreign architects over the local practitioners. The members of the government had hoped that for Singapore as a city on the cusp of the global economy, the influx of big name architects would mean global recognition as a significant

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[13]While retail has always been a significant part of Singapore's urban environment, nothing can compare to the state it has reached now. There are so many shopping centers in Singapore now, that it probably has the world's highest per capita shopping center per square footage. Additions and changes to the infrastructure guided by government direction has contributed to and accelerated this development.
[W. G. Huff, The Economic Growth of Singapore,300.]

[14]Tay Khneg Soon, "The Architecture of Rapid Transformation," in Sandhit andWheatley. Management of Success, 866.

international economic center. Prominent foreign architects were the city's stamps of approval. The government aided and hastened this process through the Land Sales Policy during the comprehensive redevelopment of the central commercial areas in Singapore. This resulted in a scramble for the profits anticipated to be made on land in the prominent locations of Singapore. The developer's success with a proposal or scheme submitted to the government eventually came to be known to be reliant on the choice of internationally recognized 'name' architects.[15] William Lim, a long-standing architect and critic of Singapore, expressed his dismay with the system. "Many of the ruling elites have gone through a process of disassociation from their cultural roots. The nation's wish to express progress and modernity is reflected in these international symbols of modern corporate architecture. [This destroyed the initial] fragile experiment in the evolutionary development of localism and identity."[16]

While the influences of culture and tradition have always played a importance role in the development of cities, their significance has never been questioned or placed in as much jeopardy as they are now. "In its haste to reach the ranks of the developed nations, Singapore had sometimes cast aside buildings, places, fragile traditions and old practices that collectively formed a people's roots and heritage," says Dr. Hong Hai, a member of Singapore's parliament.[17] Critics who agree with him "lament that while Singapore was on the road to becoming more international in scale and style, it was also becoming faceless and homogenous."[18] The city was becoming for many one without a soul and an indigenous identity. This lack of local identity[19] became a major concern for architects, urban designers and for the government by the mid 1980's.

Amongst this barrage of foreign architects, technological craze and the race to reach the sky, there eventually grew in Singapore the desire to create a city "with our identity."[20] Despite the apparent homogeneity of the architectural environment, the

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[15]Robert Powell, Innovative Architecture of Singapore, 13.
[16]ibid., 16.
[17]Brenda Yeoh and Lily Kong, Portraits of Places. (Singapore: Times Editions, 1995), p. 25.
[18]taken from Keys, 1981; Business Times 19/7/86 requoted in Yeoh and Kong, Portraits of Places, 25.
[19]More often than not local identity meant for the Singaporean government Chinese identity.
[20]Saw Swee-Hock and R. S. Bhathal, eds. Singapore towards the Year 2000. (Singapore: Singapore Association for Advancement of Science, 1983), p. 67.

vigorous assertion of cultural definition and specificity was increasingly felt.[21] The economic success that came with hard work was accompanied with a pride in achievement and in the self. Hence, the desire grew for an architecture to reflect the cultural heritage of the people who built up Singapore. This interest intensified in the mid 1980's when the flourishing of the global environment made many question the character and culture of Singapore.

In 1988, this concern for cultural definition resurfaced within the government. The first Deputy Prime Minister at the time, Goh Chok Tong advocated the need to formulate a committee to develop a national ideology that would help Singapore to keep their Asian roots as it progressed into the twenty-first century. Upon the creation of this Committee, its head Lee Hsien Loong stated that "whether Singaporeans can survive as a nation in south east Asia depends on their ability to retain traditional values and keep them as relevant and living parts of their heritage in the face of change."[22] Singaporeans, he advocated, had to remain Asian, by resisting overwhelming Western influences, in order to continue enjoying the economic growth and social peace. "Since Singaporean culture has not yet come into existence, leaders must build on what exists.[23] This should mean the Chinese, Malay and Indian cultures that make up the general population. However, with the Chinese the dominant majority in the population and government, this search for a Singaporean identity became increasingly narrow. In Joseph Tamney's analysis of government policies that ensued after the creation of this committee, he deduced that much was influenced by the government's perception of Singaporean history. He argues that their understanding of the nation's success as result of the Chinese culture is clearly demonstrated in the mid 1980's with the passing of a series of different proposals. Each primarily advocated a solely Chinese Singaporean identity.[24] There was considerable support by the government for the "Speak Mandarin campaign." This was followed by the construction of several Chinese theme parks. Large budgets were also allotted for Chinese television serials. Therefore, he concluded that "ethnic revitalization primarily meant to preserve Chinese culture."[25] As a result , he claims, many Singaporeans came to believe that the

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[21]William S. W. Lim and Tan Hock Beng, The New Asian Architecture. (Hong Kong: Periplus Editions, 1998), p. 12.
[22]Robert Powell, Innovative Architecture of Singapore, 10.
[23]Joseph B. Tamney. The Struggle over Singapore's Soul, 19.
[24]ibid., 96.
[25]ibid., 97.

"government wanted everyone, regardless of ethnic background, to conform to its version of Chineseness."[26] 'Asian' values became recognized by the public as a code phrase for the official version of Chinese culture.[27]

This growing association of a Singaporean cultural identity with that alone of *Chinese culture* occurred perhaps for several reasons. The overwhelming dominance of the Chinese population in Singapore gives the island the unique character of being a Chinese state. Freely utilizing this as an explanation, the government has been able to avoid addressing the values and beliefs of other ethnicities within Singapore. Raj Vasil, in his analysis of Singapore also noticed a considerable pride amongst the Chinese who credit themselves with the economic expansion and growth of the country since its independence in 1965.[28] Therefore, it is not surprising that they would want to assert themselves more aggressively in Singapore since they view it as their country. This should heighten the complexity for the government, for as the dominant majority, they had promised to maintain in their founding principles, a multi-racial and cultural democracy. Fellow compatriots (such as the Indians and Malays) were to be treated as communities of equal worth. Yet, despite the fear of racial or cultural disharmony and concerns with the growing disassociation of Singapore with any culture, the current prime minister found new impetus, not only to Asianize Singapore but once again to restore its Chineseness even more intensely. "It is now argued," he has said, " that if the Chineseness of the Chinese in Singapore are not restored, Singapore would have to face several serious consequences. Firstly, Singapore is likely to lose many of its highly educated and skilled citizens, who are the chief producers of wealth in this country. Secondly, as the Singapore polity is the most in harmony with the traditional political culture of the Chinese, it may have serious implications for the political stability and the effective working of the polity in the future."[29] He feared that if the Chinese connection with Singapore was too weak, many of the Chinese students

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[26]The ability of the Singaporean PAP government to so effectively push their visions, was due in part to its unusual power and stability in Singapore. Their tight control of political power in Singapore for the past four decades is due to a relatively weak local bourgeoisie, the relative affluence of its people, the government's lack of corruption and the wealth of financial resources. Since the People's Action Part won their first general election in 1959, this party has stayed in office.

[2727]Joseph B. Tamney. The Struggle over Singapore's Soul, 102

[28]Raj Vasil, Asianising Singapore: The PAP's Management of Ethnicity. (Singapore: Heinemann Asia, 1995), p. 3-4.

[29]ibid., p. 114.

educated abroad would find less incentive to return home to a community with which they have no bond.[30]

This new concern and increase in identity awareness, again altered the direction of the architecture and urban environment of Singapore. The previous craze for a more homogenous global corporate appeal in architecture was re-evaluated and subdued in favor of a more local appeal. However, this in itself would be a challenge. William Lim and Tan Hock Beng, both practicing architects in Singapore comment in their book, on the difficulty of designing within an global environment.[31] The creation, representation and embodiment of a cultural identity would perhaps be clearer within the confines of one's personal home, in isolated and smaller buildings or even perhaps in a resort that is closer to the earth and its natural environment. Inevitably to create an cultural identity that is clearly visible in the urban environment built for the global economy is much more tasking. However, it is in this environment that any representation of culture would be most visible to not only the transnational global population but also the locals. It indicates the strength of a local identity and culture even while embracing the technological and homogenizing pressures that arise in the propagation of globalization.

Singapore, like Dubai, struggles architecturally, especially since the late 1980's, to mark its environment with an identity that the government and the Chinese majority would perceive as their own, to demonstrate their uniqueness and strength as a nation. This endeavor however, is apparently more complicated, according to Goh Chong Chia,[32] since "international architecture has always acted as the architectural lingua franca in Singapore."[33] In this initial period of globalization, the bombardment of foreign designers has been extensive. Some of these architects would import with them, an international or foreign ideal. In Singapore's early stages of growth, this may have served as a much needed unifying force in its development. However, with global, economic and social success, the interest to perpetuate a new direction of architecture is grew stronger.

There are several means through which architects and designers are attempting to instill an awareness of Chinese culture. Three different systems have been

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[30]Prime Minister Goh Chok Tong made this statement in 1991.
[31]William Lim and Tan Hock Beng. The New Asian Architecture, 13.
[32]Goh Chong Chia is one of the partners in the Singaporean firm, TSP Architects, Planners Pte Ltd.
[33]Timothy Ostler, "WA Profile - TSP Architects and Planners Pte Ltd.," in World Architecture, n. 38 (1995), p. 24-63.

developed, which are not altogether different from the methods that are used by the architects and planners of Dubai. There is an attempt to manipulate and re-create in forms of buildings and large urban developments allusions to traditional forms of Chinese architecture and motifs of cultural significance. This is seen in hotels, high rises, theme parks and retail centers. The second means of cultural representation in architecture, is through the symbolic adaptations of buildings and urban layouts. In Singapore, with its Chinese majority, this practice of *feng shui* or geomancy[34] becomes a powerful and influential force.

The interest in the cultural reinvigoration and representation in the built environment of Singapore has also taken the form of restoration of older, more historical buildings. The purpose of conservation most often is to identify within the city, the architecture that is considered most representative of the original identity and culture of the city. Preserved landmarks throughout the city serve as reminders and tools to educate and influence the local population of the cultural traditions and visions for the city. Inevitably, the selection of buildings preserved is affected by a bias, since it is dictated by the agenda of those who choose the buildings. Several neighborhoods primarily Chinese, in the central business district have been preserved in their remaining entirety. Some work has also been done in the Malay and Indian quarters.

The manipulation of architectural form in the realm of the global economy can be heavily abstracted to a point of pure geometry or it may take the form of extremely animated re-creations of what is considered more traditional architecture. It may also take a form in between these two extremes. In almost all cases, these architectural references are made to Chinese heritage and culture. While most of the Chinese population who initially immigrated to Singapore came from the south eastern coastal provinces of China, the Chinese architectural influences which are now alluded to in contemporary architecture have taken a generic abstracted appeal, losing much of its historical framework in favor of technological appearance. Examples of these buildings in Singapore are scattered throughout the central business district,[35] around Raffles Place (fig. 2S) and along Orchard road (fig. 3S) primed with hotels, commercial and retail buildings.

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[34]Geomancy, is not the most perfect translation for feng shui. However, it is the only english term that comes close it is actual definition.

