Toward an Architecture in the Spirit of Islam
Toward an Architecture in the Spirit of Islam

Proceedings of Seminar One
in the series
Architectural Transformations in the Islamic World
Held at Aiglemont, Gouvieux, France
April 1978
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Notes to the Second Edition The Proceedings of Seminar One have been reprinted to conform with the format adopted for subsequent seminar publications. The contents of the original volume have herein been reorganized and all errata amended, but editorial changes are minimal; the informal, conversational tempo of the seminar and of the first edition of the Proceedings is thereby preserved. The new publication thus takes its place, in appearance as well as content, as the introductory volume to the series "Architectural Transformations in the Islamic World".

Cover Illustration Study of the structure of a dome,
Bu Ali Sina University, Hamadan, Iran
Drawing courtesy of N Ardalan.

Graphic consultants Herman and Lees Associates,
Cambridge, Mass
Printed by Smith–Edwards–Dunlap Co, Philadelphia, Pa

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Presented in this volume are the proceedings of the initial seminar. This and the following four seminars are part of the programme of discussions and dialogue which will be held prior to the presentation of the first Aga Khan Award for Architecture in 1980. The seminars reflect a desire on the part of His Highness the Aga Khan and the members of the Steering Committee to inform architects, planners, scholars and policymakers of the aims of the Award, and to include them in the formulation of the Award programme.

The first seminar was designed to be an overview of the problems in making new architecture. It sought to identify the theoretical or philosophical base for this architecture if it were to embody the spirit of Islam. At the same time, the social and economic mechanisms and regional factors that influence any architecture were recognized.

The participants were drawn from different fields, occupations and regions. Both men and women, differing in age and outlook, were asked to participate. Their activities ranged from large international architectural practices to rural self-help schemes. Some were advocates of indigenous technologies; others espoused the newest in high-technology building. There were those who worked through small communities; others dealt with planning policies on a municipal or national scale.

Some proposed new models for the Islamic city; others remarked on regional contrasts. Some stressed the necessity of seeking aesthetic renewal through the principles of Islam; others saw the way to better design through responsiveness to ecological constraints. All responded differently to the subject of the seminar, and no singular programme of solutions was proposed. In fact, the seminar has underscored the need to identify and redefine concepts of aesthetics, urbanism and regionalism within Islam.

The Proceedings are working papers on the theme of what should constitute the new architectural environments in the Islamic world and how best to achieve them. They have been presented rather informally, to reflect as closely as possible the actual programme and mood of the seminar with its discussions, dialogues and disagreements. The overriding concern of the Editor has been to transmit the enthusiasm and concern of the participants to the readers, and to receive the reactions of readers at the Office of the Convenor in time to be incorporated into future seminars and into the design of the Award programme.

Of necessity, the scholarly apparatus in the Proceedings is rather limited, including only those references cited in the papers. In the interest of readability, transliteration has been simplified unless specifically quoted. All geographical names and other generally recognized terms have been rendered in their commonly accepted form.

The glossary contains terms which might prove useful to the reader in identifying Islamic concepts of spacemaking and architectural nomenclature used during the seminar.

Special thanks are due to the staff of the Secretariat for its help in organizing the seminar. At this office, the Proceedings could not have appeared without our diligent staff, especially that help rendered by Frances Leone.
Opening Remarks

His Highness the Aga Khan

Ladies and gentlemen, welcome to Aiglemont. Thank you for being here. Thank you for participating in this seminar. Thank you for being part of the courageous group of men and women who have agreed to face a great challenge, one that I have experienced for the last twenty years, and which leaves me in the same state of perplexity as it did two decades ago when I succeeded to the Ismaili Imamate.

The community I lead is small but widespread. It is in daily contact with a multitude of Muslim societies, nationalities and languages and with an increasingly diverse number of non-Muslim peoples and countries. It therefore experiences as wide a number of exchanges, of physical, cultural and linguistic exposures as any other Muslim community. It is as a result of my community's experience that I have been haunted by a single question: what is the future physical environment that Muslims should seek for themselves and future generations in their homelands, their institutions, their workplaces, their houses, their gardens and in their surroundings?

I am a Muslim who has been in the position to build schools, housing complexes and hospitals, for Ismailis and non-Ismailis alike. While I am confident that I can determine the type of education I wish to provide in the schools, the living standards in the housing complexes or the level of medical care in the hospitals, I find that I am unable to give clear directives to any architect for the creation of an equally soundly conceived and appropriate design solution. While each new institution has an individual purpose, as it should, there are few design objectives and even fewer solutions which could become an inspiration for others.

I have had recent practical experience with this problem in the development of a 700-bed teaching hospital in Karachi. One of my requirements was that the resulting design should reflect the spirit of Islam. By this I do not mean a soulless mimicry of past traditions of architecture, but a generation of new design, using the aesthetic and practical bases of these traditions. During the design process a dialogue started, both within the project organization and among other bodies, and I began to comprehend the extent to which this subject had been so badly neglected in the past. Eventually a certain design solution was approved, with full recognition that it was only one possible attempt at the problem.

From this and repeated other personal experiences, I was led to seek advice and example. In my search for advice I found simply the recognition, albeit with surprise, that a problem did exist. In looking for examples, I have found very few buildings that demonstrate objectives or solutions from which clear, consistent and comprehensible guidelines for housing the myriad activities of today's Muslims can be derived.

I believe that the contemporary Islamic world faces a fundamental and unique challenge in determining its future physical environment. Sudden affluence as well as rapid demographic growth and urbanization have resulted in an unprecedented rate of building activity. For instance, in some Muslim countries more than half the population is presently less than fifteen years old and, therefore, the next two decades will probably see a most radical, large scale transformation of their physical fabric. Many of these countries have emerged from a colonial era and are searching for an identity of their own. This identity is at the same time specific and regional, yet it must continue to share a common civilization and history with other Islamic countries.

These nations also share similar problems of rapid urbanization. Those who live in the West have already experienced and failed to solve identical problems. Although, I believe it is fair to say that the West has now taken an extensive commitment to finding solutions.

Usually when we comment on buildings, we criticize the architect and design team for the result. We seldom take into account the role the private patron, government body or planning authority has played in the realization of that project. Thus, it is not only the design professional who must be encouraged, but also the other decision makers who must seek contemporary solutions that are sensitive to the regional and cultural characteristics of the Islamic world. We may have the means, but do we have the right attitude or the taste to allow those inspired, intelligent and creative members of our Islamic world to strive for solutions? Can we be courageous or brave enough to support them when they do?

During this seminar, you will see represented not only the designers and planners whom we normally think of as being responsible for our environment, but also the patrons and eventual users. One of the long-term aims of the Award is that this process of dialogue, which we see here in miniature, should be extended to all those who are involved in development in the Islamic world.

Many of us here speak several languages, and I am sure we would agree that our ability to communicate in several tongues sometimes impedes our expressing ourselves clearly in any one of them. If our command over several languages can erode our precision of expression, I wonder how much more quickly our eyes lose their ability to discern the integrity of a visual language. The indiscriminate exposure to many different kinds of visual languages must not lead to blindness.

Surely, one day we will be asked why we have done nothing to develop our own system of a physical environment rather than replacing it wholesale with a garble of other languages.

The establishment of an Award that would promote, encourage and recognize work and projects of exceptional quality and interest in the various aspects of our built environment is, I believe, a worthwhile and rewarding contribution towards solving the problem. Further, I hope many of these projects will reflect thought about the practical aspects of the economies, peoples and countries they serve by being built with the most cost-effective resources and with an eye to maintenance.

There are a number of ways in which the Award programme can further its aims. It can develop a series of lectures and sponsored research. Its office could act as a
documentation centre, arrange seminars and exhibitions on architectural and planning themes. Also, it can develop into a centre for new Islamic environments, acting as an information exchange, funding specific research and development projects and providing a comprehensive design library. Thus, its activities could also contribute to the creation of new building processes and technologies.

These aspects are under active consideration by the Steering Committee and will continue to be until the time of the first Award. I am sure that your contribution during these three days will enable the Committee to have a better understanding of the eventual path we should take.

The process of review for nominations for the Award must have the capability of gathering many different solutions and the flexibility of recognizing bold, new and even contradictory solutions. The guiding principles and criteria for the choice constitute a continuing regard for design excellence and sensitivity to the Islamic past and present and to the requirements of the future.

It would be tempting to use the knowledge and expertise which is collected throughout this Award process to propagate a particular type of design solution, but this idea we have absolutely rejected. Similarly, it is not our intention to institute any chair of architecture or to found a particular school of architectural thought. You may rest assured, however, that the Award is permanent. I have created a Foundation with no limit in time to ensure the Award's continuity. Although it is our aim to extend the areas of award still further to include such fields as arts and science, we have not yet decided when this would take place. I hope to be able to learn from our experience in the Award for Architecture before doing so.

I would like to take this opportunity to express publicly my appreciation of the considerable amount of work that the Steering Committee has done to provide the guidelines for this undertaking. I have been fortunate in finding eminent specialists who are prepared to share with me their experience and wisdom. Were it not for them, it is true to say that the Award would still remain a concept debated with interest among a privileged few, instead of a firm proposal receiving consideration from the experts I see here today.

The aim of this seminar is to review and consider the most important issues in-
Toward an Understanding of Architectural Symbolism

The Contemporary Muslim and the Architectural Transformation of the Islamic Urban Environment

Seyyed Hossein Nasr

The major modern urban environments of the Islamic world are suffering from a crisis which is most directly reflected in their ugliness and is in stark contrast with the serenity and beauty of the traditional Islamic city. Islamic architecture has been eclipsed by a conglomerate of often hideous styles or at best bland ones, in both cases imitated from foreign models with the pretense of universality and world-wide applicability. The crisis within Islamic architecture and the modern Islamic cities hardly needs to be underlined. Nor is it necessary to elaborate here the principles and values of traditional Islamic architecture and city planning whose forgetting has brought the present crisis into being. Our task is to study the transformations which have taken place within the mind and soul of the contemporary Muslim and which has brought about that inner chaos whose externalization is to be seen in the architectural creations of much of the contemporary Islamic world. The external environment which man creates for himself is no more than a reflection of his inner state. As the saying goes, "As inside, so outside."

What transformations have overcome the contemporary Muslim who is responsible for the prevailing architectural and urban crises within the Islamic world? Rather, such a question should be posed concerning not all contemporary Muslims but the small Westernized minority which possesses an economic and social influence far beyond its number, a minority which represents an elite (khawāṣī') in reverse. One must remember the Latin proverb corruptio optimi pessima (corruption of the best is the worst) and, according to the well-known Arabic and Persian proverb, that the fish begins to stink from its head. The changes which affect this small yet influential Westernized minority as far as architecture and city planning are concerned, affect at once intellectual, emotional and artistic elements. They concern the intelligence as well as the imagination and sensitivity.

To understand the process of change and transformation fully, it is necessary to review the two effects associated with Westernization upon Muslims: the first, being the spread of secularization; and the second, related to both internal and external factors, the narrowing of the tradition (al-dīn) to include only the principles of human action as embodied in the Shari'a and not the principles of wisdom (hikma) and the norm of making things which is contained in the principles and methods of Islamic art.

As far as secularization is concerned, the effect of Westernization has been to reduce the Islamic conception of 'ilm, according to which all knowledge including mathematics is considered as sacred, to the conception of science as a purely profane form of knowledge. The traditional architect who is entitled mi'mar (he who builds: (umrān) in the traditional sense) or muhandis (he who is a geometre, again according to the traditional conception of geometry similar to what is found in the
The Contemporary Muslim and the Architectural Transformation of the Islamic Urban Environment

Pythagorean tradition) becomes transformed into the modern architect with fancy offices filled with the latest gadgets, a person who now deals with profane mathematics and engineering techniques divorced from both wisdom and craftsmanship. Usually, and despite notable exceptions, the change also implies a loss of the humility and dignity of the traditional architect and the rise of a sense of egotism and worldliness associated with the “international” architect and businessman. It implies a weakening of moral fibre and in some cases even a divorce from ethical considerations in one’s professional work.

