

Framework

The generic term "places of public gathering" can be applied to all locales in human settlements which are outside the private and personal territorial¹ domains of the citizens. In traditional Islamic cultures this would include the public gardens, pathways, streets, covered streets such as bazaars and *sūqs* and other traditional places of commerce, as well as places of the institutions of the society together with their urban contexts. In contemporary times we must add airports, railroad stations, sport stadiums, etc., to our roster of public gathering-places.

Patterns of compact, monolithic and continuous development are observable in the majority of the Islamic settlements of North Africa, the Middle East, central Asia and India. These patterns are as much an outgrowth of ecological adaptation to the environment as they are a reflection of cultural attitudes to place-making. The term "placemaking" is used here to define conceptual approaches to the location and creation of architectural buildings, their urban context and the larger city form.²

History of Islamic Cities

An ancient and elaborate symbolism for the location and design of Islamic cities has persisted through the centuries and in the midst of secular change. Mecca, Baghdad, Mashhad and Isfahan, to name only a few, are important examples of metaphoric urban creations in Islam which exhibit strong symbolic messages.

The cosmology of major Islamic cities has traditionally followed certain ideas and rituals. These ideas have included an appreciation of astral conjunctions, animal sacrifices, geomancy, orientation of the city to the cardinal directions, geometry, compact and contiguous planning, recognition of sacred geography and the symbolic disposition of the various parts of the city. The Friday mosque and the place of government were symbolically placed at

the centre of the city in concentric planning concepts, or at the top or head of the town in anthropomorphic plans, which relate to the slope of the land and the natural flow of water.³ Within these ideal plans, the public places of gathering were situated in an orderly and mutually self-supporting manner according to a hierarchy, commencing with the major elements of the city centre and continuing to the minor nodes of residential districts.

Recent History

Recent rapid change has transformed the cities of Islam, and urban chaos has been the major legacy. To bring order out of this chaos, it is necessary to know something about the social and philosophical structure of the past. If we understand the reasons for past senses of urban integration, we may better comprehend the forces that have created the present segregation of parts, and brought decay to once wholesome and vital places of activity and public pride. With this understanding it may be possible to direct the future forces of change in a more constructive direction.⁴

The two case studies which follow illustrate the traditional cities of Iran during the Islamic period; they are also cities which experience cataclysmic changes in the twentieth century. We will focus on the centres of Hamadan and Shiraz.

Hamadan and Shiraz Bazaars

Hamadan is a provincial town in the northwestern region of Iran, lying at one of the major passes through the Zagros mountain range. Until the twentieth century it was a major stop along the east-west silk route, but its origins and importance reach deep into ancient Sasanian history. It was in Hamadan that the city of seven concentric walls known as Ecbatana was built upon a prominent hillock.

As a significant trading town and customs

post on the Iranian frontier, Hamadan developed a sizable bazaar and innumerable caravanserais. It was a pleasant place, amid abundant poplar trees and gardens.⁵ However, this rich town fabric and active centre was doomed. In the 1930s, as an act symbolic of social and political change, the central government superimposed a radial road plan on the city. This succeeded in destroying the unity of the bazaar, obliterating a portion of the Friday Mosque and even intruding upon the ancient archaeological remains of Ecbatana. A similar pattern of "modernization" was carried out systematically in most urban settlements in Iran. At the time, this was genuinely felt to be consistent with progressive change.

In time, the new roads allowed greater cover access and became the most economically active places of commerce. Civic buildings, squares, fountains and public parks became associated with this new town pattern. Yet the traditional fabric remained, and continued to cater to the modest needs of the masses in both economical and psychological terms.

Over the past forty years, the once noteworthy bazaar has fallen into a state of disrepair due to a lack of economic vitality. The great caravanserais have been converted to warehouses, the bazaars to wholesaling. A serious breakdown in the process of self-maintenance is strongly in evidence. As a consequence, a most important cultural and environmental heritage is today on the verge of complete extinction.

In contrast to the crumbling bazaars of Hamadan, the Grand Vakil bazaar of Shiraz has somehow survived this historic surgery. Although the intentions of the central authority were very much the same and the destruction of the traditional fabric just as blatant, the Shiraz bazaar managed to survive. In recent years it has undergone a rehabilitation programme that may once again restore its value as a place of public gathering. Reasons for this resilience may include the ongoing economic exchange between the nomadic Qashghai and the settled Shirazi; the presence of the important Shiite shrine

precinct of Shah Cheragh; the Persepolis tourist trade spinoff; and the particular attention paid the city in recent years within the national hierarchy.

The bazaars of Hamadan, Shiraz and of every other major town in Iran are fighting a life and death struggle for survival. The acts of modernization seem only to have hurried the rate of their demise. Should this death and decay be viewed as part of a natural cycle of social and environmental transformation, and therefore inspire no sense of alarm? Or is the potential loss of the bazaars symptomatic of a non-adaptive disease pervading contemporary decision making, and therefore a great cause for concern?

Ideas of Progress

What are the reasons for the drastic decay and negative transformation of these traditional environments? The answers are

complex and deep-rooted and not fully apparent. Valid areas of investigation may include the study of the morphology of notions of progress; new images of development associated with contemporary notions of progress; and the loss of the traditional languages of architecture.

In Islamic cultures, the progress of individuals, families and communities has historically been measured in terms of both metaphysical and material growth.⁶ Koranic reference to these simultaneous realities are numerous, with an obvious emphasis on spiritual progress as a laudable life goal.⁷ However, since the industrial revolution in the Occident, inordinate emphasis has been placed on the material and personal ego satisfaction of the individual. This is coupled with a concomitant motivation toward equating life fulfillment with increasingly homocentric concerns of material consumption.⁸

In light of the many world surveys and projections of enormous human population

expansion, world resource depletion, food insufficiencies, debilitating effects of environmental pollution and increasing social strife, humanity just cannot afford the price tag of materialism as the primary life goal.⁹ The concept of an ever-expanding pie that would allow an equal slice to each new entry into the marketplace has proved invalid in the face of modern realities. A reassessment of more wholesome and sustaining motivations regarding progress is necessary.