[35]The central business district is most easily identified by the skyscrapers of Raffles Place. However, it does stretch along Shenton Way/ Robinson Road/ Cecil Street commercial corridor to Tanjong Pagar and Anson roads.

The Dynasty Hotel, (now the Marriot) is an important node and landmark of Orchard road (fig. 4S). It is situated along a street lined with boutiques and shop fronts selling Alfred Dunhill, Ungaro, Louis Feraud, Gucci, Jaegar, Lanvin, Ralph Lauren, Cerutti 1881 and Georgio Armani. It was built in 1982 by the architectural firm known as the Archiplan Team. The building itself is a thirty-three story octagon that sits on the corner of Orchard and Scotts road. This concrete high-rise structure is capped with a bright green Chinese temple roof. Its eight sides represent an auspicious number in the Chinese culture. The hotel brochure claims that the hotel echoes the extravagant pagodas of China's Imperial past. The octagon is commonly the shape that most often relates to the pagoda. The pagoda, however, was initially built as a Buddhist building to enshrine a local object. In the Dynasty Hotel, this intent is obviously lost. While for most people this as a weak analogy, its evocation of Chineseness nevertheless, is accepted and welcomed. For the locals that frequent Orchard Road it provides a visual relief from the rows of usual glass boxes that line the street.[36] In the interior of the hotel a three story lobby displays carved teakwood panels that describe the history and legends of China. The chandeliers while made in Austria, suggest 'Oriental' influences as does the red walls and curtains. Red is considered a fortuitous color for the Chinese. In the interior and exterior of the hotel, efforts are made to allude to a Chinese heritage inspite of contemporary means of construction and the commercial and global environment of its immediate surroundings.

There are two other hotels in Singapore that adopt the appearance of traditional Chinese architecture in the design of their hotel exteriors. The Future Traders' Hotel is located at the intersection of Tanglin Road and Granger Road (fig. 5S). It was designed by the Singaporean firm, RSP Architects, Planners and Engineers (Pte) Ltd. The entire hotel complex is wrapped in a walled enclosure with a central courtyard, alluding to either the structure of the traditional Chinese courtyard house or temple. The high rise building that forms the main body of the hotel complex is capped with a red gabled temple-like roof. The information center located at the corner of the walled-complex and street intersection, is in the form of an octagon. This pavilion is topped with a separate three tiered octagonal roof. Contemporary architecture is once again alluding to the Chinese pagodas of the past. It was considered in the past that the more

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[36]Norman Edwards and Peter Keys, Singapore- A Guide to Buildings, Streets and Places. (Singapore: Times Books International), p. 212.

important the building, the greater number of tiers the roof has.[37] This concept was applied to palaces and temples. However, in the Future Trader's Hotel, the multiple roofs is used to cover an information center. Distorted into Disney-land-like icons, the traditional Chinese architectural elements adopted lack all their original significance.

Currently under construction in Singapore is the Merchant Court Hotel (fig. 6S) designed by the Alfred Wong Partnership, local firm. It is located along the waterfront of Clarke Quay to exploit the location as an urban resort. The site is bordered by three streets and a series of warehouses. In plan the building forms a U-shape, the two arms enclosing an inner landscaped garden. The tallest part of the hotel, is twelve stories and butts against the main street, forming a protective wall to the interior of the hotel. This is somewhat similar in concept to the walled enclosure of the Future Trader's Hotel. As the form of the hotel breaks down as it nears the Singapore River, so do the roofs reduce in scale. The design of the red tiled roof structure suggests the architecture of traditional Chinese temples. Its multiple layers allude to a greater monumentality of the project or an attempt to add a complexity to a series of shallow re-creations. The various corners of the building form two thirds of an octagonal shape, each with their own multiple roof, again alluding to the image of the pagoda.

While the architectural success of these buildings is questionable, they nevertheless, serve two purposes rather effectively. Located as they are in prominent parts of Singapore, along Orchard Road and in the downtown district they are visible to the locals and foreign visitors. For the local inhabitants, they hint at the Chinese heritage and culture of Singapore and more emphatically state the current dominance and success of the Chinese within this global city. For the tourists and other transnational travelers they are aiming to attract, these types of structures create a sense of unique identity and culture within the environment heavily influenced by the global economy.

This manipulation, transformation and recreation of forms perceived as traditional Chinese influences is also witnessed in the design of commercial and corporate high rises in the central business district and along Orchard Road, the commercial haven of Singapore. While the skyline of Singapore's central business and commercial districts are constantly metamorphosing, there are several buildings that in

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[37]Evenlyn Lip, Feng Shui. (London: Academy Editions, 1995), p. 27.

their exteriors and in interiors allude to traditional Chinese architectural and cultural references, despite their function as anchors for the global economy. One of the most prominent is the Millenia Complex (fig. 7S). Recently completed in 1997, it is located on one of the sites sold by the Urban Redevelopment Authority. This meant that the development had to be approved by the government in its proposal stages. The entire complex which consists of hotel, office and retail spaces was designed by Kevin Roche, John Dinkeloo and Associates (one of the many American architecture firms building in Singapore), in conjunction with Singapore's DP Architects Pte Ltd. Millenia Singapore, the forty-one story office tower (fig. 8S) rests on four illuminated cylinders and is topped with a very prominent forty foot lit pyramid roof. The entrance to the retail complex located off Raffles Boulevard (fig. 9S) is also roofed by this same pyramid-like form. However, this time there is nine of them. Written on the wall immediately above the entrance to the shopping center are two lines of a phrase in Chinese. While the form of these pyramids may seem to allude to the roof of traditional Malaysian mosques, their original influence inevitably returns back to the Chinese. The traditional Chinese roof always took the shape of some kind of triangular form.[38] The plan of these traditional pyramid roofs can take various forms of geometry, including the circular, pentagonal, hexagonal, octagonal (as seen in the modern adaptations described above in reference to the Merchant Court Hotel, Dynasty Hotel and Future Trader's Hotel), or the square[39] as seen in this example of the Millenia building and shopping complex.

The same use of the pyramid like roof can be found on numerous buildings on Orchard road (fig. 10S). The Lane Crawford Place[40] (fig. 11S) located at the intersection of Orchard Place and Paterson road forms an unusual set of geometric shapes. Completed in 1993, this was also a site that was sold by the Urban Redevelopment Authority in their efforts to build up the face of Singapore. The total site makes up just under eight thousand square meters. The large glass cone that marks the corner of the street intersection has a state of the art spiral escalator in its atrium. Advancements in technology remain in Singapore a significant part of its urban development. Behind this cone building is the sixteen story glass office tower made unique by its shape. Its four corners are chiseled so that the building forms a total of

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[38]ibid., 35.

[39]ibid., 27.

[40]It is designed by Kisho Kurokawa with Wong and Ouyang, and RSP Architects and Planners.

eight sides, interpreted as a lucky number for the Chinese. The top of this building is covered with a circular cone roof, another allusion to the pyramid roofs of traditional Chinese architecture.

Along Orchard road, just opposite the Dynasty/Marriot Hotel is the Shaw House (fig 4S). A high rise building set upon a podium, the form starts to step on the upper third of the building. Getting progressively narrower, it is capped with a flattened green pyramid. The Shaw House abstractly reflects the image of the circular pagoda roof opposite of it on the Dynasty hotel, since the hotel is considered a prominent landmark of the commercial area of Orchard road.

A block down from the Shaw house is the large commercial plaza of Ngee Ann City. The two high rise buildings, Tower A and B, anchor both sides of the complex. They are connected in between by the retail shopping complex. Both the high rise buildings and the shopping complex have stepped pyramids as roof that are ultimately capped with a space frame and glass structure serving as a skylight for the top level of the building. Around the open plaza at its base (fig. 12S), the colonnade openings are cut in geometrical patterns that allude to traditional Chinese openings for doorways. The Ngee Ann City complex serves as a major anchor for Orchard road not only for its size and commercial appeal for both locals and foreigners alike, but this complex houses the MTR station for Orchard road.

The new headquarters for the Singapore Tourist Promotion Board (fig. 13S) was designed by Singapore's Alfred Wong Partnership and completed in 1995. Shaped in the form of a V, it opens to a central courtyard. The building itself is thirteen stories. The upper five floors break up into series of distinct hipped and gabled roofs that once again suggest traditional Chinese roofs.[41] There is another level of detailing within this buildings that helps localize the architecture. The fan shaped traveler's palm (fig. 14S) is a plant unique to the equatorial areas and thus, serves as one of Singapore's landmarks. This is the decorative and thematic patterning carved onto the material on the interior walls and throughout the facade. While this building references Chinese architectural traditions, albeit poorly, it also attempts to use a more universally accepted symbol of Singapore. This abstracted representation of local plant of Singapore is necessary for the Tourist Promotion Board as they attempt to market

[41]The Chinese roof always takes some triangular form. The roof forms takes four basic shapes: the gabled, hipped, half-hipped, half-gabled and pyramidal. [taken from: Andrew Boyd, Chinese Architecture and Town Planning. (Chicago: The University of Chicago Press, 1962), p. 35.

Singapore as a multi-cultural state. Yet it is undeniable that the Chinese-like roofs on the top levels of the buildings remain the most prominent part of its design.

Located at Raffles Place is the Republic Plaza, a high rise designed by Kisho Kurokawa Architects and Associates with RSP Architects Planners and Engineers. The building itself is subtly stepped, a design intervention that is perhaps more obvious in the changes in the shape of the plan. However, closer to the top of building, each level is more prominently smaller than the previous, forming some sort of an abstracted pagoda, a common allusion for highrises built in Chinese cities. The pagoda is perhaps the most easy reference to draw from due to its slender form and greater heights comparatively to most other traditional buildings. Yet the original significance is often overlooked in favor of extreme abstraction and technological fascination.

The Concourse (fig. 15S) by Paul Rudolph and Architect 61 is another high rise building that attempt, however, abstractly, to refer to the Chinese pagoda as an inspiration for form. The entire development is seven hundred thousand square feet of residential, retail and commercial space. The complex includes a forty one story office tower, an eighty-seven unit residential hotel and a three level shopping mall, all sitting on a site of 223, 579 square feet ,[42] along Singapore's waterfront. The commercial tower is designed from eight basic clusters that shift vertically and interlock horizontally to form the complex body of the high rise. This allows for outdoor terracing and effective protection from the tropical sun of Singapore. The plan of the office tower is an octagon for cultural reasons, since as stated before, the number eight connotes for the Chinese happiness and well being.[43] The numerous references to the pagoda in the contemporary architecture is interesting, especially since there are no original pagodas in Singapore.

It is also interesting to note that the Republic Plaza and the Concourse sit first on a podium, as do many other highrises in Singapore. The Republic Plaza's sixty-six stories rests on a nine story podium. The same is seen with the Millenia Tower, Greatest World City complex, the Shaw House and the Merchant Court Hotel. The office building in the Lane Crawford Place even hints at the notion of a podium through the different use of materials. Most often the podium houses the retail aspect of the program, while the high rise above consist of the corporate and commercial offices. Yet this abundant incorporation of the podium into mid and high rise design may refer

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[42]The size of the lot is twenty percent larger than a Manhattan city block.