The intellectual change also has been depleting such fundamental realities and concepts as space, light, rhythm, form and matter of their sacred content. They are transformed into post-Cartesian Western concepts bearing the same name, and they are experienced on only a limited material level. Space is then no longer the symbol of Divine Presence, nor Light of the Divine Intellect. Architectural rhythms which reintegrate multiplicity into Unity are forgotten. Form loses its symbolic value, and material substance becomes simply the dead, inert matter of Newtonian physics, far removed from the concept and experience of “matter” entertained in traditional Islamic cosmology. Moreover, these changes are taking place within the minds not only of most of the modern-trained Muslim architects, but also of most of their major clients, who are either the rich or government authorities, and who order most of the new modern architecture in the Islamic world. In fact, for some people, the transformation has been so rapid and abrupt that they do not even realize that the vast majority of the Muslim peoples for whom they are building still entertain different notions of space, light, form and matter from those the modernized classes have learned in modern universities, whether these schools are located geographically in the Occident or in the Islamic world itself. It is of much interest to note that while traditional Islamic architecture still survives in the craft guilds and “in the breast” (sadr) of certain individuals, there is not a single school of architecture in the universities of the Islamic world where this traditional Islamic architecture and its principles are taught in a serious manner.

As far as the imagination is concerned, nearly the same process of desacralization is to be observed. The imagination of the traditional Muslim is determined by the forms and symbols drawn mostly from the Holy Koran; his soul consists essentially of the intertwining of certain basic formulas of the Holy Book which imbue his inner being with fundamental attitudes vis-à-vis God and His creation. In Islamic cosmology, the world of imagination occupies an intermediate region in the hierarchy of cosmic existence, between the material and purely spiritual worlds. Its forms, sounds and colours have an objective reality, and its ontological reality serves to give human imagination a function above and beyond profane imagination as understood in the modern world. It is this imagination which Ibn `Arabi refers to so often in his work, speaking of its creative power, and which has been translated as mundus imaginis, to prevent its being confused with the profane use of the term imagination in modern parlance. The imagination of the traditional Muslim artist was constantly nourished by the Islamicized cosmic sector of this world, and of course more directly by the central theophany of the Islamic revelation, which is the Holy Koran. The modern Muslim has, on the contrary, been deprived of this celestial sustenance, so that even where there is a degree of creativity on the part of some of the modernized Muslim architects, the fruit of this creativity has hardly anything to do with Islamic art and architecture.

Finally, the sensibility of those Muslims affected by the withering influence of Westernization has been deeply changed. In fact, in this domain, even those Muslims who still live within the traditional Islamic world suffer from the same problem when it comes to the judgment of art forms outside their own traditional world. In Islamic art, beauty is considered to be a reflection of the Divine Beauty; as the prophetic Hadith says, Allahu jamilun.

Uhibu al-jamal (God is beautiful and He loves beauty), from Ibn Hanbal, Masnad, Book 4, verses 133, 134. Moreover, beauty is an intrinsic dimension of the Truth and its manifestations, and it is therefore a necessary component of every legitimate artistic creation. Islam never separates beauty from utility, or art from making, as it must have been in the traditional West when art meant artis and technology was still related to technē. The change of sensibility due to modernization has caused many Muslims to lose this inner sense of beauty, dignity, harmony and nobility, which characterizes all authentic

Cairo, Egypt: tomb and madrasa of Sultan Hasan

Plan: D. Brandenburg
manifestations of the Islamic spirit, including, of course, Islamic art. The modernized Muslim can hardly be conceived to be the descendant of those who built the Sultan Hasan Mosque of Cairo or the Maidan-ı Naqsh-ı Jahan of Isfahan.

Likewise, traditional Islamic sensibility saw the world in its transient aspect; it was aware of the la of the shahada which reduces everything to nothingness before the Immutable Majesty of Allah. Hence, architecture sought to avoid the grandiose and the worldly and aimed to preserve and substantiate the basic intuition of the ephemerality of the world and its impermanence, which the spiritualized form of Semitic nomadism, propagated by Islam, accentuated and strengthened. The traditional Muslim looked at the city with full awareness of its passing, transient quality with respect both to God Himself and to virgin nature, the handiwork of God. Moreover, he saw the city as the extension of the natural environment, in harmony rather than in discord with it.

Islamic architecture remained faithful to simple building materials and employed the elemental forces of nature such as light and wind for its sources of energy. It brought nature into the city through the recreation of the calm, harmony and peace of virgin nature within the courtyards of the mosque or the home. The modernized Muslim, whose spiritual sense has become dulled by the force of secularization, has forgotten the ephemeral quality of human life on earth and the peace and harmony pervading nature. Like the modern Westerner whom he emulates, he wants to build homes as if he were going to live forever and construct cities whose very existence is based on the defiance of nature, the violation of her rhythms and the depletion of her resources. The secularized wish is to create an ambience in which God is forgotten, which means creating an urban environment in total disequilibrium with the natural environment. This environment is created by God and is itself a reminder of the Divine, which gives the lie to the very notion of secularism.

In addition to the transformations brought about on the levels of intelligence, imagination and sensibility in modernized Muslims, there is also a general loss of unity and integration of life which directly affects architecture and city planning. Islam is based upon Unity (tawhid) and is the means toward the integration of human life, and in fact of all multiplicity, into Unity. Every authentic manifestation of the Islamic spirit reflects the doctrine of tawhid. This doctrine is the principle of all the Islamic arts and sciences, as well as of the Shari’a, which integrate all human action and prepare man to return to the One, in the world of the perfection which is found on the highest level in the Holy Prophet, in the world which could be called “The Muhammadan Perfection,” i.e., the ‘urwa, the model which Muslims follow.

The traditional Islamic city reflected this unity directly. Since there is no distinction in Islam between the sacred and profane, a unity pervaded the architecture of the city which related the architecture of the home or even the palace and other municipal buildings to that of the mosque. This unity made the space within the Muslim home an extension of the space of the mosque, which in fact it is, from a ritual as well as an artistic point of view. The all-encompassing nature of the Shari’a, which includes worship (‘ibadat) as well as transactions (mu’āmalat), made possible the integration of all forms of activity. In the heart of the Islamic city, spaces designed for worship became interconnected with those designed for education, the making of things and business transactions, as well as for private living and cultural activity. The heart of many Islamic cities today still displays this remarkable unity of space and function within the mosque, madrasa, bazaar, private homes and the like. Needless to say, secularism destroys this vision of unity and the integration of all human activity within a divine norm and pattern. The loss of this unity, at least on a more external level, is one of the primary factors responsible for the plight of the modern city within the Islamic world. It becomes even more marked by the fact that the vast majority of Muslims still live within a unified world view and cannot bear the compartmentalized form of life imposed on them by the mind and will of the minority, who build for them according to models of architecture and city planning based not on unity but on the segmentation and separation of various domains of human activity.

The second effect of contact with the West is the narrowing down of religion to embrace only the laws pertaining to human action. The Shari’a includes a series of complex factors, some of which are related to forces within Islamic society and some to contact with the West. It is not possible to deal here with the how and why of the spread of puritanism, rationalistic movements, such as various forms of Neo-Wahabism and different so-called reformist movements associated with groups like the Salafiyya, the Ikhwan al-muslinin in Egypt, the Deoband movement in India, and the Jama‘at-ul-islam in Pakistan. What is important for the present discussion is that these movements, in the laudable attempt to revive the Shari’a and the Islamic practices associated with daily life, have for the most part neglected Islamic art and the metaphysical and philosophical principles underlying it.

When this type of religiosity is combined with modernistic tendencies, it creates an atmosphere in which the only thing that matters is the juridical aspect of the religion and not its artistic dimension. At best, God is remembered as Truth, at least on a certain level, but He is forgotten as Presence. Hence, beauty becomes incidental, and the Islamic character of architecture and city planning are of total inconsequence. What matters is that the new city development has a mosque or two somewhere. It matters little if the rest of the city resembles the secularized and inhuman urban spaces of modern Western cities or their suburbs, where either inhuman regimentation or a rugged individualism dominates. In such places, the only thing that does not matter is the wholeness of life and the integration of human society.
Despite the religious character of this type of reform movement and its reaction to many Western things on the level of ideas, the transformation it brings about in the mind and soul of the contemporary Muslim fortifies the secularizing tendency in its effect on architecture and city planning. Both factors alienate the Muslim from those aspects of the Islamic tradition which bear most directly on art and architecture, both the wisdom or sapientia always associated with Islamic esotericism and the cosmology which issues from it, and the principles governing Islamic art itself. The secularizing tendency causes certain Muslims to become completely indifferent to their own religion, whether reflected in the Shari'a itself or its sapiential teachings. The reformist tendency reduces religion for the most part to its juridical aspect. Through its belittling and even disdain for wisdom (hikma), it accepts the secularization of both art and nature and makes inaccessible those very elements of the Islamic tradition of which the Muslims are most direly in need to recreate an authentic Islamic ambiance. The atrocious destruction of so much Islamic architecture and even of sanctuaries and holy cities by apparently devout Muslims is proof, if proof is necessary, of the significance of the loss of that divine wisdom which contains the principles of Islamic art. This is true whether the loss comes from a lack of interest in religion as such, through secularism, or the narrowing down of religion to only one of its dimensions, and hence the forgetting of the sacramental character of traditional Islamic art as an integral aspect of the Islamic revelation.

Of course, besides these spiritual and intellectual factors, there are important social, political and economic elements with which the present paper is not concerned. But one cannot avoid at least mentioning that most nations of the Islamic world suffer from an inferiority complex before the West. They seek to create Western forms of architecture often as prestige projects in order to become acceptable, even if it is not economically feasible to manage a high rise building covered with glass in the middle of a desert. Likewise, the great wealth of some of the Islamic countries provides just the right background for the greed of many Western contractors and planners, who operate with the help of their Muslim counterparts to present plans and projects which manage to be most costly and not what is most Islamic. Of course, a few arches are usually added to guarantee that they will be accepted as conforming with the local culture, but the real intentions remain hidden only to those who are unaware of the real nature of Islamic architecture. Those people, unfortunately, are the very ones asked to judge the validity of these projects. One wonders what would happen to many of the new urban developments within the Islamic world if architects continued to build as if the energy crisis did not exist. There is certainly no excuse for the Muslim countries to repeat the errors of Western urban development. The fact that an error may gain world-wide acceptance for a short time does not turn it into a truth.

To remedy this serious situation, one cannot suggest a more obvious first step than the training of Islamic architects, men and women who are committed to specifically Islamic architecture, rather than those who practice Western architecture with the claim that it is international, and who happen to be named Muhammad, Ahmad or Ali. To train Islamic architects, in turn, requires certain essential resources for education in this field. Fortunately, traditional Islamic architecture is still alive in the villages and smaller towns of many Islamic countries, and secret documents are still preserved in some of the guilds. Where modern architects do not interfere, the architecture continues to be beautiful and functional at the same time. Moreover, the vast majority of the Islamic people are still drawn to the authentic expressions of the architecture. Advantage can be taken of these factors to create schools of Islamic architecture to train architects and city planners who can build the cities, public monuments, housing projects and other major developments which have been necessitated by the population explosion, migration to cities, changes in ways of production and other factors. These projects are now carried out by people trained in Western architecture, whether they happen to be citizens of Western or Islamic countries.

The establishment of such schools and institutions requires the revival of the Islamic arts and sciences, and the rediscovery of the spiritual and metaphysical principles of these arts and sciences. This means that, ultimately, Islamic architecture cannot be revived unless the contemporary Muslim is reborn, and the shackles of Western cultural and philosophical domination are overthrown. The external world cannot be adorned with the beauty, which is the theophany of the divine.

Isfahan, Iran plan of the Maidan-e Shah
Plan After N. Ardalan and L. Bakhtiar
beauty, unless the inner man is adorned with those virtues (fādilīl) and forms of wisdom which have always characterized the creative scholars and artists within the Islamic civilization. The task remains a vast one. But one can always begin with the training of a few. One can hope and pray that their personal example, and the beauty of works they create according to Islamic principles, will serve as a light which will transform the darkness. That darkness, which pervades the life of the Westernized Muslim and the urban environment in which he lives, can be changed into the crystallization of light and elaboration of harmony which authentic Islamic art and architecture have always been and will always be.

Reference Notes

1 The urban crisis is of course world-wide. Much that is taking place in the Islamic world is related to, and is a consequence of, this world-wide crisis. The fact that this is so indicates the passive nature of much of the Islamic world vis-à-vis the West, and is itself an indication of this crisis. In any case, if, as some of our concern in this paper is with the Islamic world, we shall limit ourselves to the architectural and urban problems of this world, although many of our comments also apply elsewhere.


5 F. Schuon Comprendre l'Islam. Also as Understanding Islam, trans by D. M. Matheson. Allen & Unwin, 1976


8 F. Schuon, op. cit., chapter 1

9 On a more external level, because inwardly the One shines like a never-setting sun at the heart of all things and most of all of Man, who is the complete and central theophany of the One in this world.