In this reassessment it is important to remember that Islam has always encouraged a very practical approach to life, based on a pragmatic view of phenomenal reality. This pragmatism has been complemented by a strong conviction related to the spiritual quest of all humanity. The ethereal world, known through intuition and the creative intellect and understood through transcendental logic, has therefore developed as a simultaneous reality. Islam promotes a "middle way" (*serat-al-mustaqim*) which develops cognition and action through a balanced sense of the phenomenal, as understood through reason, and the ethereal, understood through transcendent intuition.¹⁰ Totality, from the Muslim world view, encompasses both the material and the metaphysical.

Contemporary visions of progress entirely deny or find little room for this balanced approximation of reality.¹¹ Yet today's most advanced subatomic physicists tend to agree with Islam's organic and complementary view of life's primary principles of operation.¹² Ironically, most of mankind's ancient traditions have been based upon the same "indeterminate" nature of reality.¹³

Images of Development

The images associated with the recent progressive development in most of the world, and particularly in the resource-plenty countries of the Islamic world, have tended to exhibit strong anti-ecological and theological tendencies.¹⁴ As if compelled by a Promethean desire for self-



Yazd, Iran: inside the bazaar

Photo R Holod

annihilation, the "ideal cities" of the twentieth century have been highly energy consumptive and wasteful. The concept of the megalopolis, the dispersed city images of the "Ville Radieuse" of Le Corbusier and the sealed glass towers of Mies van der Rohe have created false ideas of form, totally alien to the ecological and cultural constraints of this spaceship earth. Granted that many of these "ideal" conceptions were mistakenly transmitted to life zones not originally receptive to their use, it is important to acknowledge that even in Western Europe and America these "ideal" forms are under serious debate today.¹⁵

Until the 1960s the level of global development had not reached such a threshold of ecological turbulence. The total inter-relatedness of world cultures was still not so consciously sensed, and an energy conservation ethic had not yet evolved for the new policy makers of this global village.¹⁶ Today, the energy ethic is beginning to be enunciated and slowly understood, although few tangible images of this new attitude exist. In a world programmed for "package deals," there are few "energy ethic packages." The few that do exist are in their infancy; they lack the maturity of the "full life" wishes of humanity which balance process with form. There is not yet a language of the aesthetics of energy conservation in city planning, urban design or architecture.

While many of our contemporary ills may be explained by an overemphasis on materialism and the use of irrelevant models of development, it cannot be denied that the majority of humanity now desires these "golden calves." So appealingly have the marketplace and the media promulgated certain views and products that the materialistic and so-called pragmatic ideas of progress dominate both societal action and political need for visible demonstrations of advancement. Therefore, although it is impossible to demolish all the glass skyscrapers in the deserts of the Middle East, it is possible to indicate their limitations and commence a transitional period of doing with less. Greater understanding, through experi-

mental means and clear demonstration projects, must be acquired for the energy-conscious age of the future.¹⁷

In this new consciousness, it is not enough to create energy-conserving containers while leaving the contents (the users, the people) in a state of frustration or with a sense of backwardness or second-class citizenship. It is necessary to develop transitional strategies which accommodate the impulse toward development while allowing time to integrate and transform these impulses into more constructive and relevant manifestations.

Most Islamic countries can boast a real treasury of insight and wisdom which, if tapped, might resolve many of the dilemmas of architectural "misfittings." This treasury consists of the traditional cultural values and indigenous settlements of Islam, including the ways of its people, its cultural institutions and its adaptive ideas of placemaking.

No more than two generations separate most contemporary Muslims from their energy-conscious past. This means that, in physical fact, both the architectural and paternal grandfathers of this consciousness exist. The centuries-old adaptive strategies inherent in these "cultural grandfathers," if observed for their principles and not for their styles, can reap rich harvests of appropriate strategies to help anticipate the needs of tomorrow. They can also yield both a sense of personal and local pride through the promotion of a regional sense of identity, and the psychological benefits of continuity in the face of rapid change.

The Traditional Languages of Architecture

In terms of building technology and materials, the most advanced modern thinking is concerned with "passive design" in



Fez, Morocco: garden of a traditional courtyard house

Photo: W. Porter

buildings; the study of indigenous architecture is considered an essential foundation for this field. The traditional massive buildings in the hot arid zones of the Middle East, for instance, had long ago perfected the art of building with less waste while creating suitable standards of environmental comfort. The concepts of compact town planning; the courtyard plans of buildings; construction with thick insulating walls; the natural channeling of cooling breezes through the use of shadow and water; and the common language of Islamic art expressed through the symbolic use of geometry, calligraphy and colour are just some of the outstanding achievements of traditional Islamic placemaking. Their common-sense validity defies any temporal boundary;¹⁸ these underlying principles of adaptive design are as correct today as when they evolved centuries ago. They are indeed the first principles of any valid design and construction process in areas with comparable climates and value systems.¹⁹

It is ironic but true that most recently-built communities and buildings in the Muslim world are not based upon the language of their traditional architecture, nor upon the symbolic images of growth and progress associated with Islam. Is it any wonder that our contemporary settlements tend to be ignoble places of alienation to their inhabitants, incapable of inspiring respect in either the local citizenry or in that of other cultures?²⁰

Concerns

In identifying some of the principal issues of concern within the seminar topic "Places of Public Gathering in Islam," we have provided some structure by dividing the subject matter into three groups. These three are: places of education; places of leisure and recreation; and places of civic and commercial activities. Some placemaking activities may feel equally at home in more than one functional category. A problem of distribution also arises, for the third category (civic and

commercial activities) encompasses many more items than the first two. Nevertheless, it is typology of function which is at issue here, along with the lessons for future action which can be elicited from their careful study.

