

The Suburbanization of a Metropolis: Urban Growth Boundary Policy and Residential Suburbanization: Riyadh, Saudi Arabia, a Case Study.

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"Suburban escape...is, ironically, a low-grade uniform environment from which escape is impossible." – Lewis Mumford

*The process of suburbanization of Riyadh, a city of 4.5 million inhabitants, offers a unique situation in which the urban morphology of the city can be examined in light of socio-political and economic conditions. Central government ordinances helped create 'dysfunctional' sprawl by mandating big lots and over wide streets. Fifty percent of the city's urban plan of approximately 1,300 square kilometers represents a pattern of untimely, undeveloped subdivisions. Much of this premature subdivisioning was a result of speculative land deals. The current area of undeveloped subdivided land is **approximately** 650 square kilometers, which roughly the equivalent to the city's land currently developed..*

The author argues that government policies and inefficient urban planning practices have encouraged the transformation of the peripheral desert landscape into unchecked land subdivisioning championed by land developers and speculators. Using a comparative approach, the paper attempts to highlight sociopolitical and other cultural factors that underlie this inefficient sprawl at the fringe. It closes with recommendations to alleviate such a costly pattern that can be generalized to other developing world cities.

INTRODUCTION

The purpose of this paper is to examine the spatial pattern of the enlargement of Riyadh, the capital of the Kingdom of Saudi Arabia. It focuses on suburbanization, taking into account cultural and geographical factors of the predominately Arab Muslim society which in itself is under going enormous transformation. It traces the phases of city growth with emphasis on the accompanying salient social, economic and organizational characteristics of each phase. It focuses on the suburbanization process and the government attempts to slow urban growth controls with the introduction of the Urban Growth Boundary Policy (UGBP) in 1989.

The author attempts to unravel the factors that fostered the contemporary built environment which is in great contrast to the millennia traditional city built form of the *medina*, as the Muslim Arab population opts for the scattered grid iron patterned sprawl that resulted within a relatively short span. What makes the study of the suburbanization of Riyadh most interesting is the similarities and dissimilarities it exhibits *vis a vis* (as opposed to) the Western suburbanization models.

Saudi Arabia is a predominately desert nation-state that was created in 1932 as a sovereign state by its founder the late King Abdul Aziz Al Saud, following the disintegration of the Ottoman Empire during the early decades of the twentieth century. Saudi Arabia was catapulted into the world scene due to the massive oil reserves it has been endowed with. From being an inward-looking, xenophobic and conservative society, Saudi Arabia was transformed into a modern developing nation during the last 70 years since its creation. It occupies an area of 2,250,000 square kilometers, comprising about 80% of the Arabian Peninsula. Saudi Arabia's population totaled 17 million in the 1992 census. In 2002, the population is estimated to reach 22.5 million.

The promulgation of the new nation state guaranteed political security for the pugnacious village states of central Arabia. This was soon augmented with the discovery of vast oil reserves which heralded the superiority of Riyadh for generations to come. With improved economic conditions, Riyadh had to adapt to the modern exigencies paramountly, the automobile. Construction boomed, population soared, and decentralization of residences and businesses proceeded at a remarkable pace. By the early 1970s Riyadh was something quite different from what it had been only two decades earlier when it was enclosed within mud walls. An increasing segment of the population began fleeing the ramshackle mud core, the Islamic *medina*, to the gridiron suburban sprawl which was characterized by rectilinear broad asphalted streets. The suburb gradually became the predominant element of the emerging Arab metropolis.

From a sleepy walled Islamic town of less than 30 thousand in 1950, Riyadh currently boasts a population of 4.5 million inhabitants, increasing at a rate of 8.1% per annum. Developed land constitutes 44% of the total 'urban area' of the first and second phases of the city's Urban Growth Boundary's total area of 1,800 square kilometers.¹ From this total 854 square kilometers of undeveloped area, or 63% is already subdivided, constituting untimely grid-iron subdivisions waiting for prospective buyers and speculators. This area has been estimated to house a population equal to the existing population. Such outward urban growth, as in most other Saudi cities and towns, can be seen as a suburbanization without suburbia. The suburbanization process in Riyadh, as in most of the Kingdom's major urban centers, offers a divergent path to urban decentralization which shares more parallels to suburban development in the English speaking world, than to that of the compact Arab Islamic city, i.e. the *medina*.

Yet, while in the US, for example, suburbia has long ceased to be an appendage to the city, peripheral growth in Riyadh has remained under the control of central administration of the metropolitan area. This arrangement rather than decentralized control of the region has created incohesive and stagnant planning.

Giving the government the preponderant role in underwriting urban growth of Saudi cities, urban management is heavily controlled from the central government in the form of simple and unified physical urban planning practices adopted by the central urban planning authority in the capital. As such, the central municipality (*Amanah*), which derives its financing and authority from the Ministry of Municipal and Rural Affairs, retains substantial control of urban development over the entire city despite the explosive growth over the last seventy years. Consequently, Riyadh's urban development has been run by a wieldy and bloated bureaucratic municipal organization. Principally, the municipality prepares and approves subdivision at an ever increasing pace following an enlargement of an outdated super-grid road network that was prepared by the Greek consulting firm of Doxiadis Associates and approved by the Council of Ministers since 1973. The author argues that given its highly traditional and centralized political structure, the Saudi government has been reluctant to move away from traditional power relations and outdated urban planning modes.

Table 1: Riyadh population, number of families and housing units

Year	POPULATION				Number of Families in Riyadh			No. of Dwellings
	Population Total	Saudis	Non-Saudis	Saudi Percentage	TOTAL	Saudis	Non-Saudis	
1919	19,000							-
1935	36,000							4,836
1950	84,000							12,297
1960	181,000							29,143
1968	300,000*							51,160
1974	666,000							-
1986	1,400,000	882,000	518,000	63%	204,844	109,755	95,089	308,212
1990	2,100,000	1,142,000	672,000	68%	307,986	175,236	132,754	351,266
1996	3,100,000	2,325,000	775,000	75%	433,596	289,712	143,886	454,476
2001	4,500,000	3,375,000	1,125,000	74%	718,567	535,103	183,464	734,819*

* Approximated figures are illustrative. Riyadh's population is expected to increase by 3.5 times between 1996 and 2021; household numbers are forecasted to increase by 5 times, which translates into housing demand. Source: Faisal Mubarak, 1992, p. 224; The Higher Commission for the Development of Arriyadh. Metropolitan Development Strategy for Arriyadh (MEDSTAR), *A Strategic Framework for the Development of Arriyadh, Phase II, Part 3. 3.3 Report, Draft Urban Management Plan*, June 1999, p. 81-91; Kingdom of Saudi Arabia, Arriyadh Development Authority, Investment Climate, 2002, p. 50.