10 These have been dealt with by numerous authors such as H. A. R. Gibb, G. Hourani, & Cragg, etc.

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Prepared Commentary

Doğan Kuban

Two factors made it difficult to prepare my comments. First, Professor Nasr is a philosopher and cultural historian who deals with the Islamic architecture on a different level from me, a historian of architecture and an architect. Second, I was brought up in the middle of Atatürk's reforms with entrenched beliefs in modern state secularism, which influences my interpretation of the Islamic heritage, especially when one deals with its future. I must confess that I am amazed to see such differences of interpretation based on similar observations.

I think the essential feature of Nasr's paper is putting aside the social, political and economic factors which are the core of the changing dimensions of our physical environment. The relationship between the elements of a spiritual and intellectual nature and the shape of architecture that Nasr wants to make us believe is hardly convincing. He starts with the common observation on the degeneration of Islamic cities, their actual physiognomy that so sharply contrasts with the serenity of the traditional urban environment. But with this first statement he posits an isolated view of Islamic history. From beginning to end of his paper he discusses problems as if they were related only to the Islamic world. The blight of our modern cities, the dilemma between the new and the old, chaotic developments, ugliness and social disturbances are not specific to the world of Islam. These are universal characteristics of the contemporary world. All his observations are correct, but they were made a long time ago by Western urban history scholars to explain the passing of cities from the preindustrial to the industrial age. Certainly, our situation is a little more chaotic because the problem of historical continuity is less clear, the change is faster and the status of the new is more underlined. So we destroy more rapidly in Istanbul and Tehran than French people did in Paris.

He is right in saying that the outer chaos is an indication of the inner chaos. But the transformation of Muslim man is part of a universal transformation, maybe just a shade stronger. History is not an addition of smaller histories; it is a total process of continuous change. When we discuss modern Islam, we cannot isolate it from the rest of the world. To focus on one or several factors as the source of certain situations is used as a method throughout his paper. As Nasr sees it, the transformations that disrupted the Muslim world are the work of a Westernized elite. It is true that the modernizing process has been led by an elite. But disruption is not the result. The modernization efforts are the results of a disrupted Muslim world.

And was it different in other places? Was not Islamic culture an elite culture? In Muslim history the juxtaposition of high literature and folk literature, palace art and folk art, literature and a whole society of illiterates characterize an elitist culture. When we say Islamic culture, we generally mean the elite culture. Otherwise, it would be a very hazy term. In the transitional periods of history directions have always been given by an elite, but the transitions themselves are the results of much deeper forces.

Having thus separated my interpretation from that of Professor Nasr about the causes of the degradation of the Islamic culture, I come to the core of his main argument: the effect of Westernization upon the Muslims. According to him, the negative effects of Westernization work through two channels. One is secularization. The other is the reduction of Shari'a to its legal basis only, leaving aside the deeper esoteric significance of the religion. He thinks that both of them damaged the Muslim's affective life, his sensitivity and his imagination, as well as his intelligence. In order to explain these negative influences, he uses the modern architect, an archetype of the Westernized elite. His description of the modern Muslim architect's behaviour is acceptable. But to make the architect primarily responsible for the chaotic situation in our cities and principally responsible for the downfall of the traditional crafts is to put the cart before the horse. True, the modern Muslim architect does not know the old crafts. But it is obvious for the modern interpretation of history that the doom of traditional crafts is the outcome of the development of industry. One cannot dispute this. In his interpretations everything universal becomes specific. For example, to say that the concepts of space, light and rhythm were the appanage of the traditional Muslim architecture, and that Western materialism made our architects forget about them is a similar statement. The poor quality of architecture in Islamic countries is something we can agree upon, but the above mentioned qualities of architecture defines good architecture everywhere at all times. They are not specific to any tradition, and the same argument can be paraphrased for every country. It is true that "the traditional symbolism filled with divine love" is forgotten. But forms never lose their symbolic values, whether divine or something else. And it is difficult to assert that the traditional symbolism was only of divine origin. Nasr underlines the difference between traditional architecture based on crafts and expressing a specific cosmology versus modern architecture based on industry and expressing the material interpretation of the world. Again, this is neither a Muslim phenomenon, nor a fashion to be dispensed with. I agree when he says that transformations are so rapid that old categories about the physical world are still living in people's minds; they feel alienated in the modern environment. This might even be true for those modern architects who create it. Alienation, not only in its physical aspects, but in the life of modern man, is a source of grave concern. One cannot solve those problems by teaching modern architects the traditional crafts and history of architecture, as you cannot solve the problems of modern economy by teaching the example of Caliph 'Umar.

Professor Nasr states a truth when he remarks that the imagination of the traditional Muslim artist was constantly nourished by the "Islamicized" cosmic sector of this world, understanding his "Islamicized cosmic sector" within its physically definable boundaries. I share this idea, because this is the way artists work. Still, one cannot say that a modern secularized Muslim architect, being deprived of
his religious sustenance, cannot create an Islamic architecture. One cannot separate the architect from the society. Creativity is not only a personal gift of God. First, the cultural environment must be potentially creative. Then artists respond to it in their personal ways. So, can we accept that modern Islamic society becomes uncreative because of secularism? This can only mean that artistic creation is possible, at least in Islamic countries, only within the religious context.

I think this is a very bold and serious assertion. But I shall not discuss it here, because it is an essentially aesthetic problem. Yet, I believe that if any kind of religiosity is attached to the phenomenon of artistic creativity, to a deep seated original religious or mystical attitude of human mind, it is certainly not connected with a specific religion. Human creativity is as old as the creation itself. I understand that the specifically Muslim sensitivity is jeopardized in this age of transition. Yet, again, all characteristics mentioned by Nasr are universal. And one cannot find remedies to this sickness just by referring to the Islamic past "Islam never separates beauty from utility," he says. So it was in the medieval West. This is a medieval attitude. The modernized Muslim can hardly be conceived to be descended from those who built the Sultan Hasan Mosque. The man who made Montparnasse tower can hardly be conceived to be the descendant of those who built the Louvre.

There are other aspects of Islamic architecture on which it is difficult to be in agreement with Nasr. The transient aspect of Islamic architecture or environment should not be generalized. For simple dwellings and the general city structures, we may speak of an Islamic spirit which saw, or had to see, the world in its transient, changing form. But the great works of architecture, where we find the creativity of Islamic culture at its best, are not the outcome of this spirit. Remember Mshatta, Fatehpur Sikri, the great mausoleums like the Taj Mahal, Mamluk madrasas and caravanserais. To speak of the characteristics of an Islamic city as an extension of the natural environment is, also, not always true. In the Middle Ages, many of the Islamic cities were walled, and they had very distinct crystallized shapes. Only in later periods, in regions like Anatolia, where cities themselves felt secure, did development into the natural landscape take place.

In the remaining part of his paper, Nasr underlines secularization as the main cause of all the chaos of our modern physical environment. According to him, we created the modern city to forget God. This city has no unity because the unifying effect of Shari'a no longer exists. It is difficult to claim, or to prove, that when Shari'a exercises its power, everything goes well, and unity is installed by itself. One can read any medieval Muslim author to find contrary claims. Unity is a total abstract concept, especially when attached to God's will. It is an ideal never reached in human society. Secularization is certainly not responsible for the downfall of the blissful medieval unity of our society. There is no discontinuity between Muslim history before secularization and afterward. Even in its most disturbed periods, events slowly or speedily follow each other sequentially. Islam today is the continuation of Islam yesterday. The whole sickness comes from the speedy change from medieval society to a society which tries to accommodate itself to the Industrial Age. Secularism was one of the answers to the overwhelming questions created by rapid change. It is not the whole answer. Secularized Islamic society is still an Islamic society with undeniable particularities.

We lost the vision of unity which was the characteristic of the slow-motioned and religion-centered societies of past ages everywhere. Now we have to distinguish Islam as a faith, as revealed in the Koran, from Islam as an institution. Islam as a type of society, or as an institution, has been changing throughout its history, in all its aspects, in all Islamic countries. Islam as culture is more ramified and varied.

Islam as a unity is a myth created by Western scholarship in its stage of infancy. When Islam was still considered a historical entity contrasting with the Christian West and interpreted essentially as a religious attitude. We know there has been great discussion about this in modern times. However, believing in one God and the Koran did not create unity in Islamic societies as overall institutions. Without forgetting that the culture of Turkey is Islamic in its way, my country and I display secularist tendencies. Also, the culture is in the process of creating new dimensions without denying its past.

In his last pages Nasr turns again to Islamic esotericism which enlightened the creative spirit of Islamic artists. Many of his analyses I find congenial. But, as I stated at the beginning of my comments, to try to explain the decadence of the traditional values with only intellectual and spiritual dimensions to speak of Shari'a, creates ambiguity. Today, the status of Western forms in our culture, whether in architecture, business management or Westernized education of our elite cannot be understood without economical, social and political considerations.

At the end of his paper, he suggests training architects in traditional ways, the revival of Islamic arts and sciences, and the rediscovery of the spiritual and metaphysical principles of arts and sciences. Here I have to suggest that he remember this is an elitist approach, which he refuted in the beginning of his paper. Here our ways are totally separated, not in the necessity of education, but in the content of education. As an architectural historian and a specialist of preservation, I believe in the necessity of teaching history of architecture. Yet, the importance given to history of architecture in university curricula is nothing new. Teaching the historical styles in their minutest details constituted a large part of the curriculum in the schools of Beaux-Arts tradition, all over the world, until very recently. This did not change the fate of our cities. As a matter of fact, the architect did, or does, nothing but help the modern chaos to be established.

The education of the masses is essential. Only through a reasonable level of knowledge does the demand for self-identity increase. With it comes the consciousness
of the past, and with the integration of the past and present in the living culture, the society seeks a physical ambience which will reflect the new synthesis. This is a long process. But here we need again the elite, including the architects, as agents of transformation. This is the reason we are here.

The truly secularized Muslim country is Turkey. We had a long experience with soul-searching in national (i.e., Islamic) architecture. And, after the Revolution, we had two periods of revival. But these proved to be rather unfruitful experiences. In contrast, we may mention Saudi Arabia, which is close to the ideal of a state based on Shari’a, from the point of view of religious tradition. Yet modern architecture in Saudi Arabia is dominated by a style that can be called petrol-architecture. Nasr also remarks on this state of affairs. He explains it as “the result of the narrowing down of religion to embrace only laws pertaining to human action, thus forgetting or neglecting Art and its underlying philosophical, mystical principles.” This again proves that the revival of Shari’a does not necessarily change the deterioration of traditional environment and full scale imitation of the West.

Does a direct relationship between the Islamic quality of an environment and Islam as defined in the Muslim doctrine really exist? I think this is an oversimplification. Faith, whatever way organized in a society, and whatever way accepted as the source of behavior, cannot control the whole life pattern. The automobile is not the product of Islamic culture; but it is now a permanent element of Islamic life.

The compartmentalizing of modern man is a source of unrest in today’s world, as Nasr rightly maintains when he speaks about the chaos in our cities. But the compartmentalized interpretation of modern history could be the source of difficulties of higher order.

So, I believe that as we become more modern, we will return more to the sources of our own culture. The hope does not lie in looking backward. I think that Professor Nasr did not intend this. Yet, his method is to see the future through the eyeglasses of the past. I suggest seeing the past through the eyeglasses of the future. Thus, I believe, we can define a better world.

To summarize my comments on Nasr’s paper, I think that his explanations remain on the level of philosophical abstractions: they are not very convincing, and they cannot bring a concrete solution to our problems.

I have to state my own opinion on the creation of an architecture based on the spiritual heritage of Islam. The relationship between a culture and the formal character of its architecture is not easy to formulate. Sometimes we believe that architecture symbolizes certain values pertinent to a specific culture. But which values? An Englishman builds a modern hotel in Riyadh, in the very centre of Wahabist spirit. What does this building express? It certainly does not express a break in religious fervor, but it does express something important for the definition of the building process are at work. We assume that the building is fit for local exigencies, it is even difficult to discuss its qualities foreign to Islam, because the client asks for it; he is satisfied, probably even proud of it.

But we, the intellectuals and elite of the Islam, are not satisfied. We are looking for something with which we can identify ourselves. Fortunately, or unfortunately, this is an elitist approach. The role of the Muslim elite is primary for the self-consciousness and the development of Muslim countries. The Turkish revolution was guided and organized by intellectuals. In time its principles have been shared gradually by the majority of the people. When our peoples have the opportunity to talk about their works, the sooner the better, then discussions on the nature of Muslim architecture will not take place only in seminars.
Let me return to the main line of my argument: Islamic culture has a basic unity founded on the Koran, as the word of God. But quite a variety of forms of every order have been created during its history. There are oceans between the architectural concepts of Badshahi Mosque at Lahore, of the Selimiye at Edirne and of the Great Mosque at Cordoba. What is important in their shaping is not the common ground of Islamic culture, but the local interpretation of it. What makes them truly symbolical is their relationship to the soil, to the physical environment on which they were built, the cultural and political environment in which they were created.