My investigation reviews the traditional attitudes and environmental characteristics of each functional type, and their transformations in recent history; it also makes some observations about the effectiveness and appropriateness of these transformations in accommodating Islamic life aims and regional, ecological and cultural constraints. The study is brief, and its

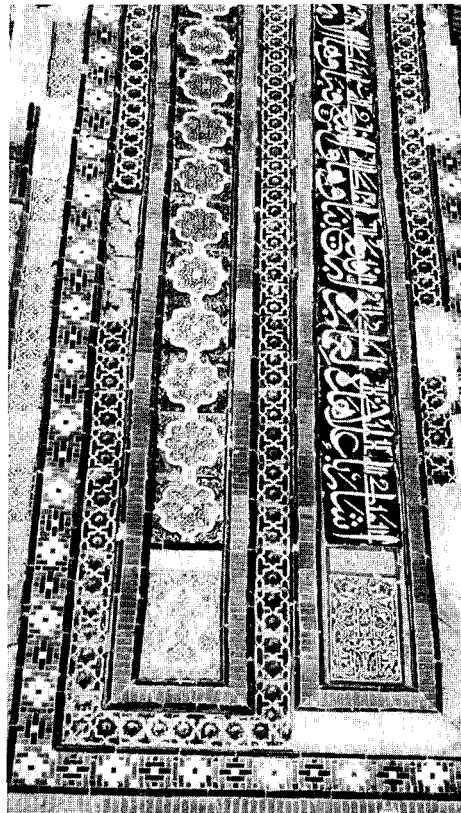
intent is only to provoke discussion about certain salient issues of concern.

Places of Education

The traditional places of education in Islam have been the home, the craft guilds, the madrasa, the mosque and the *khāngah*. The master/disciple system of education, featuring a strong one-to-one relationship between teacher and student, dominated the transfer of experiential knowledge.²¹ Work and study, practice and theory were combined in a matter-of-fact manner which facilitated practical learning. There was maximum correlation between information needs and task accomplishment, resulting in greater efficiency. Thus the small children of the Islamic world produce most of the crafts, and have done so for centuries. Masters and upper-level apprentices and craftsmen are therefore free to focus their abilities on more meaningful endeavours that deal with higher planes of creative imagination.

We come now to that other dimension of traditional education, where the infusion of symbolic and metaphysical considerations into the created artifact was as important as the functional dictates.²² This metaphysical instruction need not have come from the teachings of the mosque or the madrasa, for the very way of life of the traditional craftsman was highly metaphysical and cosmic. The traditional craftsman, mason and architect created his works without a full consciousness of the metaphorical language of his art. As most communication was verbal and visual, very few records of this process have survived. Yet we can learn about the process by observing the "survivors" of the great modern "holocaust." The tanners and leathermakers of Fez still craft their marvelous pointed slippers, a form as usable as it is beautiful, while the Nubian masons in upper Egypt attain the same imperfect perfection from their mud buildings.²³

The principle of master/disciple has long existed in both the Occident and the



Samarkand, U.S.S.R : Shah-i-Zinda, Emirzade Mausoleum. Detail of portal showing elements of geometric and calligraphic decoration executed in coloured tile (fourteenth century)

Photo: R Holod

Orient as a primary form of education.²⁴ It is still exercised today, although contemporary educational systems in the hyperindustrial nations utilize it in a secondary manner, even then applying it to menial, mechanical tasks. Modern higher education avoids this direct system of knowledge transfer. Only in the rarefied postdoctoral levels can one still have the privilege of learning by direct observation of a master. Mass education, it has been held, moulds only a partial, specialized individual, who lacks a deep understanding of a holistic approach to the human experience.²⁵

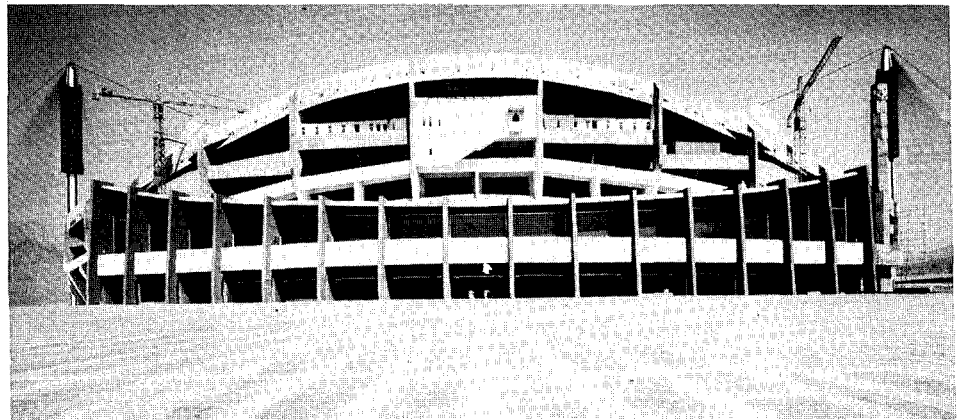
The traditional places of education centered around rooms, porches, courtyards, spaces adjoining a bazaar and enclosed gardens. The theological schools and mosques certainly elevated the quality of the learning environment, but they were basically repetitions of similar spaces experienced in the home. In summary, then, the traditional place of education has long been one integrated with the social fabric; in spatial terms, it has consisted of small rooms around a courtyard space; and the method of instruction was a master/disciple system, in which the knowledge transferred depended as much upon the personal observations of the conveyor (the teacher) as upon the information conveyed.

Current opinion, however, views the role of education in an entirely different mould, and relates to completely different goals and needs. The social liberation of women in society has created new attitudes toward education which have profoundly altered the traditional system of knowledge transfer. Therefore, in sharp contrast to the past, the contemporary model of the isolated, socially segregated campus has developed, complete with factory-like multipurpose instruction halls. The system of knowledge transfer has taken the form of impersonal books, television monitors and "alien" instructors who rarely have occasion to know their students as individuals, and vice versa.

It can of course be argued that educational systems relevant to so-called underdeveloped or craft-oriented societies differ

from those required by hyperindustrialized societies. This cannot be denied, but one wonders whether this trend is a healthy one, and whether it can answer world needs in the year 2000 when there will be six billion inhabitants, more than half of school age.²⁶ Also, I question whether

there has to be such a sharp break with past forms of education in both mode and place of instruction. Can alternative strategies be tailored to meet the sociocultural constraints of different nations while allowing a continuity of past, present and future?