[43]Roberto de Alba, "The Concourse Building in Singapore," in Arca. n. 82 (May 1994), p. 4-15.

to the traditional Chinese buildings which were built on a raised podium. The higher the podium, it was believed, the more important the building.[44] However, the purpose of the podium here in Singapore does not seem to serve this purpose. The podium in Singapore also does not serve the function it does in Hong Kong, in creating an extra level of direly needed circulation space, at least not yet.[45] The incorporation of the podium, much like the pyramid roofs and references to temple or pagoda architecture have become empty signifiers on the buildings in the global economy. While the references to Chinese traditions, heritage and culture may be clear, the true significance and intent of these architectural forms have been lost. Yet with the government's active participation, these architectural objects now serve as symbols in reviving and building a stronger Chinese cultural awareness in Singapore, the global city.

In the claiming back of one's own urban environment from the overwhelming influences of the globalization, there have been some more subtle distinctions that are made within the architecture to address the concerns and interests of the local (primarily Chinese) residents of Singapore. The notion of Feng Shui for the Chinese of Singapore is an important part of the design and construction of buildings and interiors.

The concept of feng shui is based on the belief that there is a healthy dynamic balance in the universe and that human fate and fortune is considerably controlled and directed by these cosmological and earth forces. This art of placement and urban orientation has been practiced by the Chinese for the past one thousand years. The increase in awareness of Chinese heritage and culture in Singapore in the past ten years has led to a rise in popularity of feng shui. The geomancy practiced in Singapore closely resembles the system used in the coastal province of Fu Jian in China as it is where the majority of the practicing geomancers in Singapore originally came from.[46]

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[44]Evenlyn Lip, Feng Shui, 35.

[45]In the January 19th 1998 edition of the Strait Times, the article titled "Singapore as a world-class city: 4 areas of focus," spelled out Singapore's prime minister's areas of focus in the continued development of Singapore urbanistically. Goh Chok Tong expressed an interest in studying more on Hong Kong's use of the second storey level pedestrians that are located all indoors allowing commuters to walk from one building to another without using the road. This is part of the function of the podium in the architecture of Hong Kong that is not found currently in the architecture of the podium in Singapore.

[46]The province of Fu Jian is most associated with the Compass school of thought, regarding feng shui. The compass school focuses on detailed analysis of directions and elements to determine the positive or negative energies on a site or within a building. [taken from: Sara Noble, Feng Shui in Singapore, 12.]

Examples of feng shui in the built environment are visible to the trained eye in the location of a building, in the placing of furniture, in the form of the plan or design of the building. I. M. Pei designed a fifty-two story high rise for the headquarters for the Overseas Chinese Banking Corporation (OCBC). This building replaced the old headquarters housed in the China building, which was a six story building with a classical design. This new building was representative of an aggressive urban renewal policy advocated by the government in the late 1970's. It was to be the symbol of the new fast paced development of Singapore that would soon tower over the low rise colonial buildings and rows of shop houses. The location for the new building remained over the site of the old in what was considered historically the city's center of Chinese commerce. While I. M. Pei is not a big proponent of feng shui, it was believed nevertheless by the owners. OCBC originally prospered here due to feng shui and they were told that if they remained at this location, they would continue to prosper.[47]

This awareness and interest in feng shui is not restricted to banks alone. While not overtly discussed in Singapore, it has also affected the design of certain hotels. The Hyatt Hotel is located on Scotts road, just off the commercial haven of Orchard road. Built in 1971 by Architectural Design Group, the hotel underwent extensive renovations in 1984. In 1986, Michael Gray, the former manager of the Hyatt was interviewed by a local television station SBC TV. He explained that bad feng shui was considered as a significant reason for the poor show in business levels. Thus, when renovations were considered, the new designs of Kumpulan Akitek was largely affected by the advice and recommendations from a '*feng shui monk.*' The angle of the main entrance was changed. The fountain formerly located in the front of the building was moved and replaced with flower beds. A flag pole was also placed in the fourth floor. There are many other hotels in Singapore besides the Hyatt that are believed to have had some form of geomantic renovations. However, the lack of public acknowledgment keeps this suspicions as mere speculation.[48]

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[47]"Bank Headquarters-Symbolic of New Singapore," in Architectural Record. v. 167 n. 4 (April 1980), p. 118-121.

[48]Sara Noble spent a year and a half in Singapore studying feng shui with the leading geomancers of the city. Through her discussions with them, she came to the conclusion that possibly the Shangri-La, the Marco Polo and the Dynasty Hotel had all consulted feng shui experts during the times of their renovation. [Sara Noble. Feng Shui in Singapore, 40.]

This practice of feng shui is not restricted to renovations alone. Despite the overwhelming concerns of the global economy, it has still proven to be an influential force. This is seen in the Ritz Carelton Millenia, one of the new hotels constructed as part of the Millenia complex. Kevin Roche was the main architect but the interiors of the hotel were designed by Garth Alexander Oldershaw. His design for he interiors was governed by a European aesthetic and the general expression of wealth, although, Oldershaw claimed that Asian/Chinese references are very much present to suggest the sense of place. Much like the hotels in Dubai, the architecture is often localized through the selection of furniture and art displayed. In the Ritz Carelton, the guest rooms were filled with specially commissioned pieces of art by Asian artists. The carpeting throughout the hotel reflects Tai Ping influences. The furniture in the lounge is made up of Ming tables. The references to the Chinese culture of the locale is subtle, limited to a few carefully selected pieces. Even more subtle and perhaps unknown and invisible to the majority of the guests frequenting this hotel is the use of feng shui in the orientation of the hotel and certain interior elements.[49]

In the interest of ensuring profits, feng shui may have influenced the design of the department store Wisma Atria, a high rise building located immediately beside Ngee Ann City and opposite the Dynasty Hotel on Orchard road. When this building was later studied by a feng shui expert, he stated that the entire concept of the design, materials, interior decor, even the store logo was influenced by the feng shui. In all cases the allusion was made to water, since water symbolizes money, consequently the wealth and success of a department store. The store logo represents a series of stylized waves. Waves and seas are often depicted in their advertisements. The building is clad in translucent blue materials to recall the image of water. The main entrance of the buildings is also set below ground level, which forces customers to enter the buildings by descending a staircase that curves backwards and forwards, resembling a stream of water entering a pool. The analogy in feng shui is that the bottom of the building is very much representative of a reservoir collecting the customers that flow in like water. A large aquarium also anchors this building on its lowest floor. Wisma Atria seems to be another example of the dominant influence of feng shui inspite of the very powerful focus on globalization.[50]

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[49]Edie Cohen, "Putting on the Ritz," in Interior Design. v. 68 n. 10 (August 1997), p. 154-156.
[50]Sara Noble. Feng Shui in Singapore. 52.

In the largest private mega-development in Singapore, feng shui influenced the overall layout of the plan. Suntec City (fig. 16S) designed by Tsao and McKowan and DP architects consists of a 1.08 million square feet convention center, 800,000 square feet of retail and entertainment space, forty-five story office towers and an eighteen story office tower. The entire project spans in all twenty-three acres. It seems increasingly that "as cities through out Asia leap into the twenty-first century, the multi-use development is fast becoming the architectural icon of the day."[51] This entire project was initially inspired by the government's desire to attract Hong Kong's tycoons to invest in Singapore. The creation of Suntec City is essentially their investments realized.

For the architects the concept for Suntec was influenced by the desire to complement the urban and social environment, instead of simply dominating its surroundings. The final design was apparently equally affected by Singapore and a variety of global influences. Feng Shui is very present in the overall plan of Suntec City. It is implied that the future of Singapore is cradled in the hand of Suntec city. In the center of the lower concourse, a gold ring structure rises above the upper plaza guiding the flow of a water fountain. The ring apparently is a symbol of eternal unity and harmony. The entire plaza, Tsao and McKowan claimed was inspired by the success of Rockerfeller Center, the arcades of Turin and the mandalas of India. Chinese astrological signs can also be found in the stone pavement around the fountain. On parts of the building that are closest to the level of the pedestrians, portions of the curtain wall burst into colors that reflect for the designers the local mix of people in Singapore, saffron, curry and jade. The mark of new technologies in the interiors is equally powerful complex when set against the thousands of years old tradition of feng shui. From a distance, however, Suntec City's presence in the skyline, boldly advertises the economic strength of Singapore within the global economy.

In the recently completed multi-use complex by the Singaporean firm Ong and Ong Architects, feng shui was also used in the final form of the building. 'The Great World City'[52] (fig. 17S) as the complex is known, forms a series of five tower blocks

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[51]Anon., "Making the Extra Large the Right Fit," in Architectural Record. v. 184 n. 5 (May 1996), p. 86-95.

[52]This mixed use project completed in 1997, includes condominiums, twin office towers, a self contained shopping mall and a five screen cinema. The gross floor area of the total project is 176, 402 square meters. Its architectural style is influenced by the art deco style of the amusement park that was initially located on the site. The name the 'Great World City,' was adopted from the original name of the amusement park.

connected by a podium of internal streets weaving together the various functions of residential, commercial and retail. The series of three spires rising out of the podium form the Chinese character for the world *mountain.* The architects explained that this created a mystical balance of water and wind. Basic principles of feng shui in this instance suggest the architects, require that the solid element (in this case, the mountain) be placed opposite the open area of the building (representing air and water). According to the architects this was their architectural objective in "balancing a sense of exhilarating transparency and comforting enclosure."[53] Located on axis with Orchard road, this complex is constructed on a rather prominent site of Singapore.

The application of feng shui does not dominate all construction in Singapore but it is readily accepted and rather common. While its practice in the early twentieth century was rather limited, it is becoming increasingly popular in recent years with special reason. At the turn of the twentieth century, only ten percent of the Chinese population was born in Singapore, therefore, their success meant the need to assimilate into the Malay culture. By 1947, although the Chinese constituted almost eighty percent of the population, they remained a political minority until the 1960's. As Chinese cultural awareness and practices increased in the form of education, customs, celebrations and rituals so did the traditional practice of feng shui. The government has encouraged a strong resurgence of Chinese culture especially those aspects that deal with kinship, which are so fundamental in the practice of feng shui.[54]

In the past twenty years of globalization, the representation and propagation of local culture in built form has taken many different shapes in Singapore. This yearning for a Chinese sensibility within the global environment has continued to intensify with the increasing apprehension of the fragility of local Chinese culture and identity. This concern was heightened in 1982, when the number of visitors to Singapore fell by 4.5% from the year before. In 1983, tourists to Singapore again decreased by another 3.5%. Tourists and journalists complained that there was less and less to see in Singapore. Since they were encountering the same modern metropolis they left at home, there was less of an incentive to stay in Singapore. "Tourists didn't think they were having an Asian experience."[55] Since tourism made up 5.7% of the GDP in 1986

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[53]Peter Wislocki, "Ong and Ong Architects: a Practice of Continual Development," in World Architecture, n. 68 (July-August 1998), p. 78-101.