Direct relationship to the soil, this is something we have to discuss. Today a great many buildings erected in the Muslim countries don't have this quality which makes a building a product of its soil. They are not the product of a specifically Islamic environment, either culturally or technically. Although this is not a phenomenon particular to our countries, we are now more sensitive to these importations. We created truly great architecture in the past, and the self-identity of the Muslim world cannot be better represented than by the remains of its material culture. This is our actual concern. This is why we ask the question: What are the qualities of an architecture which will express us? The "us" here is what everybody has discussed: Muslims as they are now, or Muslims as they were; Muslims of Istanbul, Muslims of Tehran, or Riyadh, or Indonesia or sub-Saharan Africa; of the cities, of the villages, living in palaces or in the huts of Bangladesh. This is the Islamic world in its complexity which is real. To define Islamic qualities in this complexity is to build on loose ground.

Is architecture a high art or a craft like shoemaking? It depends on how one looks at it, and who looks at it. If you ask Panofsky, it is a high art. If you consult a sociologist like Duvignaud, it is a craft. Croce would answer that it is both. If you accept it as a high art, one can impose a style of architecture; if it is a craft, one cannot.

With the coming of industry, the craft base of our traditional architecture had died. In the past, what made architecture a part of the soil on which it was built was the traditional craft. Even the sultans could not escape its determinism. But where are the stonecarvers, woodcarvers, stucco-makers, even good bricklayers? Their survival is directly proportional to the development of modern technology in their respective countries or regions. So, the craft basis has been practically destroyed. Mr. Fathy may have his beautiful experiments. A very limited revival of old crafts is possible as folklore activities for touristic purposes. The traditional crafts may survive as techniques, but they do not survive as symbols of an actual building activity.

I will give you an example: in the town of Safranbolu in northwestern Turkey there is a beautiful tradition of wooden houses. The town is still intact. There is a village nearby from which most of the carpenters used to come. Today there remain only two or three old carpenters who know their craft. But they prefer to do simple scaffolding, centering for ferro-concrete, and modern wooden roofs, because it is simpler, less time-consuming and brings more money; it is what modern society asks from them. Therefore, it also becomes a status symbol. Old carpenters have to show that they are able to continue in modern ways. Nobody except the architect--restorer asks for their old competence. They are the same old believers. The village keeps its traditional atmosphere on the surface. But something irreplaceable is broken.

We have to accept that the crafts that were the bases of traditional architecture are doomed for our purposes; one cannot keep a preindustrial technology while one struggles to reach the industrial civilization. You can have a mosque in the sixteenth century style, but not with stone or brick, or medieval stucco or wooden work. We do not have that much money, that much time, those kinds of traditional crafts. And the new mosque, in the sixteenth century style, could only be a degenerate shell, which is not what we are looking for.

In vernacular architecture, I am a little reluctant to say this with such confidence. This is why the experiments similar to Hassan Fathy's have their impact on architects' minds. What remains is a spirit, the spirit of the actual living culture, under the strong influence of modern life, and the suffocating stress of rapid changes. By living culture I mean a culture that has specific and definable patterns of behaviour in the actual life of its members and in the social structure it expresses. If it is chaotic, architecture will express it as such. Only in the actual dimensions of our lives can we extract the valuable solutions.

Architecture is a client-oriented profession. In normal, stabilized periods, it expresses homogeneous, established norms of culture. But in a period like ours, it comes into existence according to individual wishes and situations. So a Princess of Iran can prefer Mr. Peters of Taliesin for her palace; a V.I.P. in Saudi Arabia may call a German planner for the Islamic Conference Centre in Mecca. Norms are not yet established. This is one of the reasons why the elite who have a concern for the values of our traditional architecture carry such weight.

As long as Muslim societies and their architects learn more about their history, not through faith, but through an objective evaluation of their history and the present potential of their countries, and as long as they learn about the modern world, they will become more aware of their tradition. This never means the imitation of traditional forms. As Islamic countries rely more on their own resources, their new identity will secure them with the basic potential of creativity. Since the problem of identity is related to the problem of historical heritage, we will be looking to the sources of our uniqueness for inspiration.

What tangible elements of the past for inspiration exist, and what general methods can we use to integrate their spirit and message to our modern environment? We are aware that there is an Islamic architecture which is still alive in our built environment, not only with its great monuments, but with the structure of its cities, lesser
settlements, simple dwellings and living traditions of crafts. At the same time we observe its fast disappearance. Although we do not destroy the great monuments which still serve the necessities of our faith, or symbolize the still lingering memories of our past, the great bulk of buildings constituted by vernacular architecture are being wantonly destroyed, because their cultural and symbolic, even economic values are now subordinated to the exigencies of new life patterns, to the status of new forms and materials and speculative profits of staggering dimensions.

Reference Notes

1 The literature on the modern urban crisis is overflowing. The reaction to the unhealthy development of the industrial city started in the nineteenth century. For modern periods one can remember Lewis Mumford, Jane Jacobs; for later periods the environmentalists, the modern urban ecologists, etc.

2 A magnificent example is the ruined walled city of Bam in Kermān.

3 For Turkish secularism see: Niyazi Berkes, "Historical background of Turkish secularism" Islam and the West, pp 41–68, R N Frye, editor (The Hague, 1957), also Adnan A Adıvar Interaction of Islamic and Western thought in Turkey Near Eastern Culture and Society, pages 119–129 (Princeton, 1966)

Daniel Lerner The Passing of Traditional Society: Modernizing the Middle East (New York, 1963)

5 "Pearl Palace, Tehran, Iran Royalty's exotic residence for H H Princess Shams Pahlavi, sister of the Shah of Iran," Progressive Architecture, LVIII (6), June 1977

Discussion

Correa

We heard this morning two different positions very powerfully staked out; Professor Nasr’s was the assertion that the magnificent architecture of Islam had a profound religious and metaphysical basis. Today, we see only the visual impact of a place like Fatehpur Sikri, for instance. That’s really only seeing half the pie. We must return to an integrated view.

Professor Kuban, on the other hand, differed on a number of important aspects. For instance, I thought he said that the old Islamic cities were primarily the consequence of a feudal economy. This makes some sense to me because one sometimes sees this integrated product in other societies without such a strong religious basis to the architecture. I think we could probe pre-Islamic societies looking for architecture displaying these elements of integration. More profoundly, and more basically, he is saying that Nasr’s position is a paraphrase of, “I have seen the past and it works.” I agree. The question is, “What do we do with the future? Where do we go from here?” He seemed to imply that the Islamic world was caught up in a kind of world movement for change, for modernization. I suspect there are other positions which a number of other people would articulate. Is it not possible today to have an Islamic point of view which is modern, yet has the metaphysical and religious component brought out by Nasr?

Ardalan

We have had the privilege of hearing two attitudes from apparently different points of observation by very brilliant minds. It is interesting to look at the pattern that the two weave with one another. I feel there is no conflict Nasr speaks of a universal view. Certainly, I believe his view is not to be limited to the word “religion.” He speaks of an esoteric view, very much within a Platonic view of working from the universal to the particular. Possibly this characterizes a certain aspect of viewing life.

Kuban spoke of the particular, of the regional, and of the “soil” of human and natural resources from which inspirations also arise.

These are aspects of a crystal. Nasr speaks of the circle, the sphere, the unity of thought. Kuban speaks of the facets of the crystal which bring it into manifestation. The sphere has no dimension, no materiality. Kuban speaks of materiality and of dimension. These two can live with one another compatibly, for reality is restructured when one has communication between the particular and universal. Therefore, I feel that a very important beginning has been made.

Professor Kuban has introduced a vitally important idea, one which I also sense in Iran now. There are perennial, eternal and timeless creative visions. Within the soil and environment of any region, they take on a palette of materialization. In Islam, these very important regional qualities have an Islamic vision through which they are interpreted. It would be rather dangerous, I feel, to have the architecture of Malaysia influenced by the architecture of Saudi Arabia, or that of North Africa by that of Persia. Even in the architecture of Persia, regional qualities of temperate to semi-tropical architecture in the north contrast very strongly with that of the hot, arid architecture of the great salt deserts.

This is an element I would hope to see developed further during our deliberations. Discussions related to the particular soil or environment or bio-climatic region could provide the means for interpreting essentially perennial creative visions. These must be visions created within the spirit of Islam, which is really the discussion here. Creative visions inspired by Buddhism or Christianity would use a different series of symbols.

I am convinced that it would add great dimension to the Aga Khan Award if the aspect of regionalism is discerned and explored. There is great danger that the unity sought by this Award might suffer greatly if the architecture from some specific region is promoted. Placing that particular image in the foreground may cause individuals to feel that this type of architecture essentially fosters the best Islamic concepts. It is very important to look at the creative process inspired and materialized through Islamic symbolism and Shari’a and the whole history of its growth. Complementary to that are regional aspects. At least four or five very distinct regions must be discussed; and their aspects underscored so that we do not, in any way, hinder the unity toward which this Award would wish to go. Excellence should be relative to particular regions.

Zubair

I considered myself a layman in this field, but I have some impressions. I came here especially with the hope that some solid ideas would evolve about Islamic architecture. I was at pains in our grand project in Saudi Arabia to find the meaning of and design criteria for Islamic architecture. The regionalism of human existence, noted by Mr. Ardalan, has also been on my mind.

I think that there were two schools of thought expressed today in the paper and initial commentary. The first is a universal ideal about Islamic architecture. The second is that if we let things evolve in the process of change, if we are modernized, we lose the identity of Islamic architecture.

I feel that there is no such thing as secular Islam. Islam embodies all our activities, whether in art or in living, so the idea of “Islamicization” of the arts is rather important. We have concentrated upon Islamization of our behavior in one aspect of our life, which is the Shari’a, and on prayer will all its aspects, leaving arts aside. Most of the elite have been educated in Europe and America. They return with the idea that one concentrates on functions rather than shape. They place a lot of emphasis on the efficient functions
of the building rather than on location and space according to Islamic ideas. I would say there is an Islamic architecture and, even if we are highly modernized, if we are industrialized, we still will have a type of Islamic architecture because space allocation is different from space allocation in a Western country. Take, for instance, the factory. Factory space allocation must be different. In Islamic society there will be a place of prayer, and there will be a place for ablution (wudu). If we are embodying our Islamic attitude, this would be reflected in the design itself.

That is really what we are searching for in our university. King Abdul Aziz University is launching a project which will cost millions to design. I am really afraid that we might just put more emphasis on efficiencies and functions, meanwhile losing an Islamic attitude.

Berque

This morning we heard views which are in conflict in Arab countries and throughout the whole world. The world is being divided into those who believe in authenticity without a future and those who believe in a future without authenticity. One of the tasks of our seminar is to set up avenues of approach which will enable us to find a solution to that conflict. Fortunately, the antithesis is a false one. In Islamic tradition we can find many inherent elements which make for modernity.

As a student of the sociology and history of Islam, I cannot accept the identification of Islamic law with theosophy. Nasr said that no term in an Oriental language is able to translate the concept of secularism, but we have many possible translations for the term “humanism.” The last Surah of the Holy Koran uses the term of nās six times in five verses. Is it by chance? I believe not.

Islam does not plunge man into mystery; it asks man to mystery, which is a different matter. Consider for instance, Yu’mīnun bi’al-ghayb (those who believe in the unseen)—(Koran II, 2), and not Yu’ishūn bi’al-ghayb ‘aw yakunu lil ghayb (those who live in the supernatural and devote all to it). One has to believe in mystery and not to be mystery. There is a great difference between the genuine attitude of Islam and the attitude of Christianity. Christianity demands something different of man; he is plunged into mystery by way of the sacraments. In Islam we have nothing of the kind, the element of mystery is very much circumscribed. Many Islamic thinkers even declare that there is no problem with secularism in Islam for one simple reason: it is secularism itself.

I would like to ask my colleague, Professor Nasr, at what period in history and in what Islamic society he has found an expression of the philosophy of which he has spoken? There is a philosophical/metaphysical school, which professes these ideas. It should be noted, however, that this school was not specifically Islamic but universal. It is not by accident that our friend, Henri Corbin, attaches it directly to Zoroastrianism; we also find it in Plotinus and in the Alexandrians. It is not really Islamic at all. It is not good method to assimilate to Islam something that is not Islamic, nor what, in the history of Islam, was always a minority, perhaps even in an exotic view.