A discussion of the Urban Growth Boundary policy (UGB) in Riyadh must be looked upon from the viewpoint of decentralization of the capital city's form. The first part of the paper is devoted to the literature on suburbanization in the Western countries where the phenomenon originated in the modern sense of the term. This approach will help give the paper a comparative perspective as well as build on customarily used terminology in the literature. The second part discusses the Saudi Arabian model of suburbanization highlighting the peculiar characteristics that shaped it. The suburbanization model as presented in the second section is further subdivided into four sub-sections, which comprise the major components shaping the Saudi model: the first one examines municipal organization in Saudi Arabia and its limited role in shaping and reaping the benefit of the land market bonanza; the second sheds light on the unguarded mass deployment of the grid, championed by the central state in the development of its new Al Malaz suburb, despite its irrelevance to the traditional

concept of the built environment of Arabia and its proven shortcomings worldwide; the third is devoted to the adoption of city master plans which have institutionalized the super grid as the future urban development paradigm;² the fourth examines the adoption of the Urban Growth Boundary by the national government to slow the frenzy of suburban subdivisions. The third major section of the paper comprises an evaluation of the Saudi model with emphasis on its shortcomings. The paper closes with concluding remarks.

Suburbanization: a worldwide view

Whitehand and Carr (2001) point out that "Beyond the English-speaking world, however, suburbanization was much slower to occur." Within continental Europe the apartment block (often containing 2-6 dwellings) was more common, whereas the single-family house standing in its garden was still comparatively rare. Generally speaking, they contend, "European cities (and those in Scotland) were dominated by tenements in comparison with their English and American counterparts."³

The study of city morphology help urbanites understand universal and common factors affecting growth and urban form patterns. The suburbanization of contemporary cities offers insight into prevailing cultural forces. Yet, research on suburban development is lacking. Referring in particular to English suburbs, Whitehand and Carr (2001) contend that "systematic investigation of what suburbs are like as a physical environment are particularly rare..." While the study of urban morphology of traditional cities give credit to historical characteristics of pre-industrial urban development processes, studies of especially modern suburbanization in most third world countries cities is rare.⁴

Historically, the process of physical enlargement of cities has taken various forms. Yet, it can be generally agreed that such growth, particularly within the English speaking world, has taken the form of outgrowth over time and space from the city center.⁵ At the end of the 18th century, scattered middle-class suburban villages surrounded London. By the 19th century the process of building suburban villas by the middle-class was a commonplace practice. The early 19th century witnessed the proliferation of small estates for more middle class families at the periphery of London's built-up area. Then developers rather than owner-occupiers laid out roads and plots; the mass production of a rising phenomenon ensued.⁶ With the 'commercialization' of the suburban ideal, mass production of detached villas at the outskirts of UK cities soon resulted in less than the idealistic house (Figure -- from Essex Handbook).

What started as a centripetal process taking the shape of a streetscape dominated by mostly compact, continuous building facades, had changed to a more expansive, disjointed 'open landscape' in which dwellings were mostly detached or semi-detached and separated from the road and often from one another, by private space, mostly utilized as gardens.⁷ This transformation from a compact streetscape to a more 'open' landscape was initially a middle class phenomenon.⁸ Suburbs have been the embodiment of the English concept of picturesque countryside, hence creating an aesthetic marriage of town and country which constituted a major feature in Western suburbanization.

Fishman (2002) states: "For suburbia too was an archetypical middle-class invention, perhaps the most radical rethinking of the relations between residence and the city in the history of domestic architecture...[it] represents a collective assertion of class wealth and privilege as impressive as any medieval castle."⁹

A precise definition of the term suburbia must be established. According to Fishman, the term 'suburbia' means literally 'beyond the city.' It refers to any kind of settlement at the periphery of a large city, regardless of the function of such a growth, whether an industrial

outgrowth or an affluent bedroom community. Dictionaries provide a straightforward and simple definition for suburbs as "those residential parts belonging to a town or city that lie immediately outside and adjacent to its walls or boundaries."

In the United States the concept proved successful. The pace of suburbanization rapidly overtook that in Great Britain in the second half of the nineteenth century. However, the American suburbs outpaced their English counterparts in the prodigious consumption of space both in terms of lot size and the size of the dwelling. No where else was the suburban ideal better copied, packaged and extended to a more sophisticated sense of the meaning than in the United States. Since its inception, suburbia has become the 'quintessential' physical embodiment of the United States culture, along with big cars, broad streets, expansive lawns, country clubs and suburban shopping centers. The U.S. States culture manifested itself in conspicuous consumption, the private automobile, upward mobility, and the tendency toward racial and income segregation. However, in the American stereotype, "suburbs are small, controlled communities where for the most part everyone has the same living standards, the same weeds, the same number of garbage cans, the same house plans..." The major aspect of suburbia is that of uniformity, both as a planning type and as a state of mind based on imagery and symbolism.¹⁰

Jackson (1985) enumerates three distinguishing elements that characterize metropolitan areas in the United States.¹¹ The first element is their low residential density and the absence of division between town and country compared to the touted notion of the country atmosphere in the English tradition of suburbia. The widely touted notion of the 'American dream' has been forthcoming in owning a private home. Sprawl has become synonymous with the privatization of American life. The second element is the strong cultural attachment to homeownership. For example, about two-thirds of American households own their dwellings, a rate which is double that found in Germany, Switzerland, France, Great Britain and Norway. The third element and 'most important one' is the socioeconomic distinction between the center and the periphery. This is manifest in the widening income disparity between those living in the core *vis a vis* those living in the suburbs.¹²

In the US, Fainstien and Campbell (2002), contend that "After World War II, there was a release of pent-up consumer demand in the USA with political support for home ownership to produce rapid suburbanization and hence the need to develop transportation, education, sanitation, and other service for new suburban residents."¹³ Suburbs, however, can also be described as fragmented peripheral communities defined by their legal independence, and run by self-governing legislative councils. I believe, it is the self-government, physically delineated aspect of community that offers the most plausible definition of the suburb. For example, Beverley Hills is a legally defined entity that lies within the urban sprawl of Los Angeles, California. Despite their essential similarities, American suburbs differ also in size, ethnicity and income.

Urban development at the city periphery of many nations offer different patterns. In Sweden a country with a standard of living comparable to that of the US, the enlargement of Stockholm, following World War II, took the form of satellite communities with high-rises and high-density that are the physical anti-thesis of the low-density, private automobile dependent and mostly residential sprawl typical of US suburbanization. Western European neighborhoods have maintained their historical aura such is the case in Rome, Barcelona, and Vienna. In Amsterdam, the upper income segments of the city's residents reside in the seventeenth-century town houses, which have been restored. In most traditional European cities, suburban areas usually became the choice of the lower-income labor classes.

In South Africa, government forbids contiguous private residential development around urbanized areas. In Johannesburg the impoverished working class, predominately blacks, are confined to live in the suburbs and commute long, rush hour journeys to the city where they

work. The city center was mostly occupied by the privileged white minority. The outskirts of Pretoria and elegant Cape Town are dotted with shanties that house predominately blacks who built illicit dwellings from wooden planks, cardboard, metal and plastic sheets and other makeshift materials.