Farahabad stadium and gymnasium, Iran capacity 30,000 spectators. Architects Studio Architettura Darvich

Photo: Studio Architettura Darvich

Places of Leisure/Recreation

As leisure activities become an increasingly necessary respite for the common man in an industrialized and urbanized world, new emphasis is being accorded sports, amusement, recreation and tourism in the form of appropriate places for these activities.

Sports Centres

In contrast with the places of education, for which specific historical precedents clearly exist, the category of spectator sports has opened new architectural domains in the twentieth century. This is especially true in the Islamic world. The main reason for this change has been the advent of mass spectator sports, where it is not uncommon for one hundred thousand or more persons to spend three or four hours watching various kinds of competitive sports. The paradigmatic places of spectator sports are the venues of Olympic and regional sporting events. In direct connection with these periodic events and with recent world-wide interest in competitive sports are the local sports stadia associated with schools, colleges and municipalities. These are viewed as sources of personal health, competitive drive and national pride, in addition to their potential for new business and employment opportunities. In terms of land use and activity generation in Muslim cities, sports centres have not yet found a real sense of place. As vast segregated plots surrounded by chain link fences, they await integration into the urban fabric. If they are of recent vintage, they are usually situated far out on the city periphery. If older, they may have been overgrown by metropolitan congestion.

Muslim cultures have spawned many indigenous sports, but these have tended to be primarily of a personal or limited group nature. In modern Iran the *zurkhaneh* or "House of Strength" survives as a vestige of a warrior past in which individual acts of strength and self-growth

were encouraged. While history records polo playing in the vast Maidan-i Shah in Safavid Isfahan, it was then a royal sport limited in popular participation.

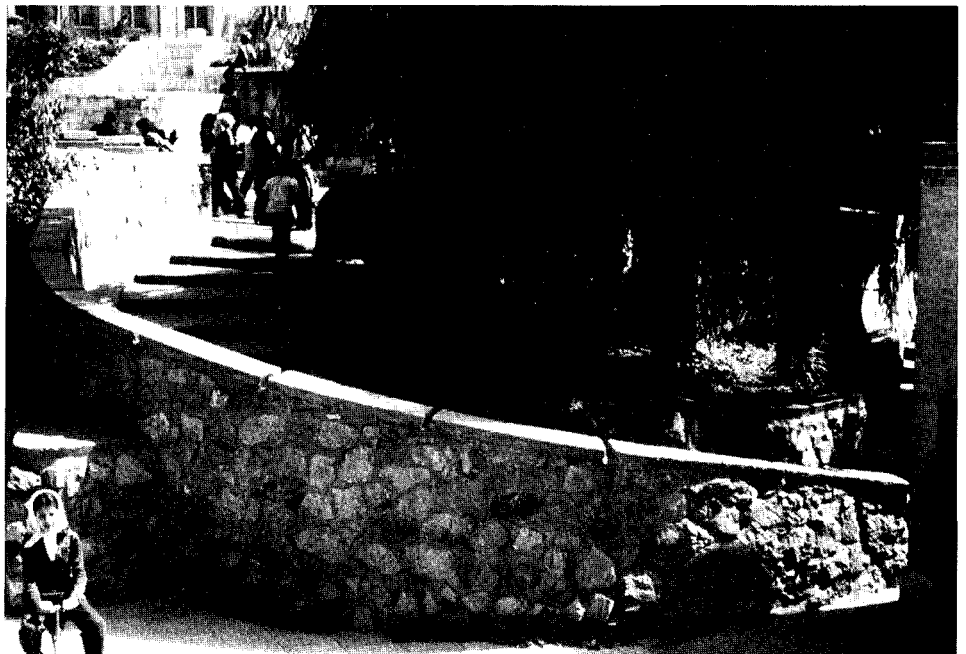
As symbolic places for national rallies, or conversely as places of protestation, sports centres may take on political connotations and raise issues of public security, safety and access. Decisions about their placement and design are therefore difficult for the client (usually the government), the professional and the builder. One thing is for certain, however: since sports centres periodically generate vast traffic jams, they evoke questions about real value in terms of energy and resource commitment.

Public Parks

Public parks have existed in local communities, towns or regions for some time. In the temperate climates of the West,

parks sometimes occupy more than twenty percent of a town's land use. However, their introduction into the fabric of Islamic urban settlements was quite recent. In most hot and arid Muslim cities, less than one percent of the total land surface has ever been utilized as public green space. Instead, the promotion of private open space has been the common practice. When settlements were smaller and nature more accessible, the need for proximity to nature was fulfilled daily by private courtyard gardens or by the great paradise gardens of the aristocracy. Many of the latter have now been turned into public gardens, such as the Bāgh-i-fin in Kashan and the Chehel Sotun in Isfahan.

The traditional paradise gardens in Persia and other hot arid climates were relatively small, and carefully scaled to the local availability of water. By comparison, the urban parks in the West—such as Regent Park in London and Central Park in New York—are significantly larger in scale,



Tehran, Iran: Shafaq Park, designed by Kamran Diba

Photo M. Niamir

commensurate with their more temperate ecological environments. The gardens of Versailles, historically modeled after the Persian gardens, show an even more startling difference in scale.²⁷

With increasing urbanization, many Muslim city populations now exceed one million. The growing need for public green spaces has recently been sensed. While the ecology will not support large green areas and the government bureaucracy is not fully geared for their maintenance, there is a desperate need for some "green lungs" to enable the congested cities to breathe once again. Public green areas may prove effective in microclimate change: if properly designed and disposed throughout the city, they serve as shaded channels for cooling local breezes.