I do not think it is necessary for a project of Islamic urbanization to formulate a regressive Utopia. We would do better to propose definite progress based upon, or inspired by, an admittedly criticized past.

Fathy

I would like to answer the question of mystery. We must define what we mean by mystery. In different cultures—ancient Egypt, Christianity and Islam—the word mystery has a different meaning. I can know a natural phenomenon which I cannot explain consciously or simply have clarified afterwards. At one time, I came
across a sura in the Koran that talked about the seven heavens; according to this passage, God created the earth and enveloped it with seven heavens. I was concerned when I read this in the *Surat al Baqara*.

According to my scientific background, I believed that the earth was created from the atmosphere, from energy, radiations, from protons, neutrons and so forth. How could it, then, be created and enveloped by the seven zones described in the Koran?

It happened that I had a book on botany which I had not opened. At this time I opened it and chanced to turn to the very page mentioning the earth and the seven zones that envelop it. The first zone is the atmosphere with its moisture content; there was a second zone from ten to twenty kilometres altitude; another where oxygen is changed into ozone at twenty-five kilometres; another at ninety kilometres and so on. Thus, it was explained scientifically.

This knowledge could not have been available to the people in the sixth century or at the beginning of either Islam or Christianity. To my mind, mystery and knowledge have been organized along a time line. Knowledge had been progressively unveiled by the tearing of the temple curtain at the time of the Crucifixion. The secret knowledge which had been in the temple was being given to mankind. At that point it was not accessible to the masses, but only to the few who could rise to a very high degree of understanding. Subsequently, we moved away from mystery, and from knowledge limited to a few, to a dispersion into hands of the many and it became rationalism. This rational way of thinking came with the Renaissance, limited knowledge to what man can understand and took over our way of thinking or looking for the ways of nature. Knowledge thus becomes a matter of man trying to discover the laws of nature or creation in every phenomenon.

Take, as an example, a tree with its leaves and veins. If a hydrologist tried to calculate the sections of this natural system with all his computers, he would never reach this perfection. Once I was invited to the house of a friend in Long Island, and he asked me to talk about what I saw. I said, “Look at the view you have with the trees and the water behind. The tree is wiser than man, because every leaf is placed where it can take the sun, the wind and everything else. And when I think of New York where you have simply put people on top of one another, the tree is wiser.”

The problem we are discussing here is the problem of architecture in Islamic cities, mainly between the latitudes of fifteen and thirty-four degrees, with a rather similar climate and environment. By the end of the nineteenth century, Islamic architecture had reached the nadir of a cycle whose peak was in the fourteenth century. It declined under different influences from within itself as well as from without because every style starts with force at the beginning, comes to a climax and then starts a decline. The architectural decline coincided with political decline, and that coincided with the industrial revolution, which has changed everything. The moment had come for change, and we didn’t know how to change, so we took the easy way out, simply adopting Western culture.

You want to revive Islamic architecture? We don’t need to revive it; it is living. All we need is a scientific evaluation. We have never thoroughly evaluated Islamic town planning and house design. A group of students, two of them are here today, came to Cairo and made some analyses and evaluations of the architecture; they calculated the air temperature and the air movement in the street and inside the houses. They proved that this was ahead of anything we are doing today.

Another consideration is that today, the boulevard is designed for the automobile. Man is forgotten. Our cities are designed by road engineers, not by human beings! If the modern asphalt boulevard is compared scientifically to the old crooked street, we will see that the latter is better. Some critics would say that Arabs obviously did not know how to plan, because they did not have a straight line. There is, however, a proverb that says, “The straight is the line of duty and the curved is the line of beauty.” The curve in the street has the same use as the courtyard of a house. What we need today is an objective evaluation of these environments on their own terms.

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**Correa**

What Mr. Fathy said was very important. He is actually moving us in another direction. From what I understand, he said that the basic impulse and analysis of this architecture can be objective and rational. He did not use the word metaphysical once; he was talking about enormously rational and, I would say, functional objectives, such as keeping the heat out and using local materials. If you look at the great architecture of the last hundred years, it has always had these aims.

There is no point in comparing the great heritage of Islam with a new Hilton Hotel. This is not the best that modern architecture has to offer. To make such a comparison creates a false kind of juxtaposition. The aims Fathy has discussed are the universal objectives of good architecture. It is close to what Louis Sullivan said 150 years ago in Chicago. We must decide what aspects of Islamic architecture can be explained in these terms and what goes beyond that into the metaphysical realm. We have to decide, also, how much of that metaphysical baggage can be taken with us into the next hundred years. To my mind, these are the real issues, and not the false dichotomy between the ugliness of what is now going up and the great monuments of the past. The modern buildings are terribly ugly, but it is not all the fault of the West. The fault lies with those of us who build them.

At one time, I thought that India was very lucky to get le Corbusier. Now I realize that le Corbusier was very lucky to get India.
Faghih

We should be very careful about thinking of Islamic architecture only as a highly idealized, non-practical, elitist architecture. It was not at all Professor Nasr's intention to say so. It is, however, our duty to talk about it as architects, planners and engineers who are now operating totally within these regions. We are contemporary people facing contemporary issues, but we have some nostalgia for what we, or our ancestors, were. We have to talk about ourselves. We have to know who we are, although I realize it is not easy. We must put different questions together. For instance, how can we combine highly rationalized building processes for large-scale schemes with the spirituality which we maintain within ourselves?

Prussin

My interest in and concern with Islam derives from a somewhat different perspective, from the peripheral areas of Malaysia and sub-Saharan Africa. Although I am not as knowledgeable as many of you in the tradition of Islam, the perspective I come with may add additional insights.

My research has been not so much with the core of Islam, but with those cultures which have interacted with Islam in quite different ways. The experiences which I have had have been most revealing, for example, in contrast to those voiced by Hassan Fathy. The physical and cultural environment of Malaysia has created an entirely different architecture, even though Malaysia is a Muslim country. Sub-Saharan Africa is also different in almost every way, even though its savannah and sahelian regions have been infused with Islamic traditions over many centuries.

These countries and regions, while accepting Islam, have at the same time retained their own cultural identity and heritage. It is necessary that we emphasize the importance of, and recognize the differences which occur within the Islamic world and which are manifested in these peripheral areas.

West Africa, as my own research revealed, provides a beginning for understanding the marvelous integration of traditional art forms and modes with local adaptations of traditional Islamic culture. New forms arise, interface between traditional systems and Islamic adaptation. In my opinion, it is these interfaces which ought to be a model for our historic investigations.

The necklace I am wearing provides an interesting illustration of the point I wish to make. It was made for me by a German jeweler with whom I worked in West Africa. This design is based on a traditional Asante motif from Ghana. Although the Asante are not Muslim, many were at one time, and their heritage carries within itself a number of Islamic iconographic elements and aesthetic principles. The necklace motif is based on a pre-Islamic proverb which advises that two crocodiles who share one stomach should never fight.

Silver necklace, with design derived from traditional Asante (Ghana) motif

Photo: E. Calderón (courtesy L. Prussin)
over food. The two crocodiles can be recognized even in the elaborate arabesque pattern.

Here, then, is an example of the way in which a traditional pre-Islamic Asante (tотemic) proverb has been incorporated into the Islamic facets of the culture, and then, more recently, adopted by a German silversmith working in high technology, into a new aesthetic form. Perhaps, when thinking about the future of Islamic architecture, we may want to keep this kind of model in the back of our minds.

Nasr

A very large number of questions have been posed which I must answer; first of all, I am very glad that my talk disturbed everybody. This is what I am here for.

Many very profound comments were made. I shall begin with the comments of Professor Berque because they touch on points concerning Islam itself without which a discussion of Islamic architecture would have no meaning. I must begin with the Surat al Nās, the last verse of the Holy Koran, which mentions man seven times. The last time it says, “I take refuge . . . from jinn and man” (Qul a’udh . . . min al jinn wa-al nās). This means that one of the first things Islam teaches is that man is also something to take refuge from and not only to take refuge in. Man should not take himself that seriously.

True, it is possible to have an Islamic humanism. I definitely agree with you (Professor Gardet and others have written about the humanisme musulman) provided we consider humanism not as the Renaissance revolt against God. The Promethean myth does not exist in Islam. When we say humanism, for most people in the West, it means a kind of negation of heaven. If one understands humanism as the understanding of the nature of man and his importance in the scheme of things, obviously, that is acceptable. But the idea of man as being the slave of God (‘abd allah), who has received everything from God, is so central that any kind of civilization based upon man as the centre of things cannot be Islamic. Islam is profoundly theo-centered, God-centered, without in any way negating the importance of man. But that, of course, still leaves us with the problem of secularization which is again not the same thing as humanism.

Now, about the question of authenticity without a future and future without authenticity: this is the last thing that I would ever claim to say. The truth has nothing to do with the past or the future. It has to do with now, with the present moment. Whenever we discuss things (this is one of the maladies, I think, of modern Western scholarship which we have also adopted), the question of truth is very soon forgotten. Truth is the most trivial of all questions. You never discuss it; it is an embarrassing question. We always talk about what is the past, what is the future. The most important is what is true. From the authentic Islamic perspective, the important thing is not the future or the past. There is nothing worse than to have a false life. It is much better to have a true death. If the future means to live like animals, it is better not to have that future.

No one wants to idealize the past. In fact, Islamic teaching itself says that the only ideal person was the Prophet himself. There have been difficulties within Islamic society through all epochs. I am the last person to idealize the past which has no relevance to the future. The idea of a past that is dead in a future which man is to make is totally false. The two are interrelated in the profoundest sense. I am completely opposed to the study of Islamic tradition as archeology. Dividing and segmenting a living reality into a past and a future is like killing ourselves. All past years are gone, and tomorrow is the future, but my own being, as long as I am alive, links the past and the future together, and I do not want to be juxtaposed against that other perspective.

As far as the identification of the Islamic heritage with theosophy is concerned, I did not say that the Islamic tradition is only a form of wisdom or theosophy or esotericism. I said that this lies at the heart of Islamic tradition, including Sunni and Shi’a Islam, which has always accepted many levels of meaning (Since we are in the presence of the Imam of Isma’ilism, his particular perspective in Islam is based on the dimension of al-bāṭin, the inner dimension of Islam.). What I’m talking about is inwardness, the inner dimension. No society lives according to a democratic counting of votes on inwardness. There is no such thing. The twenty million people in western Europe during the Renaissance produced only one Leonardo DaVinci and one Michelangelo. But it was they who made Renaissance art. It is not always a majority that lives in inwardness. It is not a question of numbers. Berque asked me, “What period of Islamic history can you cite in which this philosophy was a majority philosophy?” This philosophy was never a majority philosophy in the sense of taking a count of votes. But it was always a living presence, like the heart which inwardly regulated the functions of the body. And I’m the last person to negate the exoteric, the outward, the fact, the particular.

Mr. Ardalan juxtaposed my position vis-à-vis Kuban, saying I go from the universal to the particular, and he goes from the particular to the universal. Both are perfectly acceptable provided the particular pertains to the universal, provided it is the application of the universal. This philosophy, before the modern onslaught, was present in all Islamic societies. It percolated down.

I want to negate the idea of the khawāṣ as elitism. As the result of the impact of Marxism and various forms of socialism, the word elitism is now very, very bad (although the Soviet Union has the most fixed elite of any society on the surface of the earth). Everybody hates the elite. But without a few outstanding names, would you have had modern mathematics? Would you have had modern physics? Would you have had modern architecture without Sullivan? Elite in the positive sense is a sine qua non of existence. The word elite should not be understood in its
political, social meaning of the last century in the West. Every society has its elite, whether it's the East or West, Capitalist, Marxist, Muslim, Hindu. We, who try to discuss things seriously, should not fall prey to the journalistic usage of words.

Professor Berque notes that he has heard certain outstanding Islamic authorities mention that the problem of secularism does not exist in Islam because Islam is secularistic. I am not one of the outstanding authorities of Islam. I speak as a humble scholar of the Islamic world. There are certain modernized Muslims, who call anything that happens to be in vogue, Islamic. Supposing people suddenly stand on their heads, put their feet up and start walking in the cities of Paris and London. Somebody would come and say this is just an Islamic teaching about how people should walk. This is precisely why the Islamic world is where it is. During the last fifty years, it has not shown one serious reaction to the West except in the field of Shi'ia which I have defended and discussed. The rest, everything that has come up in the West has been considered to be Islamic. Once there was the evolutionary theory of Darwin. In 1903, al-Tantawi in Damascus said that it is the teaching of Islam. Then came a form of democracy: Islam was democracy. Then came socialism: Islam was socialism. Now there are the Marxists and there is talk of Islamic Marxism. Tomorrow it will be something else, and they'll just add the adjective Islamic to it. But I do not think that solves the problem of semantics. The problem of secularization does not exist because Islam is a secular religion What does this sentence mean? It means that essentially it doesn't matter from the Islamic point of view whether you remember God or you forget Him.