[54]Sara Noble. Feng Shui in Singapore, 78- 79.

[55]Thomas Sweeney, "Reclaiming Old Singapore," in Historic Preservation, 42-49.

and remained a major contributor to Singapore's foreign exchange this was an issue of major concern. Any further serious decline would greatly affect the economy.[56]

While historic preservation and conservation was already being practiced in Singapore, by the mid 1980's this became a major focus for the government's development of the city for two reasons. Part of this impetus arose from the concern amongst the governing elites that Singaporean society was becoming too westernized and losing too much of its own 'Asian' identity. "Having created a sparkling new Singapore with no trace of the past, the reclamation of lost heritage began to assume an urgency that is narcotic."[57] Another reason for the avid support of building conservation was obviously to attract increasing numbers of tourists and entrepreneurs by using tradition and heritage authentically and if necessary manufactured for mass consumption.[58]

Thus, after the guidelines for preservation were presented in 1988, the plan for conservation started with a US$223 million expenditure for the redevelopment and conservation of ethnic enclaves such as Chinatown, Little India, Kampong Glam, the Singapore River and the Heritage Link which included all historic buildings in the city of colonial origin. As the Committee on Heritage noted, heritage "makes us different and interesting for visitors." It seems somewhat disturbing that despite the honorable intentions to preserve local culture and heritage as an educating tool, reminder and marker for the local people of Singapore of their identity and struggle, the strength of the global economy has made tourism more of the driving force instead of local considerations. This becomes very evident in the direction that the preservation of these areas have taken.

Among the three main conservation areas, Chinatown, Kampong Glam and Little India, Chinatown has had the highest number of shophouses restored and redeveloped, perhaps not surprisingly, since the governments primary focus was on reinvigorating Chinese heritage and culture. While the style of these shophouses originated in the southern provinces of China, they were greatly influenced by European colonial architecture. They normally have two to three stories and allow the

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[56]Russel A. Smith, "The Role of Tourism in Urban Conservation-the Case of Singapore," in Cities. v. 5 n. 3 (August 1988), p. 245-259.

[57]Martin Perry, Lily Kong and Brenda Yeoh. Singapore: A Developmental City State. (West Sussex: John Wiley and Sones Ltd., 1997), p. 254.

[58] Lim and Hock Beng, The New Asian Architecture, p. 30.

occupiers to trade goods on the ground level while reserving the upper levels for residential purposes.

After the Second World War, an acute housing shortage in Singapore introduced rent control into the areas of the shophouses. However, due to inflation, the rent return was extremely limited and maintenance of the shophouses were neglected. Then in the 1960's and 1970's, considerable number of these buildings were destroyed in the name of urban renewal to make way for the new modern commercial and residential blocks. This also led to the clearance of the street hawkers which ultimately destroyed much of the original character of the place. Nevertheless, the presence of these shophouses represent so much of Singapore's struggle and development, it seemed appropriate to preserve these areas as symbols and markers of local Asian/Chinese culture. The Urban Redevelopment Association (URA) in 1995 made the following statement, "the shophouses are one of the most significant building types in Singapore architectural history and development."

The proposed conservation of Chinatown (fig. 18S, fig. 19S) covered twenty-three hectares or twelve thousand units. It attempted to capture the essence of the old Chinese lifestyle with its restored temples, shophouses and the URA promotion of a few traditional trades such as herbalists, temple idol carvers and calligraphers. While, the two to three story shophouses lining the river and central business district create a powerful contrast between the ornate and the colorful and the cool reflectiveness of the corporate high-rises, the complete success of the preservation is questionable. The essence of what was the local community has now been replaced by an aesthetic nostalgia which has less to do with the true character of the buildings. Oftentimes, only the facades were kept while the interiors were ripped down and rebuilt for a new purpose. The new businesses that have moved in are also more patronized by tourists than the local population. Little shops selling souvenirs from Singapore are significant hint of the visitors these areas are targeting. In a survey completed by the government, the local population of Singapore complained of the direction the preservation had taken, although, they agreed with the state's analysis of the importance of their heritage.[59] The high cost of the restored shop houses converted most of these buildings into offices and food outlets and a mixture of local and non-traditional restaurants. The second and third levels which were used as residential purposes are

[59]Yeoh and Kong, eds. Portraits and Places, 42.

now business extensions or other offices. In some parts of Chinatown, a spillover from the central business district has occurred. Therefore, much of the new uses within these buildings if not targeting tourists are attracting office workers. In Tanjong Pagar, the heart of Chinatown and first section to be preserved, traditional coffeeshops were replaced with Western restaurants and karoke bars. Also in this vicinity of Chinatown is a small boutique hotel converted from a row of shophouses, complete with traditional Chinese decor for an extra boost of Chineseness for tourists in search of different cultural manifestations.

As a result the greatest change has been the considerable drop in street activities and nightlife that had made this area so rich with character before. The residential use of this area which contributed so much to the community and cultural activities of the old Chinatown, has now moved out along with the vibrant character of the place. While the Urban Redevelopment Authority (URA) had anticipated a certain amount of change with the shifting of residential uses to commercial, the decline has been more drastic than expected.[60]

The same analysis is also applicable to the preservation efforts with Boat Quay (fig. 20S, fig. 21S) and Clark Quay along the Singapore River. These areas packed with shophouses and warehouses represented the first thriving commercial areas of the Chinese immigrants to Singapore. The total area preserved, covers 14, 500 square meters. The shophouses were also changed from primarily residential to retail and commercial uses. A considerable number of new restaurants, food stalls and arts and craft stores were added. The old tongkangs, or traditional river boats, which were removed from the river basin are proposed to be brought back to serve educational, entertainment and recreational purposes for the locals and tourists. However, in these examples of conservation, the haste to preserve did not allow for a full appreciation of the integral issues that also needed to be understood and addressed alongside the facades of the buildings, such as the character of the original function and the various other uses that developed over time for the residents and family shop owners of these buildings.

Lastly, in the animated environment of the entertainment districts of Singapore, theme parks have also been a popular medium for the Chinese government to raise Chinese cultural awareness amongst the locals and the visitors. Despite obvious

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[60]Sim Loo Lee, "The Conservation of Singapore's Chinatown," in Journal of Architectural Conservation. v. 3 n. 2 (July 1997), p. 43-57.

limitations in land, several theme parks that address Chinese history and culture have been constructed or revamped recently in Singapore. The Haw Par Villa Dragon World located on Pasir Panjong Road, just outside the boundaries of downtown Singapore, is known as the Disneyland of the East.[61] While the original garden was opened in 1937, it has recently undergone a considerable face lift and has been converted into a theme park portraying five thousand years of Chinese mythology and legends through rides and theatrics.

The Tang Dynasty Theme Park (fig. 22S) another of such urban developments is apparently the largest of such historical and cultural theme parks in Asia. Opened in January 1992, this project is located immediately beside another existing Chinese park. This park cost US$64 million to complete. It recreates the capital city of Chang An in the Tang Dynasty, of seventh century China. The Tang Dynasty is not only considered to be one of the most prominent and successful dynasties of China, but during the time of its rule it is believed to be the leading civilization in all the world.[62] Chinese art, culture and architecture flourished during this period and the park attempts to recreate this rather faithfully. This park obviously draws on a very powerful reference as its guide to educate and entertain transnational and local populations of the strength and power of the Chinese culture. The theme park advertises itself as "Tang Dynasty City - *The World's Only Living Empire*," which seems to immortalize the superiority of Chinese culture. The materials and the artisans that recreated the setting were imported from China. The buildings that were reconstructed of the Chang An capital included the summer palace pavilions, shop houses, merchant and commercial buildings of the time, the Underground palace, the Shui Lian Cave, the Goddess of Mercy temple (fig. 23S), an ancient courtyard and the Heng Yang pagoda that at fifty-five feet dominates the skyline. This is of course in addition to the numerous restaurants, movie theaters, souvenir shops, wax and movie studios that complete the park. All this is then surrounded by a recreation of the Great Wall of China. In addition to the physical constructions there are also numerous theatrical productions such as a traditional wedding procession or demonstrations by Kung Fu pugilists and acrobats.

These various elements the hotels, the theme parks, the high rises, the conserved and revitalized traditional neighborhoods, all fit together to help Singapore

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[61]Helen Oon, Singapore. (London: New Holland Publishers, 1995), p. 79.

[62]Andrew Boyd, Chinese Architecture and Town Planning. (Chicago: University of Chicago Press, 1962), p. 18.

promote itself as a premier tourist destination as the "New Asia, a progressive, sophisticated Asian city with a unique, cultural character, where it all happens."[63] This interest to promote tourism and the global economy however, underlay a more significant concern about the effects of globalization. With so much of Singapore's economy closely linked to the globalized corporate economy, the influx of the global influences and products have been considerable. The initial fragility in the expression of local Chinese culture in the social and physical environment of Singapore was eventually countered by social and cultural programs and by the advocation of a Chinese urban environment in the physical and symbolic representations of architecture and urban development.

This however, is not battle between more local and global influences but more a progression in unison, since both directions are consciously embraced by the government that supports and guides them. However, within these examples studied, the influence of culture and identity in the public arena has weakened in an increasingly globalized environment. The historic significance of form and tradition no longer seems to be a major consideration. They have become merely thin applications of culture and iconic references, relying on nostalgia and popular appeal. But then again it is important to acknowledge, that the purpose of these architectural elements have changed. These cultural and architectural representations in Singapore now suffice as symbols of a Chinese consciousness and dominance within the homogenous, technological and economically driven global environment. Then if only for this reason, these attempts have served their purpose quite successfully.

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[63] S. B. Balachandrer, ed. Singapore 1997, 300.