In Cairo, Egypt, the colonially planned, affluent Garden City district has become the center of a bustling metropolis. Major slums sprouted attesting to rapid urbanization within a struggling economy. In Turkey, gerry-built houses, known as *geckondu*, have emerged at the outskirts of Ankara and Istanbul. Likewise, in India, thousands of slum districts, or *bustees*, embody the depths of squalor of urbanization around the rim of Indian cities.

In developing nations, analysis of contemporary, post-industrial and post-colonial physical growth should be linked to sociopolitical and economic developments shaping peripheral city growth. As world economies are increasingly integrated, myriad lessons can be learned and conclusions shared. Macro political and economic conditions heavily influence urban planning modes resulting in the direction, intensity and scope of city growth, socioeconomic factors can be said to impact the distribution and pattern of residential growth.

The Suburbanization of Riyadh: 1930s-2000

In Arab-Muslim towns the responsibility of running the built environment fell traditionally on the residents. However, since the rise of the new nation-state, the management of modern cities in Saudi Arabia has rested increasingly in the hands of bureaucratic organizations run by technocrats and civil servants representing the monarchic state. Instead of strengthening traditional forms of urban management, the monarchy eclipsed traditional organization structures and institutions,¹⁴ by pumping the housing market with the wealth derived from the sale of petroleum. This approach has become a hindrance to the creation of genuine urban management and financial schemes that could have relieved the central state from the deterioration of urban services under its solo management.

The suburbanization of Riyadh paralleled the impressive economic and political developments of the nation state. Yet, the control of urban management of the city, despite the transformation of its functions and multiplication of its area and population has become more centralized. In major Saudi cities, municipal decentralization has amounted into mere peripheral sub-municipalities with very limited powers, while major decision making rests with the central municipality. Lack of trust, meager human and financial resources and the absence of a tradition of public participation in municipal government all preclude the development of effective forms of urban management decentralization.

Figures (Now!)

Riyadh Map of 1920s

Scattered Royal palaces of 1940s

[Modern Arch.](#) King Saud palace marketing modern architecture (my dissertation p. 201 + p 196)

Al Husaain map of 1950

[Modern urban pattern:](#) Al Malaz subdivision

pre-1970s map?

Traditional suburbanization

Doxiadis Map of 1973

Encroaching subdivisions area outside Doxiadis, 1977

Figures (Later)

Several typical subdivisions
Medstar maps
The villa prototype
the apartment/commercial 'shoe box'
Aerial views of Saudi Suburbia

The layout of roads shaped subsequent housing development and crystallized existing zones of land use. The built-up area crept outward almost evenly, with notable increases along the major radiating roads. Interestingly, traditional built communities, *hillal*, constituted the early city's outward growth surrounding the walled town. I call this early pattern 'traditional suburbanization.' New '*hillal*' sprouted outside the wall, housing somewhat homogenous residents of similar social backgrounds, comprising town folks and Bedouin tribes. The *hillal* communities were seen as a transitional stage between nomadism and rural roots and integration by the new urban society.¹⁵ These *hillal* communities were characterized by mud houses, built around a courtyard, and were compact. This millennia old pattern continued during the 1920's, first slowly within the empty sections of the walled city and then increasing at an ever faster tempo during the 1930s up to the 1950s. (Figure)

By the 1950's the traditional mud house ceased to be the typical middle class dwelling. With the introduction of imported modern building materials and construction methods, residents substituted the feeble mud brick with the more solid cement block. Moreover, industrial construction techniques made it possible to mass produce cement bricks at an ever decreasing cost. Additionally, dwellings built with cement-based techniques proved compatible with modern age conveniences such as electrical and sanitary fixtures. Cement construction methods also offered myriad possibilities for interior decoration, space utilization and indoor volume; compared to the smaller spaces allowed by wall bearing mud construction techniques which seemed prehistoric *vis a vis* willowy cement columns (Figure Aramco Book).¹⁶

Pent up demand for housing which had been inhibited by traditional construction methods up to the late 1940s eventually burst and was expressed in an intense demand for both the simple and small '*popular Arab*' house and the apartment complexes of the late 1950s (Figure). The term '*popular*' refers to the appeal of the simple, and low-cost dwelling for the lower-income and immigrant masses. Essentially a mud-house floor plan, the '*traditional Arab house*' architecture constituted an introverted arrangement of rooms around a courtyard. . The '*popular Arab*' house was a transitional stage of the suburbanization of Riyadh before the proliferation of the extroverted, Mediterranean villa during the 1960s. *Popular Arab house* communities were developed on straighter, wider streets, however varied in width, to accommodate vehicular movement (Figure).

Communities that were built with a modified architectural style of the '*popular Arab houses*,' i.e. traditional mud layout built with modern materials, became known as *al ahya'a Ashshabyayh* (popular or communities of masses), distinguishing them from well-to-do sectors of the city. Prior to the 1960's the majority of Riyadh's residents lived in larger mud dwellings. Municipalities during this stage laid out gridiron subdivisions formed by relatively narrow streets, however straight to accommodate the ever increasing number of automobiles. During the 1950s and up to the 1960s, the *al ahya'a Ashshabiyah* encircled '*traditional suburbanization*' of the *hillal* communities of the 1930 and 1940s. During the 1950s and up to the 1960s, the *al ahya'a Ashshabiyah*, which constituted the tier of '*traditional suburbanization*,' encircled the *hillal* communities of the 1930 and 1940s.

The organic form of Riyadh of pre-Saudi reign was soon to be replaced with a patchwork of gridiron subdivisions. The first laid out gridiron subdivision was by the municipality outside the *Manfouhah* gate during the 1940s, not for the well-to-do, but to curtail the haphazard

development of shanty towns by immigrants amidst the growing mud communities built by better off segments of the society. The *Manfohah* subdivision represented an unprecedented intervention in the built environment on the part of the new state through its fledgling municipality. Underlying the dispersion of Riyadh's urban population was changing transportation patterns. Auto sales soared, a trend that paralleled the increasing national wealth.

Despite the proliferation of detached and semi-detached villas during the 1950's and the 1960's, it was not until the decade of 1970, that the suburban villa eventually eclipsed the traditional court yard Arab house as the predominant residential dwelling for the emerging middle-class housing in Riyadh. Well into the 1960s, a major part of Riyadh's enlargement at both its immigrant working-class and its middle-class edges, continued to take the form of the typical Arab house. Of course, size rather than form and shape distinguished the well-to-do from other less fortunate segments of the population (**figure**).