I agree with you that Islamic and Christian conceptions of mystery are different. Man does not plunge into a mystery which his intelligence does not necessarily understand. But there is another form of mystery which is penetrated by intelligence and that is the grasp of tawhid. And there is no level to which the intelligence cannot go in understanding unity. That is precisely why a kind of soteriology based upon the understanding of tawhid is mis-interpreted so much in the West, even by my profound and dear friend Henri Corbin. Wisdom ( Sophia) has always been revealed to all religions. Islam accepts the universality of religion but that does not mean that the Islamic doctrine of tawhid is derived from either Zoroastrian, Platonic or other sources. The very fact that the Koran says, "To each nation we have revealed a prophet" (Wa laqad ba 'athnâ fi kuli umain rasâil la . . .) —Koran XVI, 36—means that Islam accepts the universality of prophecy. Since this prophecy is based upon unity from the Islamic point of view, Islam was very able and glad to accept this message when it came from other sources. When it encountered the doctrine of tawhid in several forms of Greek philosophy, it accepted them while rejecting other forms totally. Why is it that the late academy, the Stoics, who had such an influence upon the Roman world, were never very avidly studied in Islam. Where are all the Stoic treatises except that of Riuwâqi? Whereas the doctrines of Plato were studied precisely because in the Islamic point of view they alluded to the teachings of unity.

What I have in mind is not the kind of alienated theosophy drawn from neo-Platonic and Zoroastrian sources somehow forged and amalgamated by a man called Ibn 'Arabi, resuscitated by Rene Guenon in Cairo and then expanded by me here. The phenomenon of tawhid is much more universal than that. It is enough to go into any town or village (outside of the school of Ibn 'Arabi) to study essentially how Islamic civilization was formed to see that Islamic art and architecture was a wedding between the crafts and wisdom and that wisdom always came back ultimately to the doctrine of unity (tawhid). If other civilizations also asserted that, it is precisely because the other civilizations' point of view, before modern secularism, also came from God.

And this brings me up to the comments made by Professor Kuban, all of which should essentially come back to this point. He has generalized the problem in order to show that it does not exist. That is one way of looking at it. By saying that the urban crisis exists everywhere, it's not just a Muslim problem. By the fact that ugliness exists everywhere, that's not a Muslim problem. By the fact that industrialization is everywhere, that is not a Muslim problem. But if Islam is still a living reality, which I think it is, we must look at it differently. We accept that crisis is everywhere, that the suburbs of New York have many more problems even than the suburbs of Tehran. And why surrender oneself to worldwide insanity?

For example the question of industrialization. Everybody takes this to be an automatic process. Nobody wants to come to terms with it. The world-wide aspect of a problem does not in any way negate the reality of that problem. Because everybody in the world gets up and says 2 + 2 = 5, we should not accept it. Anyway, I stand as one person among other people in the Islamic world for whom all of the processes going on in the world are questionable, industrialization, urbanization, all of these other "tions" that we use. They're all to be critically studied, evaluated and not taken automatically to be trends, which somehow have to be accepted because they're in the air. This is precisely what I think that we are suffering from and we will not have a profound or even un-profound Islamic architecture until we're able to criticize these tendencies.

Professor Kuban mentions the very important problem of destruction of the crafts and again takes this to be automatic. Of course, we do remember the movement of William Morris, the crafts movement in England of seventy years ago, and the considerable effect it had upon even the most highly industrialized society of its own time. The preservation of certain of the crafts is a relative question. You did not destroy the ugliness of Manchester but nevertheless you were able to preserve many things. Why be always black or white? No one said that the crafts can be preserved in their pristine completeness and purity as they were in the Ottoman,
Discussion

Safavid or Mamluk periods. But there is no rational reason for the total destruction. Again, this is one of those excuses for laziness. We don’t do anything in the Islamic world for the preservation of the craft because it is in the air that this should change. This I think is absurd. It’s nothing more than administrative and intellectual laziness and hypocrisy of the worst kind.

And with a world that is moving toward a so-called postindustrial era where crafts are now practiced by many Ph.D. students because they cannot find other jobs, what is this excuse we always make that the crafts are being destroyed all over the world? Must we also destroy them, therefore, to keep up with the Joneses?

Now to come to the question of the transient character of Islamic art and architecture. Only that which belongs to God is not transient. Therefore, what was built for permanence in the Islamic world was always reflection of God’s presence directly, that is the mosque or the mausoleum of the saint. If you go to the city of Lahore, what you see when you first enter, which is of permanence, is the tomb of the great Suhrawardi saints of the fourteenth and fifteenth centuries. In Lahore, you see the Badshahi Mosque. And you see the fort. Of course, for practical reasons, forts were always there, always with a mosque in the middle, nevertheless, to show that they also belong to God.

But the transient aspect which I mentioned is not at all in contradiction to these great mosques like those in Istanbul or the Sultan Hasan Mosque of Cairo, which were often built in a particularly monumental sense. I was referring to the private house, small ateliers. In places like Strasbourg, ateliers built in the fourteenth or fifteenth centuries are still used. I once went with a group of Muslim scholars there and they said, “Why is it that we don’t have our own ateliers surviving from the Seljuk Period or the Mughal Period?” That kind of thing was not preserved because there was a sense of transience. There was a sense of stopping the excessive crystallization of material things and not allowing it to overwhelm man and to suffocate him. So this is a relative question.

Finally, I come to the question of secularization and change. It’s true that Islamic history has a unity, but it is true that many civilizations rise, live, decay and die. That is also part of the study of civilizations. One cannot take it automatically that if you just let everything go, somehow everything will be all right. Speaking as a Persian and a Muslim, I have a responsibility towards my own civilization to try to do what I can to help it. It will not be done automatically (Of course, everything is in the hands of God, but he has also given us freedom). I do not feel that automatically there will be a continuity. There are profound crises and things have to be done to try to preserve the civilization.

I do not think that the problem today is of the so-called masses, and I do not think that the more educated the masses will become in an education of the Western manner, the more Islamic they will become. As a matter of fact, the major problem with us in the Islamic world today is not with the masses. It is essentially with the so-called elite. I do not consider them to be an elite at all, the same way I do not accept the word ‘intellectual’ for those people who do not believe in the reality of the intellect in its Islamic sense. You cannot have an Islamic intellectual who does not believe in the reality of the intellect (al-`aql) in its Koranic sense. The so-called elite are really our major problem. It is they who determine the taste, who build, and who are able to destroy. It is they who often build spaces against the wishes of the populace. If you took a democratic court, a lot of these things would not be done, but they do.

I believe that the revival of Islamic culture which Kuban is hoping will come through education will not happen automatically. One thing will come; a class of people (including some people in this room) who, having become more and more educated in Western styles of architecture, on Western culture, Western thought, suddenly have a reaction against it. They spew forth what they have eaten. Then they emulate Gandhi, who in 1921 in South Africa took off his tie and threw it away. They, too, will say, “Until now I have eaten Western culture; now I have got it in my stomach, I must vomit it out.” This vomiting is taking place more and more. That is a very small minority, but there is a great deal of hope in what the small minority can do.

As long as the educational system automatically creates a cleavage within the soul of every Muslim between his Islamic heritage and what he learned outside, the education which does not ‘Islamicize’ learning, which does not “Islamicize” art, which even in the field of humanities and literature is essentially inculcating the complete alien form of learning into the minds of people, I do not think that everything is automatically going to be rosy.

There is no way of discussing Islamic architecture and evading the problem of the principles of Islamic architecture and what Islamic architecture means. There is no way of avoiding meaning. God is meaning (ma‘na). We have to be at the quest of this meaning. This meaning is impossible to discover, unless there is enough of a critical faculty within the Islamic world among architects and artists to be able to appraise what is coming from the outside and to rebuild according to those principles with the new conditions which the modern world presents.

Kuban

Crisis is everywhere. We have our own civilization, so let’s find our own solution. The problem is finding the method. Do we turn back to the traditional way of creating or do we have to create a new tradition of creating? Certainly, I would like to preserve as much as possible in trying to define my culture. I see this as common ground between Professor Nasr and myself. Identity is quite a complex problem. It is not a fixed thing. We must define our identity in every step of life and history. I
think it is incumbent upon us to re-define it now. In order to re-define it, we must convincingly relate it to the changing world. We must link the past to the future. In the past there was less connection with the outside world. Today, there is more interrelation with that world. It is a problem of scale.

What does Islamic architecture mean? I think something created by those people who call themselves Muslims. It is as simple as that. I can say that I am a Muslim, but I prefer secularism. No Muslim should then reply that I am not a Muslim; that would be contrary to the religion. Look back and notice that, with the tombs, huge palaces remain at Lahore. That was another kind of necessity there.

I think our discussions can well lead to common ground for development of our ideas.
Contrary to an opinion that is still too widespread, Islam does not crush the world beneath the weight of the heavens. Despite its imperious feeling of the Absolute, it does not abolish man’s initiative, no more than it denies the presence of things. Certainly, it reminds man of his infirmity, his lowness, intense and burning, nonetheless, it welcomes him. One could say that Islam allows man to gain in existential warmth what it denies him in ontological dignity. A Muslim, provided he adheres to the ghayb and to his message (Koran II. 2), can remain faithful to his nature. He is not invited to partake in a supernature, nor even in a sacredness. Submitted to a transcendental decree in his own wijdan, he reunites the existential and the fundamental. His attitudes are characterized by a continual alternating between a plenary life and a devotional one. Let us add to that the indefatigable reference to values of the highest order and to the concrete aims of humanity. That is why many theologians of Islam demand from their religion an absolute competence both in the preparation for salvation and in the management of living within society. And this corresponds fundamentally to this aptitude for recollection (dhikr), for recapitulation, and for resourcefulness that gives a typological strength to many of the behaviors of Islam, which is all the more exemplary in a world threatened with loss of its colour and its meaning.

Since he takes upon himself both transcendence and nature, Islamic man can rush in pursuit of the objectives of this life, and of the next, without ever sacrificing fundamental principles. However, nowadays, principles change in their foundation and their finality. Putting down roots is no longer looked for in human nature, a nature which might then be only a delegatee of the Essence: for what else did the secular antithesis of hadith and qadim amount to? It could be, to use another important Arabic word, that the foundations (asl., plural usul) might from now on be demanded from the living, from the collective, from the self-production of man, from history. And that could force upon the Muslims a serious bifurcation in their choices.

Islam of today must, and can, treat its problems of implantation in space and especially those of the town. This Islam, at grips with its needs and armed with new means, must accomplish this in terms of a weltanschauung reaffirmed through the centuries, but still in the process of a full socio-historical mutation. From its very beginnings, it wished to be urban. Its principles and customs have, despite upheavals throughout history, favoured the urban type over the rural or steppe type, though not without setbacks. However, for all its warmth and vividness, this evidence, which has often provoked in Western man suspicious feelings of exoticism, has not, to my knowledge, provoked the analysis it deserves. The lack of analysis has perpetrated the difficulty which presently faces the countries of Islam in adapting an Islamic model of the town to the inspira-
tions and realizations of modernity, and reciprocally, of adjusting the latter to the demands of a future Muslim identity.

This debate between types and phases of civilizations, aggravated in our times by challenges that are often lethal, cannot be resolved without being differentiated into sub-systems of national and regional varieties. What is valid for Fatimid Cairo is not valid for 'Abbasid Baghdad, and is even less valid for the Isfahan of Shah 'Abbas or for modern Casablanca. What is valid for Indonesia cannot be valid in quite the same way for Senegal. Deficiencies in elucidating the ancient legacy and in localized inquiry, in drastic news of the present, too often unintelligible for the lack of a sufficiently informed and critical approach; a multiplicity, finally, of situations and guises that are often very different, which the word Islam encompasses: all that is accumulated with perplexity and with questioning, or else, at times, with a deceiving and sterile assurance.