While public green and shaded spaces are a necessary addition to urban life, their survival and maintenance is fragile and a matter of great difficulty in most hot arid environments. The public park appears to be an indispensable corollary to apartment living, but this pattern is totally alien to most Muslim countries. Statistically, the indigenous private courtyard house can accommodate the same population density as a medium-rise apartment block, if careful measures of light availability and space separation are observed. Why, then, has this traditional adaptive mode of housing been sacrificed for an alien form, ill suited both to Muslim personal life and to the ecology of the typical Islamic environment?

Places of public recreation and amusement have often been associated with parks and green spaces in the West. These places may be zoological parks, amusement centres, public fairgrounds, restaurants and other such facilities; all of these have recently been introduced into the Islamic urban fabric. Since land prices are high in the existing city centres and most of the land there is already developed, new places of recreation have tended to be on the outskirts of cities. Consequently, access to them is often difficult for the masses.

Tourism

Concluding this category are the places of tourism, including hotels, motels and resorts related to the sea, rivers, plains and mountains. Tourism has become a major world industry, and package tours related to specific points of interest have gained such momentum as to override national boundaries and ethnic limitations. Due to the attractive incomes that this industry brings to a country and the sense of prestige it affords the local community, Muslim countries have paid much attention to this new phenomenon. Its benefits are tangible and well-known, but its disadvantages demand equal consideration; insensitive mishandling may have serious ramifications.

If not properly orchestrated, tourism tends to be "trendy" and not of a continuous, sustaining economic nature. Certain local economies can rise and fall at a mercurial rate if they are dependent on local political stability. The recent history of Beirut is an important lesson in this respect.

The unsophisticated tourist (which refers to the majority of the breed) is on a minimum time and money budget. He therefore tends to reduce the quality of local crafts and folk art by his vulgar buying patterns and tastes. Furthermore, where there is a native community adjacent to tourist developments there is a tendency toward dehumanization of these indigenous people, because of the constantly changing observers who come in and out of their lives. As "museum pieces" or as pseudo-Williamsburg natives they live unreal lives, giving unreal "messages" and artifacts to the curious and unreal tourist. It can be argued, however, that the cultural value of several ancient monuments has been preserved due to the tourist trade; Abu Simbel in Egypt is an example of this.

It is important that tourism reinforce real and sustaining values, such as enhancement of the natural environment; preservation of culturally significant monuments and places; integration with the local socioeconomic fabric and growth potential

of the region; real support of local crafts by a demand for high quality; and, most important, promotion of more genuine and meaningful human interactions.

Places of Civic and Commercial Activity

This category represents a most complex and varied array of public places. It addresses the civic places of government and municipal offices, mosques, libraries, museums, auditoriums and transportation centres, including bus, rail and air terminals. Commercial functions such as shopping, services, business offices and both light and heavy manufacturing also fall within this domain.

While most of these public functions have historic precedents in traditional Islamic cities, the fact of vastly increased scale makes the problems confronting planners and clients unique to our times. The issues become even more complex when related to capital cities, where scale, the pace of urban population growth and the presence of a transitory population of foreign dignitaries, businessmen and tourists make for further complications.

A sense of unity among this multiplicity of activities is an appropriate goal. We will better understand the possible means to this end if we survey the traditional Islamic cities, where a strong ordering of diverse parts was characteristic. The unifying element which linked the disparate parts of a city together was often the bazaar or *sūq*. Through a system of linear and grid pathways that were often covered, the bazaar network created the *madinas* and *casbahs* of traditional Muslim cities. Here, within a compact space and a highly imageable framework of pedestrian scale, many functions had been included. To use an anatomical metaphor, the *madinas* included all of the vital organs of the city body.

A review of traditional city centres shows how strikingly small these civic and commercial areas were. Another characteristic

was the paucity of public places, particularly government offices, in comparison with the numerous edifices which reflect the vastly expanded role of central government in most Muslim countries today. A third quality is the increasingly specialized modern usage of space, in contrast to the efficient multi-usage of space in traditional times. A case in point was the caravanserai, which served not only as a transient place for overnight stay, but also as a warehouse, a place of public entertainment and, on certain occasions, a place for the enactment of religious passion plays and funerary rites.

Setting the underlying theme of the madinas were the Friday Mosque, the tombs of local saints and numerous smaller mosques. The proximity of these holy places to more secular places of activity was a direct reflection of the total integration of traditional society. Today, however, the madinas and bazaars have become the vacated, decaying places for poor and wholesale merchandise. The most prosperous retail shops have moved to the "new town" or to the car-accessible streets of the modern quarters.

Artificial surgery to alleviate the problems in the bazaars has resulted in one of two outcomes. Either the physical structure has been altered radically by the introduction of traffic which it cannot sustain, as in Fez, or it has become a luxurious sort of Disneyland, as in Isfahan's Shah 'Abbas Hotel and bazaar renovations. While the bazaar and the entire madina remain important public places of gathering, which need only to be resuscitated to serve today's city centres with real value, very few successful examples of this necessary revitalization can be found.

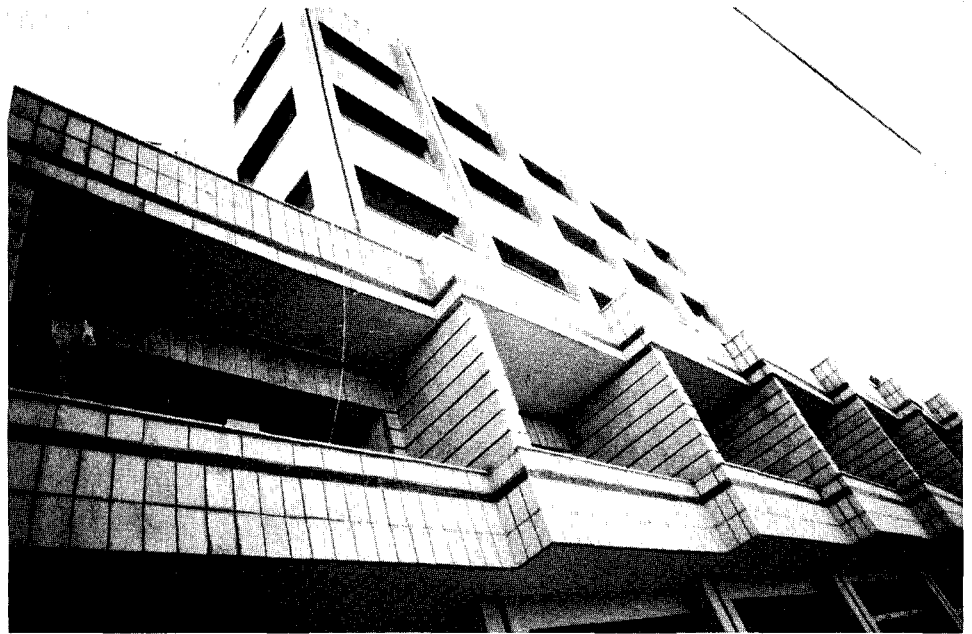
If the traditional precedents for civic and commercial places were the bazaars and madinas, what can be done to accommodate today's vastly increased demands for space and altered functional needs? The patterns of urban chaos observed in most Muslim cities cannot be the answer. In most of these, civic functions are scattered in the city as each new government agency attempts to accommodate its growing staff