Yet it was the government decision to transfer its national ministries from Jeddah on the Red Sea, to the new capital, Riyadh, the Al Saud dynastic seat, during the 1950s that inspired the trend to move to the outskirts of Riyadh. In the early 1950s, and at the behest of King Saud, following the death of his father, the new suburb of Malaz was laid out to house the new transferred ministries and the housing of its staff. The Malaz housing project constituted a compromise on the part of the government to ameliorate the government staff, traditionally from the Western Hijaz region of Saudi Arabia, for the hardships encountered by their transfer to the comparatively underdeveloped Riyadh.¹⁷

The suburbanization of Riyadh cannot be understood in chronological development of its physical growth alone. The suburbanization process encompasses a multitude of cultural factors, including political, economical, organizational, and social trends of the society. In the following section, I examine a number of factors that played a major role in the production of Saudi suburbanization.

Municipal Organization

In his discussion of Liberal democracy and Islam, Bernard Lewis observes that in Muslim cultures, "There is not even a *city* with defined powers, limits, and function, but only an assemblage of neighborhoods, mostly defined by family, tribal, ethnic, or religions criteria, and governed by officials, usually military, appointed by the sovereign."¹⁸ Michael Bonine (1983) summarizes a number of problems facing urban development in Arab cities. This rather bleak perspective of traditional political organization of the past, is still applicable to contemporary urban management in Saudi Arabia. G. Bear wrote:

*The Arab city, like the village, was never an 'organism' but only a conglomeration, and even today it has few institutions of self-rule. The Arab town of the Middle Ages was without independent or autonomous municipal institutions. Since then, the inhabitants have had some share in their city's management, and in most Middle Eastern Arab cities there is a baladiyah (municipality). But even now, central authorities have a firm hand on these bodies; in Egypt they are composed of representatives elected and appointed by the authorities,'....In Saudi Arabia, too, most of the members of the municipalities are appointed.*¹⁹

Municipalities are short of financial resources and manpower; while local autonomy is usurped by national ministries and agencies in the national capital, and so conflicting

authority and interests are the norm. **The contemporary history of urban management in Saudi Arabia corroborates such observations.**²⁰

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Political stability under the new nation-state spurred modest economic growth, and after the discovery of oil in commercial quantities, cities witnessed unprecedented urbanization. Oil has created an influx of capital into cities, but the magnitude of development has placed a great strain on housing and the infrastructure of the municipalities. Inexperienced municipal staff turned to Western physical planning, principally the notorious grid, as a system to bring order to towns witnessing high rates of population growth thanks to decreased mortality rates and unprecedented influx of immigrants from both within the Kingdom and without. Traditional compact built forms which were more sensibly constructed were replaced with urban forms of huge avenues and roundabouts, representing the triumph of the automobile in the modern metropolis. Urban centers attracted nomads and peasants who abandoned their pastoral pursuits. During the early decades of urbanization, peripheral urban lands witnessed the proliferation of shanty towns. They were haphazardly built communities of homes built of cement blocks, cardboard and corrugated metal, usually surrounded by enclosure for livestock including sheep, goats and camels.

Saudi Arabia's political structure is a product of its predominately traditional and centralized monarchic government system; with the central state assuming responsibility for major services such as education, welfare, and housing. There is no tradition of autonomous local government. Within cities, government services are run by dispersed government surrogate departments including municipalities with very limited financial powers and which derive their funds and directives from the central Ministry of Municipal and Rural Affairs (MOMRA). Government municipal systems go back to 1937, when the newly established government driven, by its commitment to serve Muslim pilgrims flocking to its holy cities of Makkah and Madinah, issued the first royal decree which heralded the central government intervention in urban development.²¹

Saudi municipal authority, rather municipal government, is organized into five tiers: The first tier is that of the *Amanahs*, or the executive municipality, which are endowed with the powers to prepare and implement subdivisions in the major Saudi cities of Riyadh, Makkah, Madinah, and Dammam. *Amanah's* mayors are directly connected to the Minister of Municipal and Rural Affairs (MOMRA). The second, third and fourth tiers are classified as Municipality A, B and C, classifications which are given to cities and towns according to their size and strategic importance. Municipalities A-C can participate in preparing local subdivisions, but do not have the power to approve such subdivisions, which are held in realm of MOMRA. Moreover, Municipalities A-C are indirectly connected to the MOMRA through the four regional directorates which oversee their budgetary and other personnel aspects (**Figure MOMRA organization!**?).

Municipalities oversee a plethora of services including approval of businesses (in conjunction with the Ministry of Trade) and building permits, safeguarding public health in regard to food and pest control, maintaining parks and major landscape works along major streets . Municipalities are also responsible for garbage collection and contract street lighting. However, municipalities have very limited powers to issue ordinances and collect revenues that match their services. Such limitations have been a major reason behind many of the problems that face them.²² Despite the growth of cities both in size and population they are not given the power to decentralize into smaller metropolitan entities where government structures could be closer to their respective populations.

Al Malaz: a progenitor of the ubiquitous Grid

It was not until the 1950s when the government institutionalized the grid and the detached villa as the ideal suburban pattern in the *Al Malaz* suburb. Following the transfer of government ministries to Riyadh in the later 1950s, the government sought to attract the Hijazi employees to Riyadh, the traditional base of Al Saud. At the behest of King Saud, a 500 acre satellite suburb, Al Malaz, was inaugurated five kilometers to the north of the walled town. The Saudi government assumed responsibility for direct financing of housing construction of the Malaz to house civil servants, who were newly moved from the Western region.

Al Malaz was composed of the administrative complexes of the new ministries, built with a mixture of Mediterranean and international architecture; a large scale housing development encompassing 754 single family houses, 340 apartment units; and a plethora of supporting facilities including a municipal hall, a library, fire station, schools, a market and recreation and health facilities. The Al Malaz suburb stood as an antithesis to the traditional mud communities surrounding the walled town (**Figure**). By the end of the 1950s, Riyadh had a population of 300,000, and covered an area of about 100 square kilometers as opposed to the original 100-acre 'heart of Arabia.'

The Al Malaz development signaled a departure from the old laissez-faire attitude and heralded a new era of government intervention in the land and housing market as a major supplier, financier and subsidizer. The villas were sold to government officials on long-term loans. The planners followed the gridiron network with an hierarchical street network comprising a 180 foot wide highway bifurcating the new suburb, major roads of 100 feet width, collector streets of 60 feet width, and service passageways of 30-45 feet width. This network fed residential blocks which measured 150 by 300 feet width, were subdivided into rectangular lots of 25 feet deep with lengths varying from 25, 75, and 110 feet. Due to its complexity and scale, the Al Malaz project can be considered as the first major attempt to coordinate the allocation of several urban elements in space, with special attention to the overall urban system.

Al Malaz was characterized by its diversified functional elements which were built to enhance Riyadh's political centrality in the nation and boost its administrative capabilities. Modernization, however, western, was sought by the monarchical state to catapult its image in an era of rising revolutions that replaced monarchies in the Arab world. Such intervention on the part of the central state was to culminate in the massive housing programs and land distribution yet to be introduced in the 1970s following the massive increase of oil prices worldwide.²³ Al Malaz development was instrumental in marketing the villa to the remaining segment of the society, within the city of Riyadh and the Kingdom as a whole. Al Malaz suburb was planned according to an 'open grid' layout, a process which has since characterized the physical pattern of Riyadh to this day.