A First Model

The Muslim city is by choice a city of God. Every Friday the central mosque, which rings out the call to prayer five times a day, assembles the community (jama'a). From this focal point radiate streets, which branch off into cul-de-sacs. Side streets occasionally lead into the gates of the town, which is protected from the open land by ramparts. Water, necessary to ritual purity, rushes beneath the dwellings, and gurgles in the receptacles of the sanctuaries and the houses. Just as every identifiable quarter can be recognized by its mosque with its weekly sermon, so too it harbours one or more hamams, where the nakedness of the body is fleetingly revealed in subterranean shadows. It also contains commercial streets, saps or bazaars, where boutiques and workshops, divided by types, crowd together. Legal wealth is invested in real estate and in lavish consumption. Illicit gains compete with the devotion to the waqfs. The waqf undertakes a large part of the aedileship, assistance and upkeep of monuments. Whether good or bad, the result will thus be the same: enormous personal and real estate liquid assets will be at the disposal of the community, under control of a canonical magistrate.

In the towns, men are classified principally by their function rather than by their kinship. Men of religious science (ulamás and ṭalabas), large and small businessmen, artisans and factory workers are recruited indiscriminately from every family. A well-balanced descent line of town dwellers will place its representatives in each of the three sectors. Correlatively, a balance that is felt as eminently moral

Fez, Morocco: craftsman in the madina

Photo: H-U Khan
divides a man’s time between places of religious worship, his private life and his production, be they respectively masjid, dar, and any different specializations. There is ternary rhythm displayed in contrast among canonical reunions of the community (legal or pious speeches), assemblies with an economic function (sūqs or bazaars, tanneries, street stalls, warehouses), and an enormous and undefined flux of passers-by. Between these last two, traders and artisans versus passers-by, idlers and consumers, the public crier (dallal) makes himself busy. The coaxing of the dilala, even though he indefinitely invokes the name of God, is an economic brokerage. If one dares say so, his function is the counterpart to the canonical call of the muezzin. The corporate organization of trades balances with the indistinct flow of the crowd, and each of these with the pious Friday assembly. In the prayer–room, which is accessible to everyone, eye and ear converge towards the minbar and the mihrab. In that respect the prayer–room differs from the private dwelling, which is sacred and inviolable even to close friends and certainly to any anonymous contingencies of the street.

The intimacy of private life is in the same way in apposition to two sorts of openness: that of ritual prayers and that of economic acts. The law rules natural movements realistically. It provides for impulses of need and of desire, times and places of anonymity. The explicit rule allows these to happen. The emir, the judge or the muqatab have no intention of ousting any of these from the secrecy of the houses, the scope of social mores or the intimacy of consciences. Liberalism? Surely, and in both the economic and moral senses of that term. Economic liberalism, in any case, gets along well with religious rigour. Was there not a man among the great founders of rites, who was also a wealthy merchant? From there, too, in terms of modernity, is the coalescence of the ideal of town life with the expansion of the middle classes in Islam.

The Model Put to Question

The above model, which corresponds quite well to what we observed in Fez shortly before World War II, stands out with a singular logic, with correspondences of all kinds and with symmetries of which we have mentioned only a few. Both ethical and functional, it seems, moreover, to be wonderfully similar to physical and mental landscapes. Perhaps this structure seems a little too perfect to have generalizations made about it without some discussion.

Does it result from a systematic exploration of the towns of Islam in successive eras? Does it not proceed from simplifications imposed by Western observation by the same contrast that, in our days, opposes or even substitutes a quite different order for former situations? These latter could differ from each other in reality: one is tempted to reduce them to an oversimple typology, to coin the term, of a no less simplistic dichotomy between East and West, past and present. Besides, is the model that we have just described valid everywhere and always? Monographic research, which alone could provide an answer to this question, is not sufficiently advanced, to my knowledge, to make the decision.

The story of city foundations, because of the importance it attaches to the foundations of the central mosque, could, however, make one lean toward the affirmative. But it is rare for a madina to be found on virgin ground. Most often one has had to accommodate to either the configuration of the site or to the traces, sometimes considerable and always imperious, of a prior urbanism. It is necessary to take into account the deliberate choices that, within the Muslim order itself, were diemetrically opposed. Two extreme examples are the initial square structure of Kufa and the circular design of Baghdad. Dynastic vicissitudes have often imposed either successive changes in the centre, as in Tunis, or additions to different towns, as in Cairo, Aleppo and Fez. In a word, radiocentric arrangement and theological derivation seem to rule the design and the life in the classic madina. Are they not the result of a generalization after the fact? Is it one that clings to concrete images, but could be valuable only as a reference to an average indicator rather than as a real model (pattern)? In this case the madina itself should be numbered among the other theoretical elaborations of Muslim tradition: dialects supposedly deriving from the classic usage, institutions purportedly descending from the Imamate, and, more generally, the vicissitudes of reality arbitrarily referred to the unity of the principle . . . .

Toward a More Elaborate Model

Three remarkable motifs of the landscape of many towns will, however, help us, if not to resolve the problem then, at least, to make some progress through the examination of differentiations and variations that, if confirmed, would bear witness to a certain aptitude of the type to adapt and to change. For the present, research would constitute a good omen. The citadel (al-gal’a) is in fact an epicentre whose relationship with the canonical (or theoretical) centre diverts the history of the town. A good example can be taken from the history of Cairo during the Ottoman period. In Fez, the “new town,” Fez Jdid, played this role from the time of the Merinids. When there was a conflict, the epicentre (if one may say so) attacked the centre, as was the case several times in Morocco. Along with this decentralization, ethnic origin, physical aspect, customs and the mentality of power which occupied the citadel were substantially at variance with those of the madina. The foreign elements, at least Bedouin and tribal, were often dominant among the people of the citadel, and were sharply in contrast to the middle class. Must we take into account this verifiable and durable heterogeneity? That is not all. What are we to say about the activities of the town? There certain kinds of commerce take on a defensive form, indeed, even tend toward extraterritoriality: khāns or fu‘duqs, wakāla do not have to be
occupied by Venetian or Genoese merchants to stand out by their architecture against the urban texture around them. The qaṣṣâriya of Fez is used by a middle class that is very jealous of its origins, but the business of importing (especially cloth) plays a precociously significant role: a new aspect that places it in opposition to the sūqs of the neighbourhood. A second element of heterogeneity, therefore, has to be introduced into the model.

The madina, which is a market, a giant workshop, a warehouse, bases its activities on its relations with the surrounding countryside which transforms its products and satisfies its demands. The town life may as well be jealous of its privileges; it cannot escape the Bedouin presence. In fact, that presence is solicited. Certain professions and certain quarters devolved upon this contratype. In the long-run these people are assimilated and proliferate there. The names of the town gentry are drawn, in large part, from rural onomastics. The Bedouin tribe finds in that way its urban sublimation; a response to the tendency of the middle-class has to colonize the agricultural periphery of the town. Thus, even before the demographic explosion of the second third of the twentieth century, or the influx of rural to the periphery and even to the very core of the city was noticeable, the attention of the social historian and of the urbanist was attracted by the relationship of town and country, which cannot be reduced to a simple antithesis.

What is more, the town is not only form; it is movement; even if we dare follow in the steps of Kevin Lynch, it is “perceived” movement. The images that the crowd perceives and produces are contrasted with the images of permanence linked to a monumental framework and to the regulated rhythms favored by the exercise of rites and by corporate activities. It is toward regularization of these elements that certain efforts of the original urbanism were striving: the solemn and defensive gates of the ramparts; pierced with alley or, more infrequently, with avenues suitable for disciplining movement (such as the Qaṣba in medieval Cairo, or the Chāhār Bāgh in Isfahan); the arrangement of open courts or even of squares (such as the Jam al-Fīnā in Marrakesh).

However, this very movement plays a part in the very essence of urban equilibrium. Explosive, varied and picturesque (cf. the sūqs in Mosul, in Aleppo or the bazaar in Tehran) the crowd, (‘amma, plebs, ra‘ā) or even rabble (awbāsh) which wanders in innumerable waves through the side streets, which strolls by the displays of goods, which gathers around public storytellers and overflows the sanctimonious Friday assembly. The crowd introduces an element of risk. It introduces anonymity as a force or act in the very heart of something which intends to be so orderly. Necessary for the citizens’ profit, the crowd also constitutes a hazard because of its potential to riot or pillage. It illustrates in every instance the unpredictable element in any given situation, a fact that is so clearly emphasized in The Arabian Night and in the literature of Magamat.

When at nightfall it stops its whirling movement, it ebbs towards gates and doors, or even slumbers on the ground. Even though its movement has been somewhat reduced by its occupation of the suburbs, such as the Maidan in Damascus, or the rabāds in Cordoba or Tunis, its threat is equal to its vitality. The crowd, much more than the middle class, carries the world within itself. And the Egyptian novelist Nagib Mahfūz was not wrong, in Awlād h arātīnā (The People of Our Quarter), in making the crowd a pillar of the future of humanity.

If the town’s shape frequently assumes this circular form, the sociological scheme that we are beginning to perceive would lead us to think rather of an ellipse. And even, let us dare say, of an ellipse with several foci for the radiating regularity that the initial model suggested gives way to several imbalances. In this constant inflexion one could see yet another regularity. Let us say instead that the
historical irregularities or transgressions of the type in the several cases we have mentioned above are themselves statutory.

We shall add a visual remark. The urban web affects the form of the puzzle or the daedalus. How could it be otherwise when most of the designs result from pressures that are brought to bear in every direction from the housing units and are animated by an expansive vitality? The house in the madina does not limit itself to fulfilling the interstices of an order imposed from outside. From within, it exerts pressure on its own walls. Although it is moulded in a quadrangular design, it forms in general, with the other houses, asymmetries or curvilinear outlines. The orthogonal order and its chessboard projections, if not at all synonymous with an “absence of soul,” as Spengler would claim, would signify whenever they appear, the intervention of another mentality: the imperious projection of a superior power, a sultan, a shah or a khedive; a Hellenistic heritage as in Latakia; or already an imitation of the West. The “essential” madina (let us dare use the word coined by Peguy) does without any directional planning. No way is it unchanging, as the contrasts between it and the new town would lead us to believe. On the contrary it is, we think, in a constant state of oscillation, as is every living organism. But with its vicissitudes, it re-establishes a balance which needs no conceptualization, or hardly any institution. If its structure is not of itself explicit, it makes itself felt by the thousands of details of communal living closely attuned to the use of space.

It therefore shares in that “visusisme” which to C. Fourier was a principle of social progress. Without the least realistic or symbolic prejudice, it creates an order that can be perpetually reorganized and re-established and in which, in a way that we find rather curious, it entrusts the role to picturesque marks and to emotional encounters that elsewhere is the prerogative of directional planning and municipal administration.

The Urban Message of the Koran

The corrections that we have just suggested for our present model could not, however, replace an induction founded on a monographic exploration of a sufficiently broad spatial and temporal scope. Since we lack an inquest, which might through comparison, establish a statistical model of the urban experience in Islam, we can and we must turn to the single document which is valid in law and in fact for every moment and for every place in Islam: the Koran.

As a society, Islam flourished after the Hegira. Those ten years during which it established itself and functioned in what might be called the “prophetic republic” can be considered highly exemplary. It was a town-life republic, cutting through the desert and the surrounding steppes.

Although essentially agricultural, it exalted an urban model, conceived as such from the beginning and founded by one of the operations known in ancient Greece as synoecism. Medina, al-Madina, thus appeared as a city par excellence. The Arab root madīnā suggests the idea of a permanent settlement and also that of the enjoyment of a natural perimeter. The city is thus located “in the heart of the land,” fi ṭarīqa ‘damrīn (Lišan al-‘Arab). Al-madīna, plural al-madīnā, appears seventeen times in the Koran, either in the generic sense, or to refer to Medina, and for the lack of a word of its own, had a hundred metaphorical names. Qariya occurs much more frequently than madina to designate a bourgade, or important village (large or small). The word is used in the sense of a hospitable hearth and a source of sweet water rather than a grouping, if one is to trust a likely etymology. In the case of the madina it is rather the aspect of grouping that prevails. The urban conjunction that the Prophet introduced was based, as we know, on a compatibility between distinct elements. Its unity remains pluralistic, and retained for quite some time dissident factions or ones that were secretly hostile (al-Munaqafin). This composition was reflected, it seems, in the countryside as ethnic neighbourhoods which the assembly united periodically; “assembly” being the literal translation of mosque. It is not unlikely that the fact that the Jews of Medina lived in separate “small forts” (at‘īm, plural ut‘ām) underlined and animated a differentiation which finally resulted in their expulsion.

In Medina, the presence of the Revelation saturates the city without it being essential for us to suppose its having any part in municipal administration. The range of the muezzin’s voice, on the other hand, is of great importance. It covers an auditory perimeter which itself has morphological merit. Certain rites will evoke a debate on the question: Is it possible for a town to have several mosques with a weekly sermon? In fact the neighbourhood coincides with the vocal perimetre of the idhn. In Islam, from the very beginning, an urbanism of the sign seems to have emerged, quite contrary to the Roman-type urbanism, which is founded on geometry and regulation.