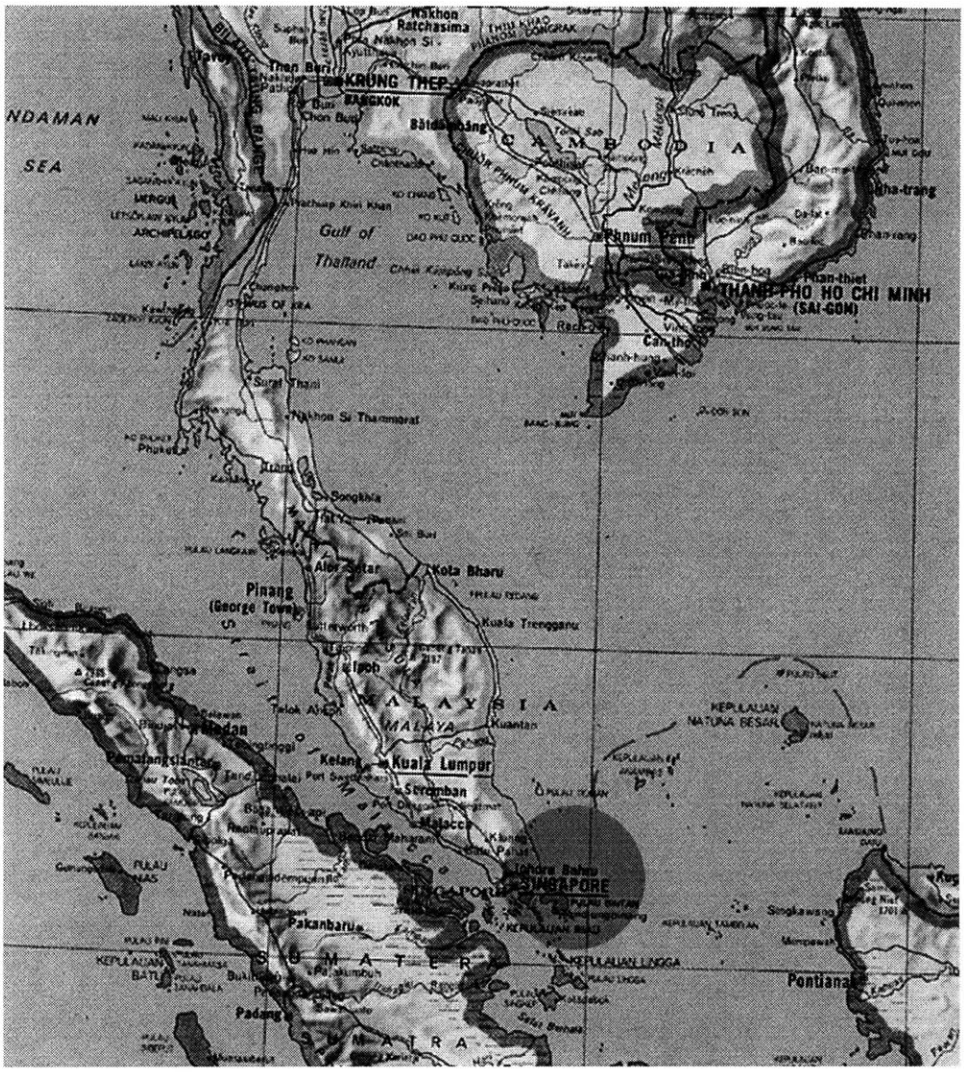


Fig. 1S Map of Singapore

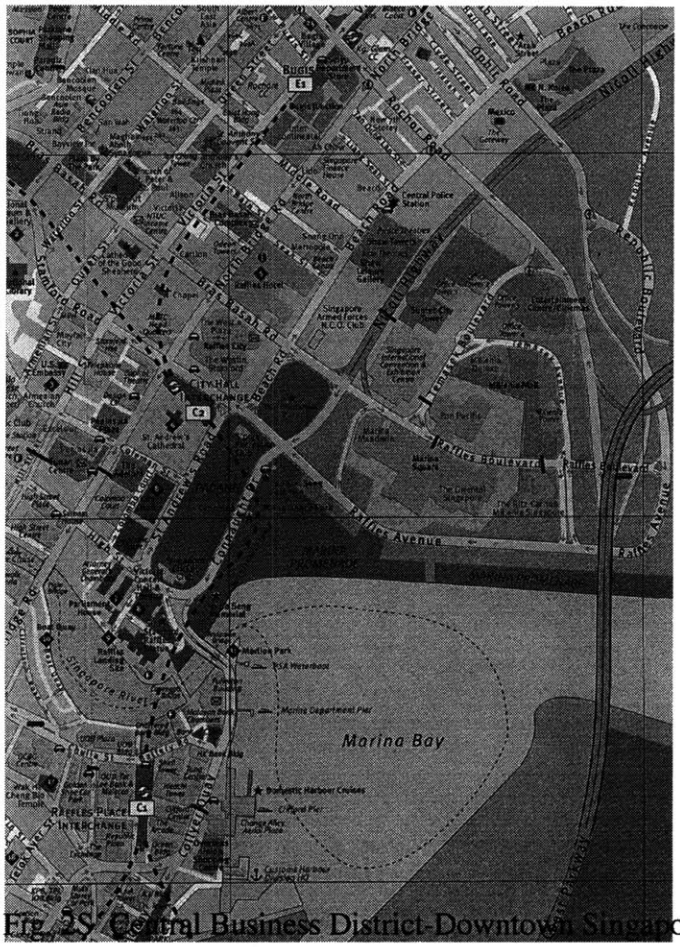
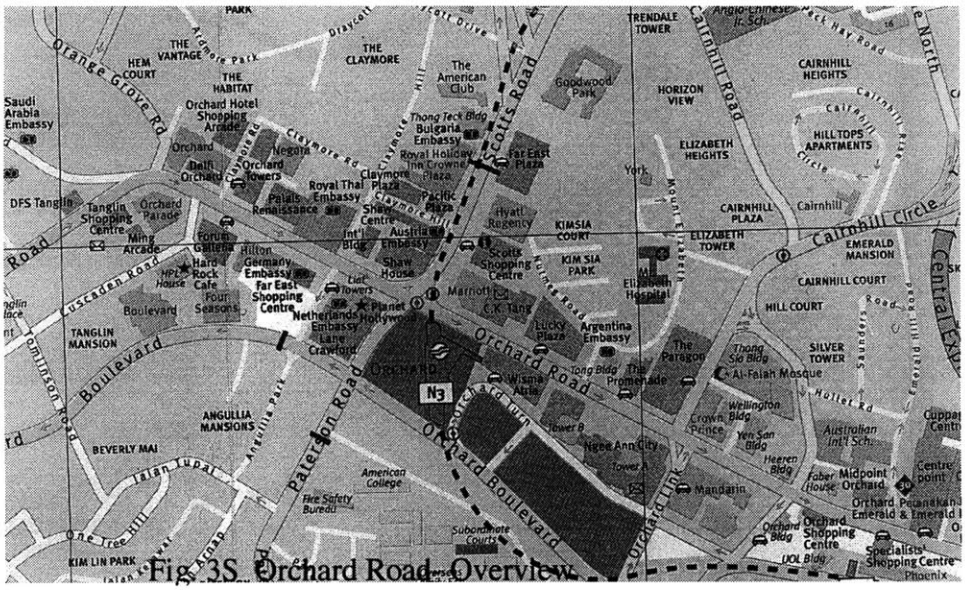


Fig. 2S Central Business District-Downtown Singapore



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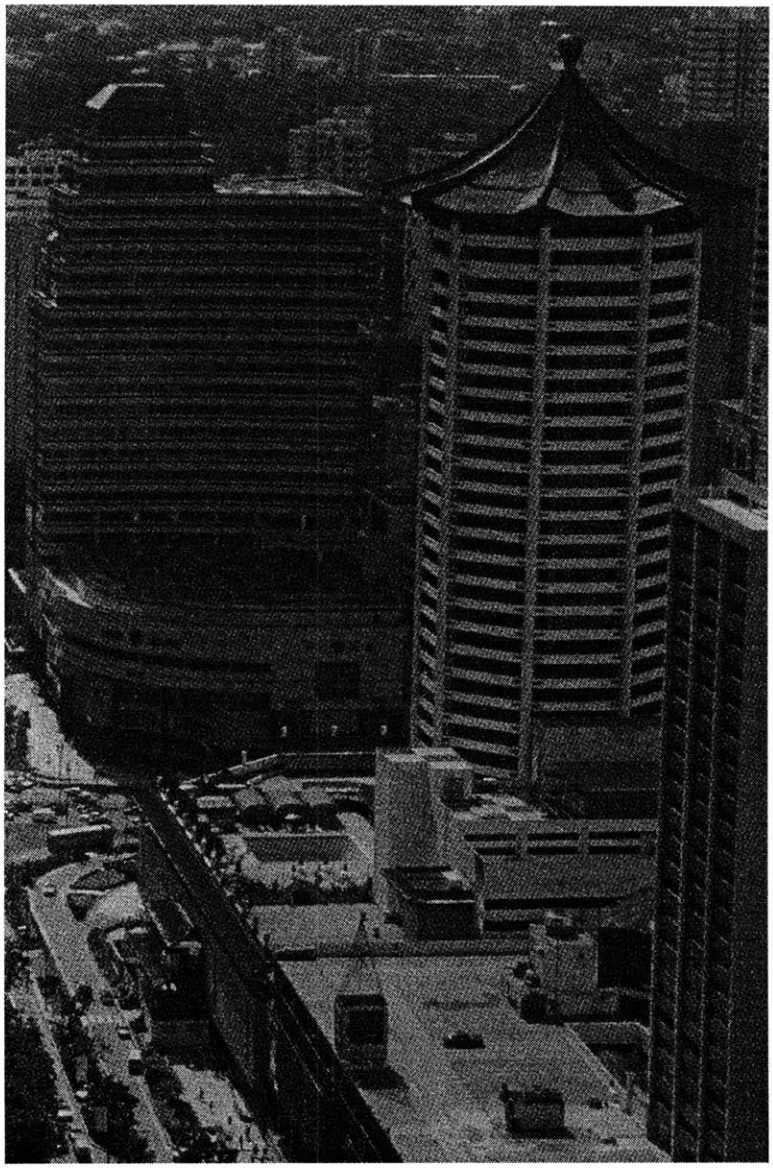

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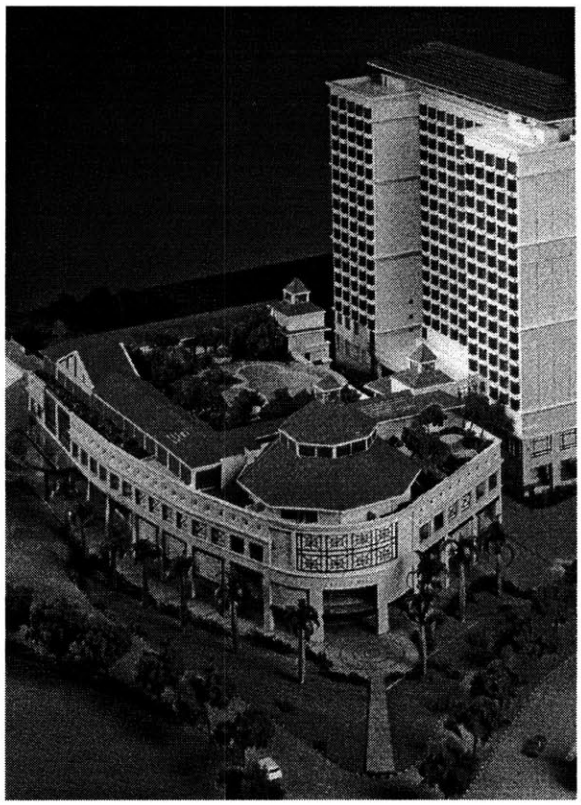