City Master Plans

The First Master Plan (Doxiadis), 1973

The departure from traditional design standards of the *medina* culminated in the adoption of the City's first Master Plan of 1973 by the Council of Ministers. The plan, which was prepared by Doxiadis Associates International, provided for growth of the city in a northerly

direction parallel to Wadi Hanifah to the west. Doxiadis introduced a linear growth concept for the city along a central spine running in a north-south direction, thus avoiding the encroachment of the city onto the Wadi Hanifah system (Figure).

The Dioxides Master plan introduced a highly physical plan that has been extended over time to accommodate an ever frenzied speculative subdivision process. The major principles of the Dioxides master plan can be outlined as follows:

- a city-wide gridiron plan comprising a system of highways that circumscribe super-blocks of 2 by 2 kilometers, on the slightly undulating terrain of the city. It sorted the city area into a functional land-use plan which has left the city with a profound urban form, essentially a lower-income service-oriented, industrial south-west, set against an upper-income residential, commercial and administrative north-east.²⁴
- city-scale zoning regulations; which included type and density of residential development, and minimum lot sizes for new residential areas.²⁵
- The Plan included the detailed design of individual Action Area Plans, covering 11.5 square kilometers in an effort to revitalize the City's center.

By shifting to comprehensive master plans, the authorities sought to control Riyadh and other major cities' phenomenal growth. Simple physical planning of the past, mainly the laying of land subdivisions according to planning-by-law measures implemented by cities' municipalities, proved lacking. City Master plans were sought to create more economically and efficient urban systems in line with national economic growth plans. The Doxiadis planners envisioned a functional city, predicated on a modular grid, simple, straight forward, easy and legible urban framework for the city's population estimated to be growing at 100,000 per annum. It was projected that the 1970s plan would serve the city's needs up to the year 2000. The modern outcome seemed inevitable: people abandoned the traditional built environment all together. Of course, the process of laying land subdivisions using the grid, which started with the *Manfouhah* subdivision in the 1940s, preceded the wholesale arrangement of the city into super-blocks of 2-by-2 kilometers by Doxiadis. However, the Plan institutionalized the segregation of the city by income, hence imposing an economic map on the population, which hitherto valued social ties over economic privatism.²⁶

The Kingdom's approach to planning mirrored the planning followed by developing countries at that time. The approach of contracting Western consultants to prepare master plans was in vogue in many Third World and Developing countries. They were archetypical solutions to rapidly expanding cities. They were long-range, multi-phase conceptualizations of a town's future growth. Master plans constitute comprehensive land use and infrastructure development plans, projected in tune with vigorous national economic growth schemes, all sought to facilitate economic prosperity and social stability through manipulating the spatial system. However, more often than not, these plans were more technical documents than realistic programs, reflective of communities' individual needs. This corroborates Brian Berry's observation on the usually perfunctory physical planning approaches employed in Third World countries. "It is a planning at the municipal level within highly centralized national government."²⁷

Oil wealth has enabled the government to embark upon vigorous national and urban planning schemes aimed at increasing living-standards of the population by all feasible means (better housing and hygiene, etc.) and by upgrading the built environment for projected future economic prosperity. Though progressive, these efforts were wrought without public input. By shifting to comprehensive master planning, the authorities sought to control Riyadh 's phenomenal growth.

Riyadh's political centrality, its growth and concentration of government, industry, and services and with a population 4.5 million increasing at an 8% per annum, the city has become a behemoth sprawl in a desert landscape that is increasingly becoming unsustainable. Like other urban centers in the Arabian Peninsula, agricultural land is scarce, and cities did not evolve primarily as marketing centers to support local hinterlands. Rather, urban economy and accessibility to strategic water and power supplies drew people to Riyadh and the city owes its impetus to the fortuitous discovery of oil, which has been the catalyst for the city's phenomenal urban development.

The Second Master Plan (SCET International – Revised), 1982

In 1976, SECT International was retained by the Ministry of Municipal and Rural Affairs (MOMRA) to update the Doxiadis Master Plan. Following the oil boom of the early 1970s, mega land owners realized that money could be made laying out roads and plots at the periphery. The original Doxiadis Plan designated a city area of 304 square kilometers and did not foresee the exponential growth of the city's population and the concomitant channeling of enormous financial savings in the real estate market. By 1977, the subdivision frenzy surpassed the original Doxiadis plan boundary of 300 kilometers to cover a total area of 700 square kilometers (Figure), resulting in unprecedented urban sprawl. Such sprawl resulted partly from the privatization of Saudi life and the increasing tendency to live in detached homes, but mostly from the real estate mania of the booming decade. The Revised Master Plan by SCET, which was completed in 1982, included 250 square kilometers of vacant approved subdivisions. Subsequently, more subdivisions were approved beyond the SCET boundary.

Riyadh suburban sprawl has been a result of factors not unlike those found in the United States, namely, consumers and speculators and businesses seeking outlying land where land is inexpensive and congestion is moderate; low cost auto travel allows people to live far from their places of work.²⁸ The resulting form of development is typical sprawl akin to that in the United States characterized by: (1) leapfrog development, (2) commercial strip development, and (3) large expanses of scattered, low-density residential development.²⁹

Urban Growth Boundary Policy

The subdividing process in the majority of Saudi cities and towns continued apace during the 1980's. To curtail haphazard outlaying of subdivisions surrounding Riyadh and other Saudi cities, the Council of Ministers adopted MOMRA's proposed Urban Growth Boundary Policy (UGB).³⁰ By late 1989, new undeveloped subdivisions in Riyadh approximately equaled the same size of the whole urban development area which accommodated more than 2 million people. The High Commission for the Development of Arriyadh, which was commissioned during the early 1970's to oversee Riyadh's urban planning and major urban projects, adopted the UGB in an attempt to put the suburban subdivision process under check.

Urban growth boundary policy is a line on the map of the city delineating phases of growth. By employing growth management policies, planners aim at preventing 'discontiguous' and leapfrog development.³¹ In Riyadh, the UGB created three phased development limits: the Urban Limit I, Urban Limit II, and the Urban Environs phase (Figure). Subdivisions were to be allowed in ULI until 1995, and then further development could take place in ULII between 1995-2005. "These urban development phase limits were created as a growth management tool to prevent the spread of costly and inefficient urban sprawl by providing government-funded infrastructure only to lands designated for development during the specified time frames." New subdivisions of land in Urban Phase II were denied government

infrastructure and social services prior to 1995, unless the subdivider committed to asphaltting roads and provided local networks of power and telephone services. While such provisions were adopted by the central government to slow conversion of suburban land into subdivisions that lacked qualities of modern urban communities, enforcement of the policy has been selective, as evidenced by the continuous subdivision activity championed by land developers with disregard for future ramifications. In effect, the existing pattern of subdivided land has predetermined much of the character of Riyadh, for decades to come.³²

The introduction of the UGB policy, while slowing the hectic pace of subdividing peripheral land, failed to introduce modified patterns that lessened the negative outcomes of the grid patterned suburbanization. Government officials have repeatedly exempted substantial lands from the requirements of the UGB. In some cases, land owners have exploited the ambiguous terms of the UGB. For example, UGB allows municipalities to approve the laying of major road networks necessary for metropolitan transportation needs. Land owners abuse this clause by paving roads outside the UGB Phase I and II claiming that these roads are necessary for metropolitan needs. Typically, land owners follow Doxiadis' 2 kilometers by 2 kilometers super-block structural framework to layout major arterial street network (Figure). Once the municipal authorities approve such road arrangements, it becomes possible for land owners to able subdivide larger tracts abutting these roads which then makes it easier to sell the land to smaller land speculators. Consequently, such a process predetermines the urban form of the city for decades to come.