in newly rented or built spaces. Changes in governments, together with the growth and transformation of ministries, are so rapid that even newly designed municipal buildings are either too small or too large upon completion.

A planning strategy employed recently in master plans for many new Muslim cities is the creation of new civic centres in undeveloped lands within the metropolitan areas. With the emergence of this "pocket" development, other constituent parts of the society have apparently also lobbied for their own enclaves. The net result of any newly created master plan is a series of enclaves for specific functions, connected by vast transportation networks consisting of over and underpasses and eight-lane highways. What the observer cannot find is any perception of order at a human, pedestrian scale; all that is evident at the human level is traffic congestion and long delays between destinations.

Commercial activity in these new master plans is organized around office towers, parking garages and commercial malls or streets characterized by varying degrees of design effectiveness. Meanwhile, the momentum of unplanned local commercial growth in most resource-rich Muslim cities is "boom town" in character, and jarringly chaotic as a result.

Municipalities and planners may admonish that "you have to break a few eggs if you are going to make an omelet." Sadly, the metaphor is hardly apt, for people are more than eggs and cities are not omelets. While the economy is prosperous, many activities that cannot be coordinated work at cross purposes. No matter how hard one tries, certain creations of urban value require time for conception and broad-based participation to assure their success. The annual growth rate in most of these capital cities averages five to seven percent, with the population nearly doubling



Amman, Jordan: Abu el-Ragheb Commercial Centre. Cost of construction \$1,000,000. U.S. Architect: Waddah el-Abidi

Photo: W el-Abidi

every decade. The demand on civic and commercial places is so great and so dynamic that planning has been unable to keep pace with the market with any degree of physical or environmental success.

In the less economically dynamic Muslim cities, the urbanization rate has been lower, but the apparent psychological need for the same "images of development" evident in the capital cities is still felt. In the name of "development," therefore, broad streets are cut through old urban fabrics, although these streets are ecologically ill-fitting and remain empty of vehicular traffic; harsh, hot squares are created where carefully-planted pansies struggle to survive the noon sun; tin-clad veneers of "modernism" wallpaper those mud structures that have survived the bulldozers' blades. Meanwhile, the segregated development patterns spurred on by speculation, personal thrusts for power and a totally un-Islamic will toward onstentatious display rip these formerly sleepy towns into piecemeal places of comic tragedy. An important paradox is faced here: the sensed need for governments to display advancement, contrasted with the inevitable disruption and alienation which the advancements bring.

Airports

The most cataclysmic impact on the urban scene has been that new creation of the twentieth century: the airport. Originally planned for propeller craft requiring small runways, and used only as a place of transportation transfer, the older airports of Muslim cities are now overrun by urban growth and congestion. There is an apparent need for construction of new airports in most cities, particularly since the advent of the jumbo jet.

Huge in size and different in nature from their relatively innocuous forefathers, airports today are not only transfer points from ground to air transport, but places of duty-free manufacturing and assembly, visitor accommodations, entertainment,

warehousing, vast military arsenals, oil depots, even the large residential ghettos of the future. They are also far distant from the existing towns, sometimes by thirty to forty kilometres. Connected to the existing metropolitan areas by expensive but empty super-highways and at times by rapid rail transit, airports are bound to be the true generators of future urban growth.

It is a well known fact that the airport road is a good speculative market place. Regardless of limited-access highway restrictions and adjacent land management legislations, future airports, more than any other urban determinant, will influence the disintegration of Muslim cities. Unless creatively and satisfactorily integrated with the city fabric, its industry, farm land and realistic near and far future growth potential, hundreds of billions of dollars will be wrongly spent on the construction

of that newest symbol of development, the international airport.

Three Case Studies

This seminar is oriented toward a case study method of learning from projects recently undertaken in Muslim countries for public places of gathering. It is hoped that a frank exchange of information among clients, users, professionals and builders would make it possible to identify more appropriate strategies for achieving a higher-quality built environment in the Muslim world. My opening remarks have been conceived as a model of the dialogue approach to identifying principal issues of concern. The three case studies which follow each relate to one of our three main sub-topics within the general issue



Tehran, Iran Iran Centre for Management Studies Architects Mandala Collaborative (Nader Ardalan, principal). Completed 1972 The Centre employs the traditional madrasa form in an equally traditional Persian garden setting. It used local buff brick and local construction methods and labour, while drawing upon admired international design prototypes and expertise

Photo N Ardalan

of Places of Public Gathering: places for education, for recreation and for institutional implementation.