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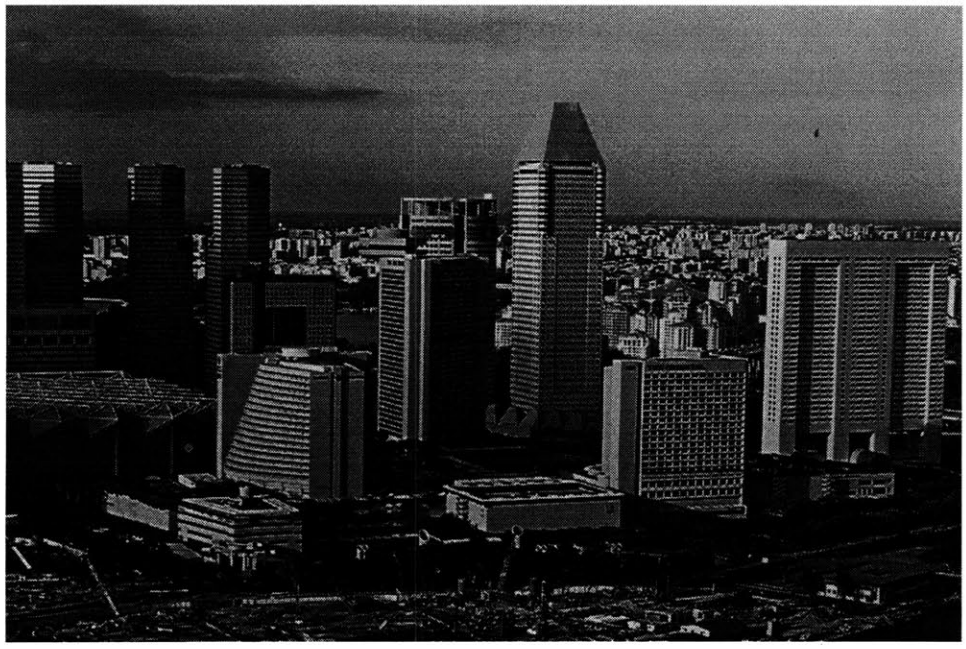

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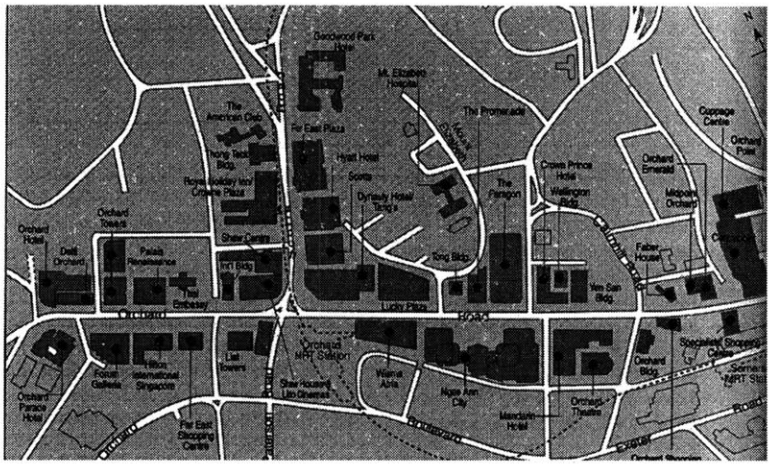

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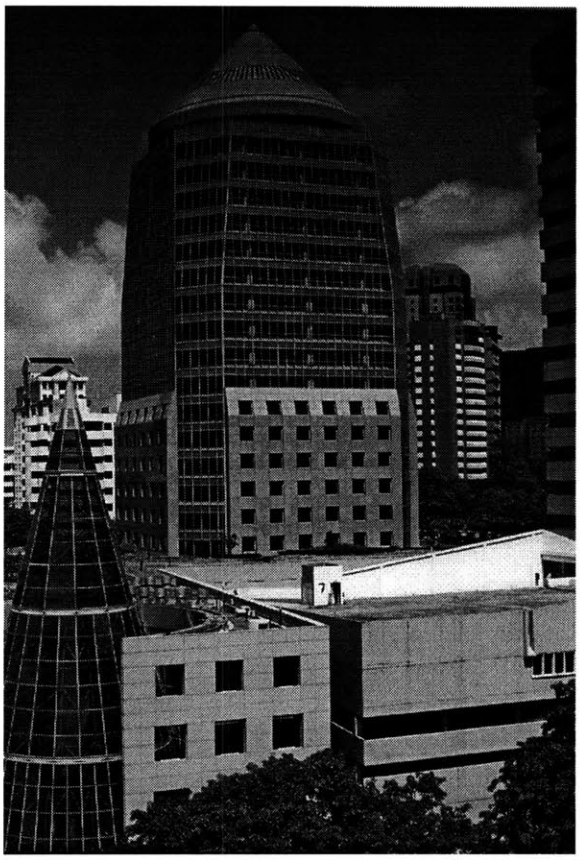

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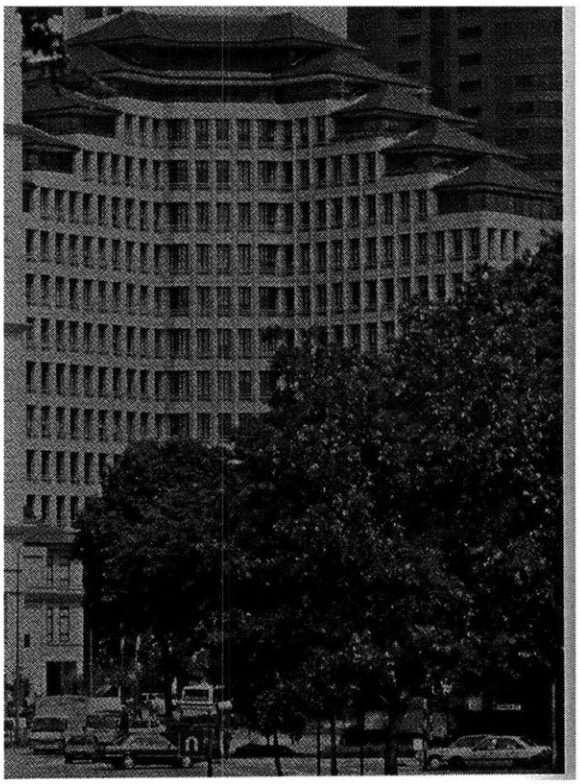

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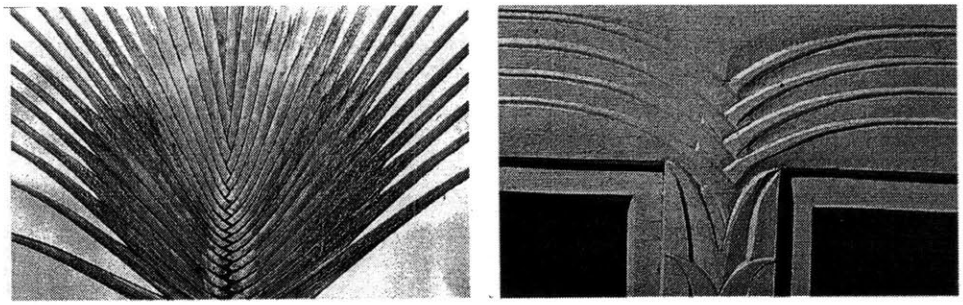

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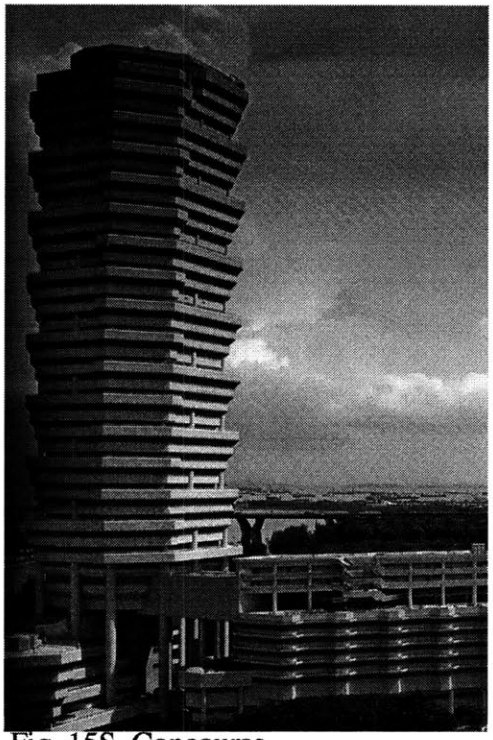

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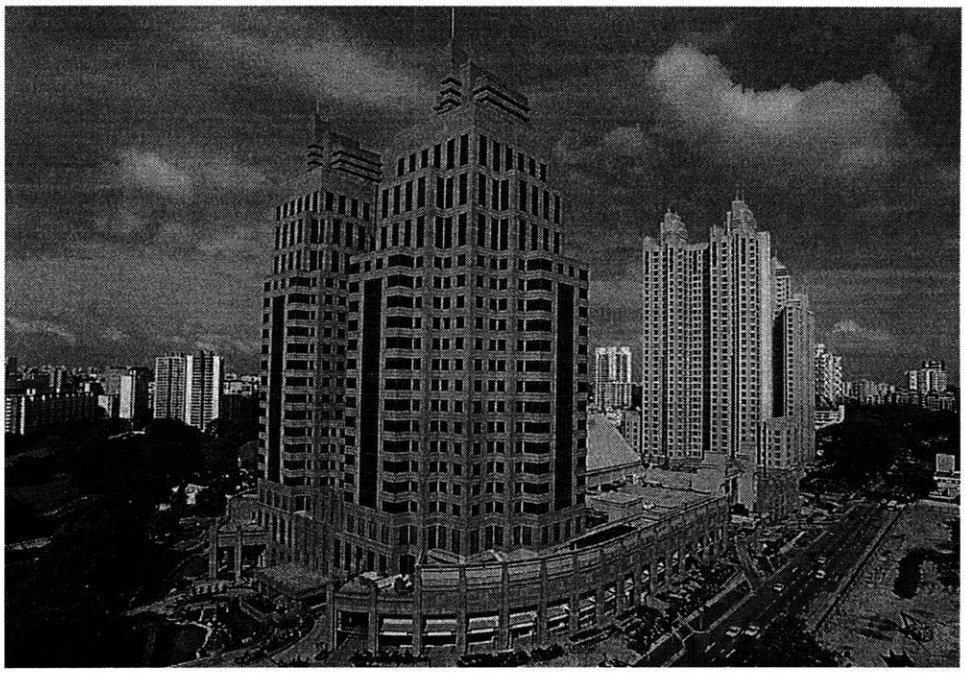