Similarly, the UGB regulations permit subdividing exurban land into weekend 'ranchettes' with a minimum area of 10,000 square meters. This has become a loophole for land owners of major tracts. Worse, this clause in the UGB exempts prospective land from the municipal requirement, which states that when land is subdivided, 33% of the land use be dedicated for primary services and road networks.

In 1995, subdivisions were permitted in UGB Phase II, despite the availability of considerable vacant subdivided land which could house double the existing population for another decade. MOMRA stipulates that prospective petitioners install local infrastructure networks and the asphaltting of new subdivisions for approval. This requirement is a worthless service used to obtain a permit.³³ The commencing of Phase II, was unnecessary given the fact that 30% of land in UGB Phase I was already subdivided but not developed. Moreover, prior to the formal commencing of Phase II, 70% of the land included in this phase had already received approval and was platted; fueled only by speculation. The MOMRA and its surrogate Riyadh, *Amanah* (municipality) through the laxness of implementing the UGB have encouraged the dumping of valuable financial resources into vacant lands

Analysis and Evaluation

In reference to changes impacting Middle Eastern cities, Saqqaf (1986), points out: "Traditional values in terms of socio-cultural beliefs as well as in terms of architectural pattern give way to more universal and less durable concepts."³⁴ The suburbanization of Riyadh has created thousands of hectares of inappropriate, unplanned subdivisions scattered around Riyadh's periphery which, according to a recent study, resulted in, firstly, "an impediment to the proper, orderly and sustainable growth and envelopment of the city, and, secondly, a huge financial liability for government whose responsibility it is to provide roads, infrastructure and community facilities."³⁵ While in the US, suburbs have long ceased to be an appendage to the city, outward city growth in Riyadh continued to reel under centralized management, a centralization that resonates the centralized political structure of the national government.

The monarchic attitude of *noblesse oblige* has shaped the government funding policies of modern built environments in Saudi Arabia. Such an attitude has resulted in the development of cities dependent on central government and has undermined the development of local urban finance, a tradition that has placed a straightjacket on municipalities to reap growth benefits to fund the development of their urban management activities, including urban planning. Relying principally on oil revenues, the government has shunned locally-derived, sensible financial schemes which hold cities responsible for their development. A recent report has identified:

- inflexible political culture that fails to engage with and lead communities,' as one of the key obstacles to good governance of Riyadh.
- Centralized management involvement of urban development processes which works against efficient and effective decision making at either the metropolitan level or local levels in Riyadh
- Absence of community involvement in decision making means that the future development of the city may not necessarily meet community needs.³⁶

Suburbanization took place under conditions of expedient city growth with a national population growth rate of 3.5% per annum. The application of grid subdivisions could be understandable in the early stages of suburbanization as an expediency solution to accommodate high rates of urbanization. However, with the improvement of planning education and the increasing financial resources available to Saudi authorities, the continuous adoption of the grid system is unfathomable, given its proven negative attributes, as previously illustrated. Up to now, most of the gridiron subdivisions in Riyadh, are 'open grids,' laid out with a view towards endless expansion and reduplication. Peter Marcuse (1987) distinguished the 'open grid' from the closed one as being very different from each other. The 'open grid,' Marcuse observes,

is used because it provides an unbounded or limited mechanisms to peripheral growth. "It can be extended as far as, and whenever, desired, with no cumbersome planning decisions required. It guarantees that what will be produced in the future will be exactly equivalent to what is produced today and what was produced yesterday."³⁷

Resorting to gridiron subdivisions, government planners departed from traditional planning approaches and did not create an urban planning paradigm suited for the local population and its desert environment. The Al Malaz suburb was extolled by the government as the modern city, hence substituting the orthogonal pattern at the cost of the efficient, compact and climatically friendly organic built forms. Its streets stood as the leading example of a handsome and commodious town order. The Al Malaz was to be endlessly repeated whenever a landowner applied for a subdivision. Landowners, predominantly wealthy members of the social elite, viewed the role of the municipality as slight, and wanted decisions to be made, as much as possible, by the forces of the private market. Land was treated as homogenous without consideration for location or topographical features. Government regulations required that up to 33% of a subdivisions area be taken by the government to allow for street network, minimal community services, primarily, schools, parks and mosques, notwithstanding that such services are considered as a requirement on the part of land owners to market the land to prospective buyers. The relative strength of speculative real estate interests *vis a vis* the public sector have made a major impact on the form of the suburbanization in Saudi Arabia. Since they can prevail upon cities to lay out their gridiron subdivisions, no matter how rugged the terrain, thus leaving the financing cost of land preparation and infrastructure to the public sector.³⁸

In 1986, 1996 and 2001, the number of families in Riyadh rose respectively from 204,844 to 433,598, to 718,567. While its population tripled from 1.4 million to 4.5. between 1986 and 2001. It has also been estimated that the number of families increases at an 7% per annum. In 1996, the total number of house holds was estimated at 433,600 while the number of dwellings was over 450,000 units, with moderate vacancy at around 5%, and with the detached, single-family suburban villas dominating the housing stock at 51%.³⁹ The average lot area for these villas was 500 square meters.

Lacking genuine planning paradigms suited for a non-Western society, municipalities turned to the grid. Initially, faced with phenomenal population growth, Riyadh Municipality, as well as the central Deputy Ministry for City planning in the majority of the Kingdom's urban centers, resorted to the gridiron pattern as a convenient, predictable and systematic layout of land at the cities' edges.

Saudi government pursued modernization policies, which accelerated the suburbanization process, to the great detriment of traditional urban practices and the deterioration of inner cities. Yet, with the proliferation of sprawl and the inner city plight, the government did not revise its antiquated urban management practices. This reflects a distinctive attitude to development and disregard for the built environment as a national heritage. To say the least, the suburbs have developed into a poorly conceived assemblage of dispersed subdivisions, which will bode substantial economic and social circumstances and attest to poorly guided centralized national and urban planning.