Iran Centre for Management Studies

The first case study is a place of education. The project is the Iran Centre for Management Studies,²⁸ located in Tehran and completed in 1972 with the collaboration of the local business community, the central government and Harvard Business School. The main issue here was the

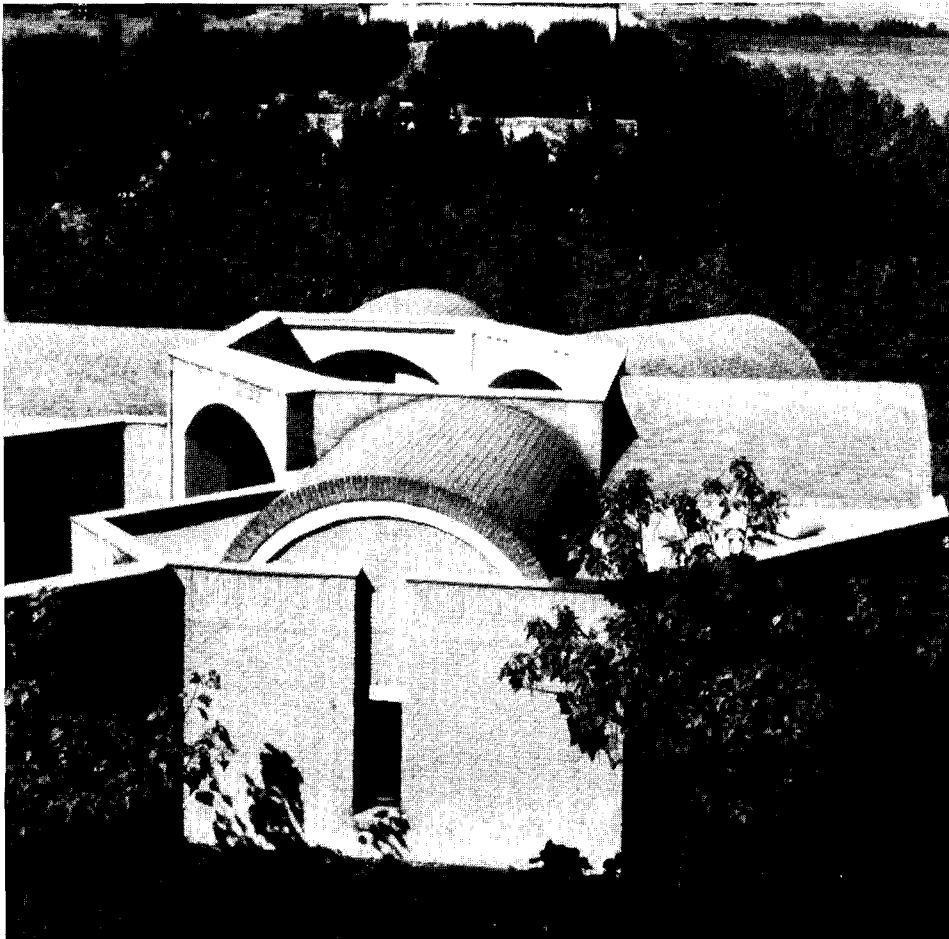
potential modern utility of the traditional principles and language of architecture. In particular, the project investigated the appropriateness of the madrasa form for the contemporary needs of a business school, in which middle management students would reside within the complex.

In the Centre for Management Studies, the special conception of a positive space system is the principal organizing model. The courtyard and garden were the two main forms used, while the concept of space creation and linkage followed theories identified in *The Sense of Unity*.²⁹

Tehran Centre for Sports

This complex developed in several stages, commencing in 1967 and reaching completion in time for the Asian Games held in Tehran in 1974. The main topic of investigation here was the use of intermediate technology. The project was undertaken in close conjunction with the Ministry of Housing and Urban Development, the Physical Education Organization, the consultants and a series of construction organizations.

Khargūsh Dareh, or "Rabbit Valley," was a barren alluvial fan formation lying some ten kilometres from the western edge of Tehran. The project for the sports centre entailed the creation there of a 100,000 seat stadium as the initial part of a complex that would eventually include a 20,000 seat velodrome, a 12,000 seat multi-purpose hall, a 4,000 seat Olympic swimming pool, a communications centre and several smaller halls, in addition to parking areas.

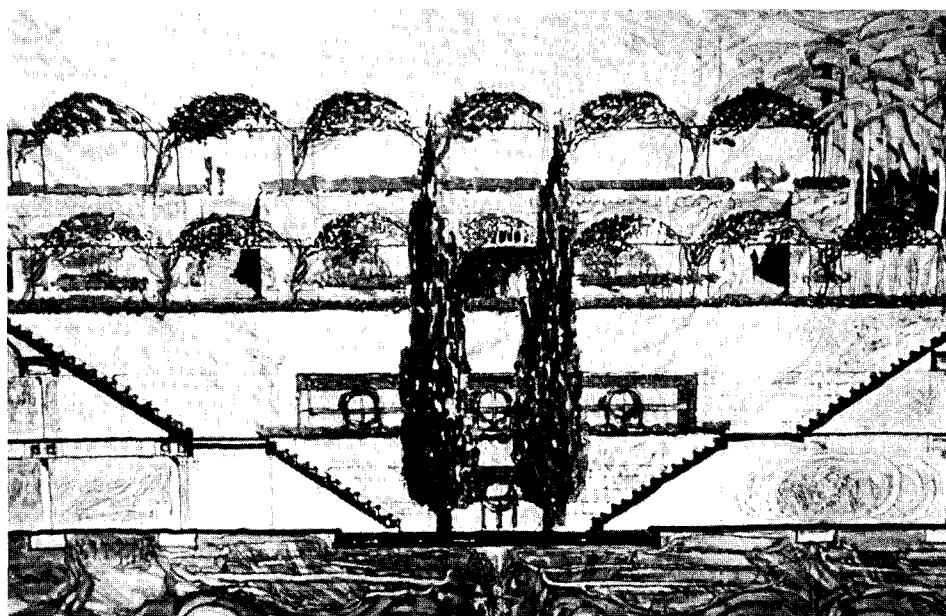


Iran Centre for Management Studies, in the foothills of the Aborz Mountains west of Tehran view of the entrance hall and detail of same

Photos: N. Ardalan

From a study of the constraints of technology, time, economy and overall planning considerations, it was decided that an earthen stadium would be the most appropriate solution. Approximately four million cubic metres of earth were excavated from the valley floor, and compacted in thirty-centimetre layers using available road building equipment and local contracting know-how. The earthen stadium was also conceived as a dam for a man-made lake which was developed in the resultant excavated valley. A water channel from the nearby river was diverted to fill the lake, which was also augmented by deep wells. The lake was used as a reservoir to irrigate by gravity a man-made pine forest of 165 hectares.