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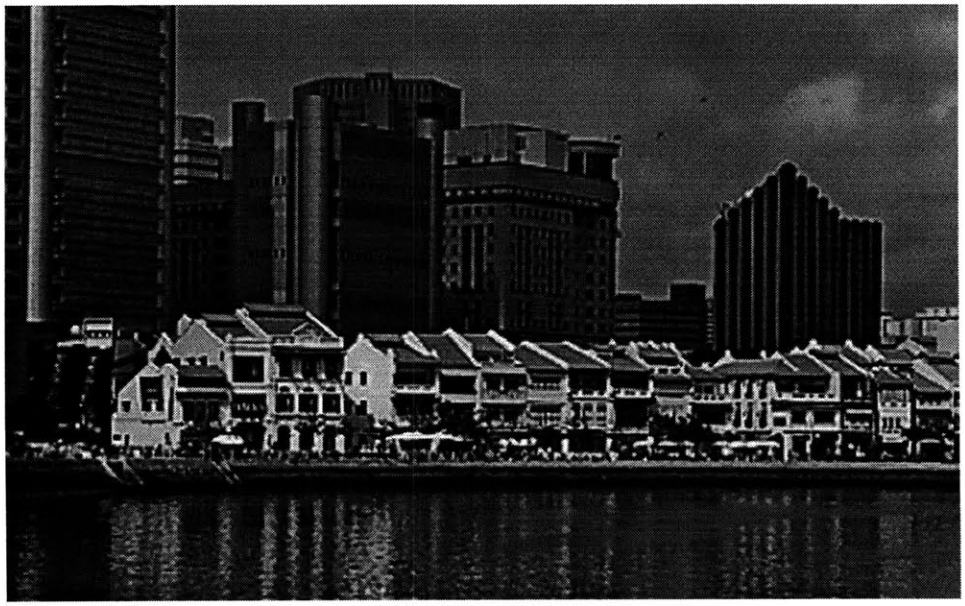

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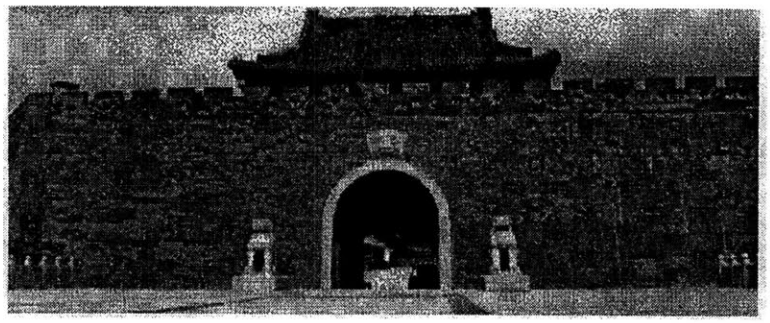

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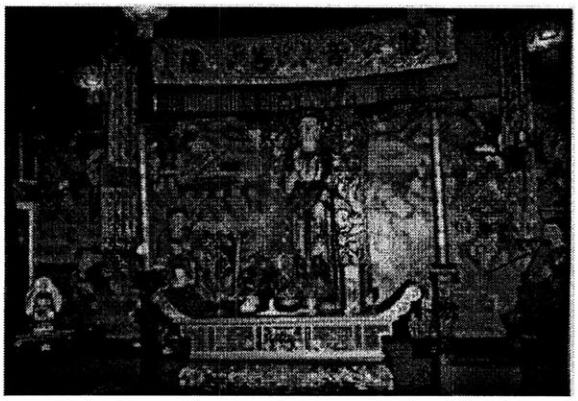

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CONCLUSION IV.

"*We live in a world characterized not just by difference but by a consuming erotic passion for it.*"

- Joel S. Kahn. Culture, Multiculture, Postculture.

"*Culture has always been a weapon of the powerful.*"

-Immanuel Wallerstein. "The National and the Universal."

The definition and significance of culture and identity in the built environment has always been complex. Its parameters are ambiguous and vague. In the past two decades, the global economy and considerable advances in technology and telecommunications have introduced the concepts of *globalization* and the *global economy* into mainstream society. This, in turn, has introduced the constructs of the *global city* into political, economic and socio-cultural discourse. This has all served to make the definition and significance of culture and identity even more nebulous and obscure.

These ambiguities raise the question of whether national culture and social identity still matter in an age of globalization, for they do not have any relevance in the making of an economically sound global city. The ease with which major financial transactions now flow between borders have somewhat weakened the boundaries of countries and states and their governments' ability to control. Some scholars even claim that the proliferation of images through the media worldwide, accompanied with the barrage of global influences in the form of goods and services, have created one new homogenous culture and environment, which is slowly minimizing the differences between cultures and the need for traditions and heritage. The extreme stance of this argument reduces the likelihood of its occurrence, at least presently. The possibility of this position raises considerable concern of a world devoid of cultural and historical variety. The place of culture in the built environment, that was once clearly defined in the structure and form of cities, is now being questioned more than ever.

Cities such as Dubai and Singapore however, do not only maintain the importance of a national culture and identity, but represent it visually within the urban environment. Even as prominent second level global cities, in the age of globalization and superior technology, they are still concerned with the representation or there lack of 'their culture.' Government policies for the past two and half of decades have begun to aggressively attract the global economy onto their shores. Infrastructure and architecture have been built and expanded to serve these global and regional needs. However, there is also a conscious desire to impress their cultural identity onto the architecture of their cities. This is especially applicable even in the most technologically and commercially driven areas, as the central business district. High-rises and other commercial and corporate buildings in Dubai and Singapore, are wrapped in icons that signify the perceptions and interpretations of local culture. So it seems that this pull of homogenization within the urban fabric, as far-reaching as it has been, is not all-encompassing as some scholars would claim. This is apparent in the two case studies.

The means through which the built environment has been designed in Singapore and Dubai to advertise a local perception of culture varies. It may take the form of surface applications on high rise and mid rise buildings or it may completely alter the shape of the building. In Singapore, a considerable number of buildings are planned in accordance with age old principles of feng shui and capped with deviations of the traditional Chinese roofs. In both cities, examples also exist of new theme parks that recreate a vision of a past glory as in the 'Tang Dynasty City' in Singapore, or of mythical allusions of the Arabian Nights in Dubai.

In almost all situations, these references to Islamic or traditional Chinese architecture have been reduced to superficial reproductions of icons and images, for they serve no real functional need. On this level, they may be criticized for they are essentially hollow applications. It seems that in an age of globalization, in the technologically driven architecture of the high rises, national and cultural icons have been somewhat neutralized. They have become a pastiche that is animated yet calculated. While they allude to an assertion of cultural identity and perhaps a cultural dominance over technology and economics, the passion and intensity of such representations is devoid of their original functional significance, having been reduced to the level of "technical puzzles."[1] They have become less controversial in their

[1]Anthony D. Smith, Nations and Nationalism in a Global Era, (Cambridge: Polity Press, 1995), 21.

representation. Perhaps in a global environment, this has become necessary. Cultural distinctions are dulled to increase the comfort of a transnational population and to heighten the focus on the business of the global economy. These cultural representations continue to have considerable symbolic value despite the superficiality in appearance.

This undoubtedly increases the difficulty and complexity in the evaluation of such structures and urban developments. While perhaps lacking in architectural finesse, they quite successfully denote to their intended viewers the seemingly enduring character of local culture in a global environment. Therefore, it would serve little purpose to critique these markers of cultural identity otherwise, if they were essentially designed to represent symbolic value. The local residents of Singapore are apparently appreciative of the allusions to Chinese architecture on the buildings along Orchard Road despite the obvious superficiality of the reference.[2] Thus, as critical as some may be of these new constructions, it leaves unanswered the question of the most appropriate means of expressing culture in contemporary architecture. Who is to ultimately claim what is considered legitimate in an environment as diverse and as complicated as that of the global economy.

This conclusion also begs the question of why the need to instill images of cultural identification onto buildings constructed primarily for the global environment. Especially when aspects of culture can be defined within the home, in public spaces through the celebration of festivals and rituals or even in areas less circulated by the transnational population and reserved more for the locals. Allusions to cultural identity would also be effective in smaller scale buildings for local communities alone. Nevertheless, the interest remains to mark the domain of the commercial and the corporate. It is on these most prominent beacons of globalization where the perceptions of local identity is most clearly and visibly marked. These are the same areas where the transnational and local population most commonly intersect and congregate.

One of the main reasons for the allure of local cultural identity is obviously its effectiveness in providing a sense of rootedness and connection. Perhaps cities as young as Dubai and Singapore counter their own insecurities in their achievements on the global front by exhibiting forms of national or cultural pride. The age of

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[2]Norman Edwards and Peter Keys, Singapore, (Singapore: Times Books International, 1988), 212.

globalization has also created a generation of people in Dubai and Singapore that did not fight for state independence or economic stability. As their cultural identities were not defined in those struggles, in this age of economic prosperity, this new generation has needed to search for alternative means of expression and definition. Perhaps this search for conceptions of contemporary cultural identity has visibly taken shape in current forms architecture. These reasons, however powerful, do not fully explain the need for cultural applications on the architecture of the business and commercial districts which are so heavily governed by corporate power, economics and technology. Hence, there are perhaps other sources in Dubai and Singapore that encourage these displays of culture, identity and tradition.

While these two cities share many of the same explanations for the resurgence of cultural representation, they, however, differ in the different constitution of their populations. The autocratic governments of both cities have attempted to direct much of their states' own social, cultural and urban development. Their roles are made more complex by the giant influx of globalization. In Singapore, the People's Action Party which has been in government since the declaration of independence represents the dominant majority of the city-state. Singapore's governing body consists mainly of Chinese leaders who feel their exclusivity is justified since almost eighty percent of their population is Chinese. The remaining twenty percent of the population, consisting of Indians and Malays often find themselves underrepresented in public policy, since the leaders of the PAP often disparage their contribution to the success of Singapore. Therefore, the cultural and ethnic vision that is most prominently perpetuated in Singapore has a very strong Chinese bias. Since the Chinese view themselves as the cornerstones of Singapore's continued growth and success, their interests are most protected and guarded.

Unlike Singapore, Dubai's government and ruling party represent the minority of Dubai's population. The ruling party has been carried on through lineage since the days of the barasati huts in Dubai. They represent the twenty-five percent of the local Arab population. The remaining seventy-five percent of migrant workers have no voice or representation within the government or their urban surroundings. Despite this disproportional construct of the power base, there is a considerable sense of insecurity amongst the local Arab population and government of being overwhelmed by not only the barrage of global influences but also by the various cultures represented within Dubai's population. While Singaporean Chinese proudly state their identity

through the power of a majority, the Arabs of Dubai feel the need for a greater emphasis of Arab identity due to their minimal presence in Dubai's very diverse population. This interest to mark their urban environment has undoubtedly much to do with the need for local Arabs to make their limited presence felt more strongly. The fear amongst the local Arab population, that their culture will be washed over and diluted, remains for them very real.

There is an alternate interpretation for this desire for cultural representation. While it was already stated in the analysis of Singapore, it is equally applicable to Dubai. The pride in the success of local development after twenty to thirty years of intense growth and sacrifice has possibly aroused the desire to immerse in one's environment the representations of the people who directed and influenced the path of development. As Paul Wheatley states, "rising national confidence requires to express its identity and intrinsic qualities."[3] These applications of traditional architecture onto contemporary built forms are banners of pride acknowledging the contributions of their local inhabitants in the successful creation and continued development of the global city.