If we take that "the two most reliable indicators of good urban form are the degree of integration of individual architectural components and, corollary to that, the successful interaction between buildings and open spaces within the overall built environment," then the resulting modern built form of Riyadh, as well as other Saudi towns and cities, is an understatement of the modern urban planning application.⁴⁰ Technological imperatives of the oil industrial economy have ushered in an era of mass intervention by the central state in the form of physical planning. Urbanization has created high rates of immigration from within the Kingdom and from without. Urban planning practices have remained the pejorative activity of the central state. So much so, the resulting urban form of Riyadh and other modern annexes of Saudi cities have a patchwork of rectangular subdivisions vanishing in the surrounding desert landscape.

It must be noted that the suburbanization of Riyadh according to the repetitive grid lies in part on the government's lax requirements, further emasculated by the political powers of the super land owners. The increase income of Saudi nationals was made possible by the improved oil economy. Discouraged by Islamic teachings to seek usury investment ventures and beset with instability in the stock markets, savings were naturally channeled to the real estate speculative land market. The outcome is a land speculation frenzy that carpeted the city with subdivisions beyond the need of future population for many decades to come.

To curtail the suburban sprawl, the Saudi government has enforced a urban growth policy. The success of the UGP can be credited more to the slowing 'oil boom' of the 1970s and the 1980s, than to the enforcement of the policy itself. The suburban development of Riyadh has continued apace despite the availability of substantial undeveloped land within the urban boundary I limit of 1995. The impetus for the continuous zeal for gridiron subdivisions has being due to wealthy developers desire to convert desert land into lucrative land speculation schemes, rather than due to real need for developable land. The government, while beset by burdensome budgetary difficulties due to decreasing real oil prices and high rates of urbanization and population, continued to sanction the inefficient sprawl of the city with dire economic implications. The adoption of the UGBP has been too little, too late.

The introduction of the UGB has been an anticlimax; it has been over simplistic, poorly studied and incoherently implemented. The position of the government has been a function of two major political factors. The first has to do with pressure from land developers, most of whom acquired suburban land free from the government and then put it on the market through intermediate land speculators. The second is the fact that the central government in its efforts to avoid popular dissent, allowed peripheral land to be added to the market in order to stave off rising land prices under a stringent GBP.

Summary

Saudi Arabia's towns and cities were transformed by rapid suburban growth since the 1950s and exhibited some of the least attractive qualities of suburbia. Modern suburban development in Saudi cities, and in Riyadh in particular, are distinguished by their seemingly unplanned character including the absence of basic support services for the residential population, and by the modest scale and quality of housing design. Such characteristics reflect the narrow role played by planning authorities, who perceived the traditional medina as a blight to be eradicated. The low-density dispersed settlement form which has resulted in the absence of any strategic control is increasingly costing the nation's cities tremendous costs. Alas, the painful application of the grid worldwide has not yet struck a cord in the laying out of suburban land in Riyadh due to its inappropriateness with a harsh desert climate.

What makes the ramifications even more gloomy is that contemporary suburbanization of Riyadh has become an 'exemplary' paradigm in modern urban development in other Saudi cities and smaller settlements alike. The Saudis are not concerned with suburbanization in the way that some other nations are. The Saudi model of suburbanization has been an accumulation of gridiron platting of subdivisions at the periphery, fueled by greedy land speculation and government free-land grants. This form of suburban development has been achieved with minimum appreciation to social and economic and environmental factors. The resulting landscape is an amorphous suburbia of concrete boxed villas and two-story apartment buildings rimming gridiron suburban sprawl.

The city core, representing the city's built up area up to the 1970s, has become a landscape of rundown slums, half-populated neighborhoods of cheap architecture housing low-income Saudi segments, and a desperate third world expatriate labor force. All in all, the suburbanization of Riyadh, while offering modern housing opportunities for the population, has been achieved at the cost of sustainability in the wider meaning of the term.

These characteristics reflect the narrow role played by planning authorities in Saudi Arabia, shackled by the centralized political structure of the national government, which has rendered political and community involvement non-existent. Poor urban planning and weak municipal authorities has resulted in a centralized approach to urban development. MOMRA turned to growth management policies to slow the scattering of suburban development, but lenient municipal ordinances could not stop greedy powerful land owners from the continuous proliferation of subdivisions. The current approach of managing the city, with heavy central government involvement, will only preclude the employment of genuine urban planning for sustainable development of a city, which is expected to exceed 10 million inhabitants by the year 2020. In order to make up for the grave mistakes of past suburbanization, future urban management should emphasize a sincere measure of decentralization of authority and allow independence for suburban districts and entrust them with adequate arrangements for financing public facilities and services.

¹ Kingdom of Saudi Arabia, Arriyadh Development Authority, *A Strategic Framework For the Development of Ariiyadh (MEDSTAR), Phase II, Part 3, Step 3.1 Report*, June 1999, p. 8.

² The Ministry of Municipal and Rural Affairs has recently authorized the multiple application of Doxiadis super block concept as a framework for suburban development in all Saudi cities.

³ J. W. R. Whitehand and C. M. H. Carr, *Twentieth-Century Suburbs: A Morphological Approach*. London: Routledge, 2001, p. 4.

⁴ When first coined in the post-war years, the term 'third world' principally denoted countries that were not part of the 'First World' lumping those of the Capitalist West and not belonging to the Soviet block (i.e. the Second World). In its quest for a common term, many of the newly independent countries began to adopt the collective term 'Third World' following the Bandung Conference, Indonesia in 1955. With the collapse of the socialist Second World, the term has been increasingly queried. For another, with the globalization of many world cities and markets, the many common denominators that are said to distinguish such a grouping of newly created nations have been questioned. Nor the term 'developing countries' offers a plausible alternative. For the gamut of variations between the developmental stages of such countries defy an encompassing term. The author opts for the term 'third world' countries as those newly created nation-states ranking low either in their political organization and/or in their economic development. However, the term 'developing countries' is preferred by the author as to refer to countries that have been devoting enormous, genuine and progressive efforts to develop their economic and political structures that put 'impersonal' values ahead of following trajectories that merely serve the interests of an elite autocracy. David Drakaksi-Smith, *Third World Cities. 2nd Edition*. London: Routledge, 2000, p. 1.

⁵ In the United Kingdom, the first country villas for a well-to-do middle class were dated to second half of the 17th century in the hamlets of Highgate and Hampstead a few kilometers north of London.⁵ The three adjacent pairs of semi-detached houses, built in c. 1688, comprised what could be the most common characteristic component of the suburban villas, namely having a sizable front and rear garden. Outside London, early suburban houses were occupied by residents who commuted to the city center where they worked. They frequented their suburban villa residences as weekend villas in conjunction with permanent houses at or near the city center. By the middle of the 18th century, there were a cluster of nine detached houses each with an individual garden of 0.2 ha at Hampstead's Belsize estate. Source: Whitehand and Carr, *op cit*.

⁶ Whitehand and Carr, *op cit*.

⁷ Ibid.