The park environment which was created provided a refreshing microclimate, a respite from the harsh surrounding plains, while simultaneously creating an appropriate place for other activities. The earthen forms of the stadium were repeated in the velodrome and in the plinths upon which the great halls were placed. The earthen beams, decorated with intricate patterns of the sand-coloured brick indigenous to Iran, created a unity within a diversity of functions built in several phases over many years.



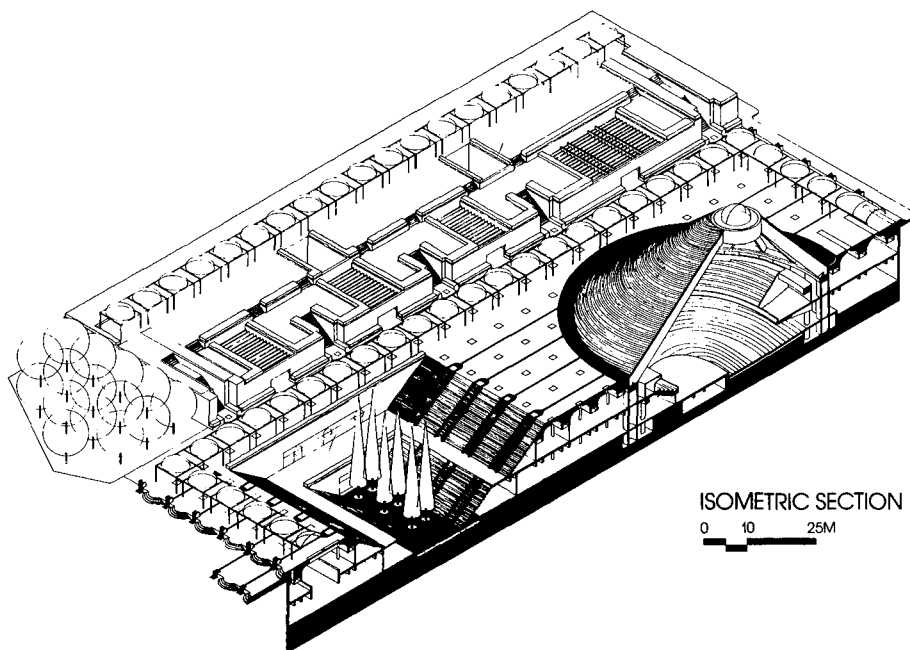
Tehran, Iran: Centre for the Celebration of Music Architects: Mandala Collaborative (Nader Ardalan, principal). Designed 1977

Watercolour sketch: Mandala Collaborative

Tehran Centre for the Celebration of Music³⁰

The major issue addressed by this civic place of culture designed in 1977 was the potential of a project to generate urban reintegration and rehabilitation.

An international centre for traditional and symphonic music was to be created in downtown Tehran. The site existed as a vast excavation, therefore allowing a 600-car garage space to be placed below ground level; its rooftop was to be transformed into an urban garden. Within this garden, the great pearly cone of the symphonic hall would gently ascend through a series of landscaped terraces and flowering arbors.



ISOMETRIC SECTION
0 10 25M

Tehran, Iran: isometric section of the Centre for the Celebration of Music Designed by Nader Ardalan and the Mandala Collaborative, 1977

Plan Mandala Collaborative

Through a potential system of interlinked pedestrian pathways, the music centre could bring together the nearby gardens of the City Theatre, Roudaki Hall and the Polytechnic campus, resulting in an even larger and more significant urban place of culture and education. This reintegration would also allow an upgrading of the existing city tissue, which consisted of modest yet elegant brick townhouses of the 1930s which were beginning to fall into economic blight and disrepair. The design of the Centre for Music was based upon two concepts: providing Tehran residents with a much needed urban green space, and bringing into being, with a minimum investment of capital energy and social disturbance, a unique cultural quarter comparable to any in the world.

Summary

In retrospect, each of the three projects faced the difficulties of "imperfect images of development," as defined earlier in this paper. They reflect the mind-set of the time of their creation, but each was based upon traditional ideas, e.g., placemaking conceived in terms of the "paradise garden" as one example of the traditional language of forms. For the most part, each was built of local materials, using available local technology and a passive energy-conserving design. But they remain just three examples of a wealth of possible solutions to the problems of appropriate educational, recreational and institutional placemaking. The importance of places and spaces for public gathering in the modern Islamic world demand this variety and vitality of approach.

Reference Notes

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⁴ See Ira Lapidus, *Muslim Cities in the Later Middle Ages* (Cambridge, Mass., 1967) and Paul Lampl, *Cities and Planning in the Ancient Near East* (New York, 1968)

⁵ I. Biglari, *Bazaars of Iran* (Tehran, 1977)

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¹⁰ Ali, *op cit*

¹¹ Aldous Huxley, *The Doors of Perception* (London, 1960).

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¹⁷ Ernest F. Schumacher, *Small is Beautiful Economics as if People Mattered* (New York, 1973)

¹⁸ Titus Burckhardt, *Art of Islam Language and Meaning* (London, 1976)

¹⁹ Ardalan and Bakhtiar, *op cit*.

²⁰ See "Opening Remarks" by His Highness the Aga Khan in *Conservation as Cultural Survival*, Proceedings of the second seminar of the Aga Khan Award for Architecture (Philadelphia, 1980)

²¹ Javad Nurbakhsh, *In the Paradise of the Sufis* (New York, 1979)

²² Titus Burckhardt, *op cit*

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²⁸ See *L'Architecture d'Aujourd'hui* 195 (February 1978), pp. 17-20.

²⁹ Ardalan and Bakhtiar, *op cit*

³⁰ See *L'Architecture d'Aujourd'hui*, *op cit*, pp. 23-24