This interest in stamping local perceptions of identity onto the urban fabric built for the global economy may also have much to do with the extreme haste in which Singapore and Dubai have both developed from third world countries to leading global cities. In the course of less than thirty years, entire surroundings were completely altered from what they were before, making it essentially impossible to trace their original structure. This extraordinary rate of change has undeniably placed tremendous pressures on each society. Fred Davis proposes that in environments of considerable flux and anxiety, there is often a *nostalgic evocation* of some past state of affairs, even if this connection is not in the forefront of awareness. For it is exactly these emotions, created in moments of uncertainty, that threaten the possibility of identity discontinuity.[4] "Nostalgia thrives on transition and on the subjective discontinuities that engender our yearning for continuity."[5] Nostalgia however, is an emotion that has an unusual effect. No matter how awkward and confused the memory, it always serves to simplify, sentimentalize, beautify and distort the past. It

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[3]Kernial Singh Sandhi and Paul Wheatley. Management of Success: The Molding of Modern Singapore. (Boulder: Westview Press, 1990), 876.
[4]Fred Davis, Yearning for Yesterday. (New York: The Free Press, 1979), 34.
[5]ibid., 49.

offers a temporary retreat and haven from the anxieties that are created from alterations in habits and in the environment. Nostalgia becomes the means to hold onto and reaffirm identities and cultures that have been badly bruised by the turmoil of the times.[6]

Therefore, while the symbols and icons that are used in the public realm in both Singapore and Dubai are gross simplifications of objects and architectural forms, they nevertheless, serve to reference a past, that is shared by the members of the politically dominant group. *Nostalgic creation* allows the past to be filtered, selected, arranged, constructed and reconstructed from a somewhat collective experience. The triangular roofs and the pagoda like forms that influence the structure of contemporary architecture are perhaps the result of identities in flux in search of grounding and continuity. The same is applicable in Dubai with the abstracted applications of arches and masharabiyas onto high rise buildings. Even something as subtle as the call for prayers within a mall serves to comfort and remind very effectively, the apparent timelessness and strength of local cultures and beliefs. Especially so if it is in an environment that is in constant transition. Located in the central business and commercial districts of Singapore and Dubai, these images refer to a sense of constancy in the environments of greatest flux, those handling the operations global economy.

The role of government has also been undeniably affected and altered by the free flow of the global economy and influences. The internet and other advanced capabilities of telecommunications have made the transfer of money, information and goods extremely rapid and often uncontrollable. The economies of global cities are no longer restricted by national boundaries or national governments. The ability of local governments to influence their national economy has been direly affected, making it more difficult to plan the economic situation of local citizens effectively. The competition between governments and cities have become even more acute, as more cities build the sophisticated infrastructure necessary to lure the significant global players and multi national corporations. Undeniably, globalization has weakened the powers of state government. This in turn has provided another plausible explanation for the need to instill cultural and architectural icons in the architecture of the global city.

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[6]ibid., 107.

These different aspects that have served to undermine the original all-encompassing power and control of local governments are especially evident in the urban environment of global cities. Here, the rampant construction of buildings for foreign corporations and commercial uses, most blatantly display the growing presence of the global economy. The image of a seemingly homogenous skyline and the infinite numbers of multinational corporate logos, while serving to highlight the success of a global city, also demonstrates, most visibly, the waning abilities of the local government to control global influences, products and the economic situations of their own city. This perhaps encourages local governments to find new means through which to assert their influence and identity more visibly. Anthony King quite lucidly explains the government's interest in the arena of built form. "Buildings socially express divisions, hierarchies and enable expression of status, authority and become an arena for political resources."[7]

In Singapore and Dubai, the intent and desire to reclaim the sections of the city that are most representative of the global economy have been instigated primarily by the local governments. In both cities, the preservation and conservation of traditional buildings commenced with government support and were accompanied by the passing of new laws. In Dubai, all facades designed for the central business district need to built in accordance to the guidelines of the *Reference Book on traditional local architecture.* Permits for construction are only allotted after the design has been approved by a government committee. The cultural language of the architecture of Dubai draws its influences from the Arab, Bedouin and Islamic heritage of the twenty-five percent of the local Arab population, who by excluding all other ethnicities in their society have managed to keep an extremely restricted and limited depiction of cultural identity in Dubai. The similar construct is applicable to Singapore. The Chinese majority in government has been very vocal in its advocation of a Chinese identity. This is evident in the design of prominent hotels, high rises and theme parks. Most of these developments have been supported and guided by the government.

These displays of the various aspects of local culture are perhaps a reaction of local governments to their diminished position in the control of their cities. These attempts to redress or reclaim the urban environment within the realm of the corporate, commercial and entertainment districts are attempts by the local government, to impress

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[7]Anthony King, Global Cities. (London: Routledge, 1990), 404.

upon their society their continued authority and control of the social, physical and economic environment. Even if it is becoming more elusive.

However, the task of government within the global city has also placed them in a rather ambiguous position. Their need to state their strength and authority is tainted by their role as the implementers of the superior framework within their cities to attract the global economy. This duality between the need to assert their presence within their own urban environment and the need to build the ideal global city has inevitably affected the clarity of direction in the creation of urban space. As a proponent of the global economy, the government's desire to mark their presence and autonomy in the form of various cultural representations ultimately needs to fit within the global framework. Hence, their interpretations of their local culture is inevitably diluted by the need to appeal to a global society. The replications of traditional designs and structures in Dubai and Singapore, are so simplified and abstracted that they decrease in their original intent and significance. Representations of cultural identity becomes less controversial when they are colorful and animated. This implies that these depictions on architectural form serve less successfully as cultural signifiers but more as political symbols.

The power of globalization to influence the propagation of culture is taken a step further with the inference that culture has now become another manufactured product of the global economy. Especially since the media has played such a huge part in globalization and the creation of *cultural capital.* For certain scholars, culture has now become merely another angle to increase the possibilities of greater financial reward. William Lim and Tan Hock Beng, in their writing on the new Asian architecture describe contemporary cultural production as the conversion of historical and cultural forms into commercialized objects.[8] Culture has become a marketable commodity for global cities, in this age of globalization. As alarming as this concept is, it is, nevertheless, another explanation for the desire to represent cultural icons on the architecture of the central business districts, upper scale commercial areas and in the locations of entertainment facilities. The depiction and value of culture has perhaps been reduced to only that which is profitable.

This analysis, however, turns cities societies and cultures into mere pawns for financial reward. It disassociates the importance of human needs from culture, which

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[8]William Lim and Tan Hock Beng, The New Asian Architecture. (Hong Kong: Periplus Editions, 1998), 31.

influences so much the desire for cultural definition. This analysis blindly assumes that the global economy has become that which is all consuming. It supposes that everyone and everything functions solely for the propagation of the global economy. This analysis would seem extremely narrow.

It is perhaps arguable that the city has always been a scene of power[9] and "culture has always been a weapon of the powerful."[10] Yet in the age of globalization, clear delineations in the control of power have become more hazy and ambiguous. However, to reduce issues of culture and identity into mere trivialities of the global economy would eradicate its intrinsic importance within society. It seems almost arrogant to propose that cultural identity which has played such an integral part in defining humanity over the past millenniums would be so easily altered and manipulated into a homogenous global culture in the face of globalization. "No matter how determined the attempt to transmit homogenous and uniform cultural material, actors are too knowing and culture too complex for any process of cultural exchange, no matter how exclusive, to be one way."[11] Spatial forms and the built environment of a city is itself composed of a complex intermingling of specific ideologies, of social, political, economic and cultural relations and the practice of hierarchies and structures.[12] Thus, for also this reason, the assumption that global cities are all adopting structures of similar appearance and universal cultural definitions is an over simplified analysis.

While issues of culture continue to be a subject of concern, admittedly, they also do not completely dominate the built environment. Yet the depictions of cultural identity are very visible. In Dubai and Singapore, both their interests in cultural representation is just as evident as their desires to become cities in the forefront of the global economy. Even within the powerful homogenizing influence of globalization, cultural identity, perhaps a little weakened, is still a vigorous and potent force. The development of the urban environment of global cities today has become so complex with the functioning of multiple layers, all of which are intermingling, all struggling to

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[9]Diana Agrest, Architecture from Without. (Cambridge: MIT Press, 1991), 114.
[10]Immanuel Wallerstein, "The National and the Universal," in King, Anthony, ed. Culture, Globalization and the World System. (Minneapolis: University of Minnesota, 1997), 99.
[11]Alan Scott, ed. Limits of Globalization. (London: Routledge, 1997), 19.
[12]Anthony King, ed. Re-presenting the City. (New York: New York University Press, 1996), 3.

constantly redefine themselves. To reduce this to anything less would be unjust in its conclusion.

Throughout this analysis the means through which cultural identity has been depicted on contemporary architecture of Dubai and Singapore has been questioned and faltered. However, at the same time an alternative proposal for a more appropriate means of representing cultural identity within the constructs of globalization remains lacking. There is perhaps considerable validity to Arif Dirlik comment that "culture is no less cultural for being subject to change through the practice of everyday life."[13] This again highlights the question of the most appropriate methods to critique such efforts. It is important to acknowledge however, that globalization is a very young phenomena. Its rapid development has inevitably aroused more questions than solutions. The critical distance that is so direly needed in the evaluation of growth and development is only starting to happen in this first wave of globalized development.

More complete answers will perhaps only come in time. The subject of cultural identity, homogenization and hybridization will continue to flirt with the ensuing developments of the global city and society. Cities with their growing numbers of newer and more luxurious environments and increasingly disparate populations will continue to strive on the global front. Globalization will persist, bringing more cities into a world of intense competition, constant change and transition. The possibility of homogenization will continue to dance on the shores of global cities. Yet it will never completely consume or overwhelm the environment around it. Just as issues of local culture and identity will not dissipate. Local or perhaps more regional culture and identity will continue to evolve and develop.

Mike Featherstone's theory of the global cultures in plural will probably become more evident with the passage of time and be the next wave of globalized development. The initial theories of homogenization were challenged with the continued strength and need for cultural identity and representation as witnessed in Dubai and Singapore. While the economic and technological aspects of globalization have heighten this need for unique cultural definition, they have simultaneously increased the interaction and contact between diverse cultures and influences. Hence, this preliminary deviation from the theories and form global homogeneity will eventually develop into more culturally sensitive and complex environments as

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[13]Arif Dirlik, "The Global in the Local," in Wilson, Rob and Wimal Dissanayake, eds. Global-Local-Cultural Production and the Transnational Imagery. (Durham: Duke University Press, 1996), 39.

hybridized cultures start to seek physical representation in the urban environment of global cities.

The intricacies encountered by Singapore and Dubai as they search for more appropriate and effective methods of portraying cultural identity are only the initial reactions to the intense momentum of the first twenty years of globalization. As technology and the global economy continue to be refined in the next twenty years, the urban developments of global cities will become even more complicated as perceptions and requirements of local cultural identity are questioned with the intensification of hybridized cultures.

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  www.tangdynasty.com.sg

- Fig. 23S Goddess of Mercy Temple
  www.tangdynasty.com.sg
- Fig. 24S Chamber of a Thousand Pleasures
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