⁸ R. Fishman - "Bourgeois Utopia: Visions of Suburbia." In *Readings in Urban Theory, 2nd Edition*, edited by Susan S. Fainstein and Scott Campbell, *Readings in Urban Theory, 2nd Edition*, Oxford, UK: Blackwell Publishers Ltd. Pp. 21-31.

⁹ R. Fishman (2002), *op. cit*.

¹⁰ Kenneth T. Jackson. *Crabgrass Frontier: The Suburbanization of the United States*. New York: Oxford University Press, 1985, p. 4.

¹¹ Ibid.

¹² Ibid, p. 6-8.

¹³ Susan S. Fainstein and Scott Campbell (eds.). "Introduction: Theories of Urban Development and their Implications for Policy and Planning. In *Readings in Urban Theory, 2nd Edition*, edited by Susan S. Fainstein and Scott Campbell, Oxford, UK: Blackwell Publishers Ltd., 2002, p. 2.

¹⁴ Saleh Al Hathloul, "Tradition, Continuity and Change In the Physical Environment: The Arab-Muslim City." Ph.D. Dissertation, MIT, 1981; Jameel Akbar. *Crisis in the Built Environment: The Case of the Muslim City*. Singapore: Concept Media Pte. Ltd., 1988.

¹⁵ Michael E. Bonine, " Cities of the Middle East and North Africa." In Stanely D. Brunn and Jack f. Williams, eds. *Cities of the World* (1983). 281-321

¹⁶ The use of concrete structures and cement blocks was introduced in 1950 for the first time in the oil producing Eastern Province of Saudi Arabia. A prominent contractor, Mr. Ahmed Al-Kaki imported skilled builders from Lebanon and Syria to build his big-multi story apartment buildings with commercial space on street level on prospering Khalid Street in Al-khobar. He hired Arab architect, Niqulla Salem, who introduced the Mediterranean multi-story style to the region. In the new residential units, no space was assigned for livestock for household production, a storage room for dates and foodstuffs, or a water well. Unlike traditional introverted homes, the new units were adorned

with wide windows and doors opened onto wide , straight streets, all to meet the new building codes of the municipality. The architecture style that was opted by Salem was more suited to the Mediterranean region than to the hot and humid climate of the Eastern province. The new style was to inspire mass emulation. Faisal Mubarak (1992), op. cit. p. 151.

¹⁷ Faisal Mubarak, op. cit. 1992.

¹⁸ Bernard Lewis, "Islam and Liberal Democracy." *The Atlantic Monthly*, Vol.271, No.2, February 1993, pp. 89-98.

¹⁹ G. Bear, "The City," in *Readings in Arab Middle Eastern Societies and Culture*, edited by Abdullah M. Lutfiyya and Charles Churchill (Paris, Mouton, 1970), 641. In Saudi Arabia *all* heads and members of municipalities are appointed by the central government.

²⁰ The author although citing such an observation disagrees with Lewis on the factors that prevent the development of genuine government structures in many Middle Eastern countries. The creation of modern nation-states in the Middle East was engineered by Western Powers Principally Great Britain and France, who employed the strategy of 'divide and conquer:' instead of creating one strategic geographical Arab nation straddling Western Asia and north Africa, opted for the creation of a multi nation Arab world ruled by 'loyal' absolute monarchies and pseudo democratic republics (later turned into totalitarian regimes) rather than fostering truly independent representative political structures which owed their control to popular support.

²¹ Royal Decree no. 8723 dated 1937, was later updated in 1941 and in further expanded in 1976 (RD no. 5). The three decrees, despite their limitations, still constitute the backbone of municipal planning and management in Saudi Arabia.

²² For example, cities can only collect limited revenues essentially in the form of fees and users' charges such as fees on advertising, nominal fees against building permits and annual business registration fees, etc.; again all fees are standardized nationally, and earnings are collected by the national Ministry of Finance which through a convoluted process return such revenues back to municipalities.

²³ For example, the Kingdom's revenues from oil rose from \$2,583 billion in 1971 to \$32,587 billion in 1974 and continued to increase to a record figure \$110,956 billion in 1981.

²⁴ Another handicapping aspect of city management in Saudi Arabia is that land use and zoning are not related to any tax formulation. Thus, peripheral growth is ever severed from the accruing costs it engenders. Likewise, land use plans and zoning regulations that guide building processes within each functional zone are seldom drawn with property rights in mind.

²⁵ Unfortunately, zoning regulations were mute regarding conservation and special area plans such as historical and environmental areas provisions.

²⁶ Mubarak, op cite, 1992.

²⁷ Quoted in Faisal Mubarak, op. cit. p. 145.

²⁸ Reid Ewing – *Is Los Angeles Style Sprawl Desirable?* In *APA Journal*, Vol. 63, No. 1, Winter, 1997.

²⁹ Jerry Weitz and Terry Moore, "Development inside Urban Growth Boundaries: Oregon's Empirical Evidence of Contiguous Urban Form." *APA Journal*, Vol. 64, Number 4, Autumn, 1988, 424-440.

³⁰ Council of Ministers Resolution no. 175, dated April 24, 1989.

³¹ Jerry Weitz and Terry Moore, op. cit.

³² The Higher Commission for the Development of Arriyadh. Metropolitan Development Strategy for Arriyadh (MEDSTAR), *A Strategic Framework for the Development of Arriyadh, Phase II, Part 3. 3.3 Report, Draft Urban Management Plan*, June 1999, p. 8.

³³ The Mayor of Riyadh office, Letter to the Governor of Riyadh no. 10677116 dated 28,711422h. (2001) included how the Mayor, during his term, managed to impose a number of concessions to grant approval of new subdivisions. They include...

³⁴ Abdul Aziz Saqqaf (Ed.).*The Middle East City: Ancient Traditions Confront a Modern World*. New York: paragon House Publishers (1987).

³⁵ MEDSTAR, op. cit, jurne 1999, p. 4.

³⁶ Ibid, p. 2-3.

³⁷ Peter Marcues, "The Grid as City Plan: New York City and Laissez-faire Planning in the Nineteenth Century," *Planning Perspectives*, 2 (1987), p. 291.

³⁸ In addition to the outlaying desert landscape in which most of current land subdivisioning is taking place, thousands of hectares of productive farmland surrounding Riyadh have been moronically divided into rural tracts, or ("ranchettes"), commonly know as *istirahats*, which constitute a form of "resting escapes." Such parcels have been bought by week-end ranchers with no knowledge of rural land management, tragic conversion of very limited farm land in Saudi Arabia. The demand for such ranchettes have also been a result of the peculiarities of the conservative society obsessed with

privacy and extended family, as well as a response to the lack of public open space in the development of contemporary urban forms in Riyadh and other Saudi cities and towns.

³⁹ MEDSTAR, , op. cit, June 1999, p, 88-90; Arriyadh Development Authority – *Investment Climate, 2002*, p. 21.

⁴⁰Stefano Bianca, *Urban Form in the Arab World: Past and Present*. London: Thames Hudson, 2000, p. 204.