To make the Koran or the Sunna say more on the topic would be to extrapolate beyond reason. Insofar as the dwelling is concerned, on the other hand, the knowns become more explicit in the sacred text, if one knows how to group them. Dār, which we translate today by “house,” refers rather, in the Koran, to the “country,” to the “land”—hell, for example, or the afterlife. It is the word ba‘yr which means “dwelling.” This word, from an old Semitic root, has in Arabic a link with nighttime supported by its etymological link with the verb bataiyabita (spend the night), and the adverb biyatān (by night). Night is the time for “holy sleep,” and thus for peacefulness, for “rest” that the root s k n. implies with metaphysical implications. Night also postulates “settlement,” “cotenancy,” and almost “legitimacy,” which the root b w. evokes (of muwawwa‘ sidq, “in the sight of truth” (Koran X, 93). In this connection let us mention the etymological flights of fancy that the old Germanic root, meaning both “build” and “inhabit,” inspires in Heidegger. At the very least, the Koran’s acceptance of ba‘yr to mean “dwelling” is so consistent that it authorizes the figura-
tive usage. The “house of God” that one would never take literally refers to either Abraham’s sacred stone or to the Ka’ba. The spider’s web suggests metaphorically “the frailest of houses” (Koran XXIX, 41). Concurrently, elements of concrete analysis or of visual qualification come to shade usages in a distinctive and ramified manner. According to lexicographers, bayt would already represent a complication of khud’ or “primitive tent.” If there exist houses of “little embellishment,” zakhraf, they would consist only of animal or vegetal material. Bayt sha’r, the dwelling of skin, is still seen today in the Algerian south, for example, or in the Bedouin tent. The bayt is already of composite structure. That is so true that the analogy that makes it a homonym of the other bayt, the “line” of a poem would be founded, according to the Lisán, on its articulation in functional parts. Another progression and one has a “large house,” called instructively al–muz’illa, the “shady one.”

This last connotation deserves some development. Let us first re-read the passage from the Koran:

And it is God who has appointed a place of rest for you and your houses, and He has appointed for you of the skins of cattle, houses you find light on the day that you journey, and on the day you abide, and of their wool, and of their fur, and of their hair furnishing and an enjoyment for a while. And it is God who has appointed for you coverings of the things He created, and He has appointed for you of the mountains refuges, and He has appointed for you shirts to protect you from the heat, and shirts to protect you from your own violence. (Koran XVI, 81)

(Translation by A. J. Arberry, The Koran Interpreted, N.Y 1973)

How could one fail to retain from this passage, the evocation of protective shade? Just as clearly too, the semantic dichotomy between the night that shields and “the Day of Resurrection” (Koran XVII, 60) awakes instructive associations. Is it not strange that the place in the book where the term bayt occurs most frequently should be precisely the Sura XXIV, the Sura of Light? One could justifiably also call it, if allowed, the optic sura. There are fourteen occurrences of this term in the same sura, out of sixty-five in the whole Koran. As it happens, this sura decrees a moral code of sex and privacy, in addition to that of legal evidence of the publicity of witnessing and punishments. One would not be exaggerating such relationships to infer from them the link between secrecy and the consummation of the marital act. “He created for you, of yourselves, spouses that you might repose in them.” (Koran XXX, 20). To the sleep of night, to the movement in the harsh light of day, a third term seems to emerge, in the moral as in the material sense: the “light–shadow,” i.e., sexuality, which “clothes” two bodies, one with other (c.f. the roots l.b.s. and b.t.n.). It implies, in a licit sense, the intimacy of the house with a semi–seclusion of women. Thus, the muhthsana (literally, “the strengthened one”) will dispense to her companion, and will receive from him, pleasures devoid of any sinful nature. The legitimate couple will be protected from the rest of the world by a prohibition, harâm, popularized by the too famous “harem” of our exotic tales. The house itself must be protected because it is as vulnerable (’awra) as the erogenous parts of the body. That, at least, is what the defenders of Medina claimed the day the factions were attacked. They would have lost heart if the Prophet, when establishing a defense trench, had not sufficiently “covered” the town (Koran XXXIII, 13)

Protection, intimacy, concealment: would it be superfluous to evoke these arrangements of light and darkness, whose evocative message so many towns and dwellings in Islam maintain to this day? It will not be necessary to resort to the extreme example of the sarādib, “multiple–storied basements” of Iraq, to measure what certain architectural types can accomplish in terms of correspondences, not only between established norms, but also between the structure of the subconscious and an interpretation of rhythms.

The House with Courtyard, Inverted Space

One can legitimately suppose that Medina rearranged to suit a new Law, a dwelling in which architecture could have discerned the contribution of many civilizations. Sumer would be therein recognized, no doubt; and, subordinately, the Greco–Latin affinity, without mentioning other influences. Let us, however, ignore what would demand specialized research containing a multiplicity of unknown factors, and let us turn our attention to several impressions that are still very much alive. Take for example, the shady courtyard (wasat al–dār) “ust ed–dar” as they still say in Maghreb. It is an enclosed space protected morning and evening from the “fury of the sun” (Taha Husein) by the walls which surround it, and vulnerable only to the midday sun. This interior courtyard is still called mrah in Maghreb, a name also given to the circumanesque formed by the circle of the encampment (duwar). There the flocks gather at night. Ra’ah a yardah, “come in at evening,” also means, by an instructive trope, “find the wife again, consummate the marriage.” From these places of security they will depart in the morning to disperse in the open space.

But let us return to the interior courtyard of the urban houses. This space, which the building protects on all sides, seems symmetrical to that which spreads out indefinitely around the city. Packed with information, it throws itself open to the four winds. This space responds to the ecological encircling of the town by intense social and cultural forces. Around the space, porticoes and porches (eyvans) make holes in the walls, opening into rooms. In the building itself, the empty space pushes the walls back rather than
allowing itself to be shut in. In their surface it digs niches, sunken spots, alcoves (ka’wwas, javas, qbus). On the street it protects itself by mashrabiyya, hanging shelters, or the balconies and overhangs of today which the use of reinforced concrete exaggerates. The house, a place of intimacy and fulfillment, is thus in many respects an empty space which responds to the pressure of space with its own leap towards the exterior. The energy of this leap is proportional to the strength of the still—patriarchal family which lives in the dwelling: strength comprised of children, alliance, goods, experiences. Similarly, the Bedouin encampment spreads out onto the steppe according to the quantity of human families it contains and the number of animals.

If the external, horizontal space invites you to unlimited wandering, the space in the house is unevenly arranged in depth and in height by means of disconnections. It does this with a complexity that is not controlled, as is Western architecture, by the superimposition of planes. Increases in height, sunken surfaces, high and low floors modulate the interior space with such a refinement of detail that this game of flattened planes and volumes makes up, to a great extent, for the relative poverty of the furnishings. Poverty? Those carpets, are they not ostentatious “ground furnishings?” Well, as it happens, we shall see that the usage of Bedouin carpets in the city dwellings is but an added feature of inverted reference to the surrounding space. The carpet is a reduction, or rather an “iconic” reminder of nature, but of a nature that is abstract and magnified by domestic art. It is not insignificant that the carpet’s design and colours (whose basic ingredient is the sap of plants) lend their mottled vegetation to family intimacy, to their aesthetic pleasure and their repose.

There are still other symmetries. This highly individualized house cuts through the tumultuous anonymity of the crowds. Similarly, its architectural structure, which allows for an emptiness in the heart of the buildings, stands in contrast to the compactness of an urban block, which is barely penetrated by small alleys. Thus, the highly elaborate excavations of the dwellings contrast with the massive anonymity of an urban block. In fact, seen from above, the town looks like a continuous design, punctured to be sure with a thousand hollows, the courtyards, but upon which one can move about along the terraces almost without touching ground. The terraces are, to be sure, really feminine territory, a confidential place, but this massive continuity is animated with a swarming mobility through its cracks, its alleys, in its covered narrow thoroughfares (sabut’s). And the Friday assembly, which reunites the heads of the families, synthesizes this combination of hollow and filled spaces, of immobility and movement beneath a big vertical sign. Which sign? That of the minaret? Of course. But Islam has no need of material props to evoke, in its great corporate moments, a pure immateriality which is in its spirit and ultimate destiny. “Say! He is God, One, God the everlasting refuge. . . .” (Qil huwa Allāh aḥad Allāh al-samad—Koran CXII 1,2).

Cosmic Symbol or Sociogram?

Muslim art could provide us with a vivid illustration of this schema. A figure reoccurs ad naureum in Arabic and Persian ornamentation. It is represented by two superimposed and rotating squares. Would it not offer us a sort of ideogram for all that we have been discussing? It is not insignificant that the architectural part and the sociological and behavioural schema that we have just described should express itself in a thousand visible stucco motifs, embossed on copper, or sculpted on wood or formed in ceramic. This comprises a sort of recapitulation or reiteration which is very familiar to Islam. Nor is it without interest that the figure in question corresponds exactly to that which the projection of a dome on squinches would trace on the ground. It has also
been noted that a repetitive form of the oriental building, namely the qubba (cupola, dome), accomplishes in its own way the circular resolution of the square of its base, the alchemical squaring of the circle.

But let us stop in time along the path of symbolic interpretations which, suggestive as they might be, are not free of arbitrariness. In the rotating square we were able to see a configuration of the world: in the arrangement of quarters of a particular Saharan oasis the reference to the cosmic tree: in the dome on a square base the juncture of earth and sky. Without wanting to minimize these architectural correspondences, nor indeed the elaborations that the esotericism of the Sufis derives from them, let us say that the framework, within which our approach is situated, is intended to be strictly socio-historical. Even the mention of the Koran, to which we had recourse, and the importance that is attached to the religious establishments of the town, was not induced by idealism, much less by symbolism, but rather by a historical positivism which here affirms itself even so far as to be self-explanatory.

Our first model, that of a city unfolding around a sacred centre where civil authority would derive from the Imam and where science would be valueless except as an offshoot of the commentary of the revealed text, forms a part of the social and psychic reality of Islam. This must be taken into account, yet left open for reconsideration or correction in the second stage of analysis.

We shall not pursue the above findings with speculative considerations which are more or less esoteric. What we shall reconsider is the role that certain characteristics of urbanism, of architecture or embellishment play in the manifestation of a social order. This "iconical" part (C. S. Peirce) of the urban system seems to us to be of great consequence. And similarly the "shiftings" or intercategorical junctures take place in the town between the most diversified orders of things: symmetric modulations of exterior and interior spaces, forms of monuments, omnipresent decorative marks of reference or attitudes and movements that correspond to the iconic in the collective life.

Town/Country Correspondences

Just now we spoke of a three-dimensionality of the madina: orthodoxy, business, production. It parallels closely that of the Bedouin countryside: fertility of the fields and the flocks, violence of war, magical and religious ritualism. The government, product of war, is supported by rural taxation, and supposedly joins with the 'ulamā to ensure the reign of orthodoxy. Understandably, it isolates itself within the citadel and has cautious relations with artisans and the middle class. Whence the polycentric model that we thought we could develop. One of its advantages is that it allows for the insertion of the town into the open countryside.

Let us take a closer look. Middle class capitalism has settled in with its style, its language and its mind at the antipodes of the Bedouin encampment. It still participates, in its own way, in the same aggressive radiation. The Islamic city-dweller is not, as has been said too often, the antithesis of the Bedouin: he is the first term of an alternation. This was quite clear to the Umayyad caliphs, who alternated between living in town and in the desert. In recent times, the dichotomy between the city-dweller and the Bedouin has been able to nourish many political maneuvers, notably during the colonial regime. It has given rise to a solidarity in resistance to oppression, a solidarity which surprises Western man. The nationalism of the 1920s, which came to power almost everywhere in the forties, asserted itself fully only through this synthesis between tribal bitterness and the language of the bourgeoisie. The medieval town also manifests the synthesis clearly. A basically
warlike power, backed up by a Bedouin rear-guard inserted its own home, the citadel, into the middle class order which itself was inserted into the tribal environment.

Such correspondences are precisely what interest us. The ubiquitousness of the dome and the rotating squares, while offering a characteristic motif, leads us to a structure where their relationships which constitute and the correspondences they produce count more than their material consistency or even their form. And these forms themselves count perhaps more as references of a system than as achievements in themselves. Below, we shall try to draw certain practical corollaries from this idea which diverges, as one can see, from all aestheticism.

The Organic and the Critical in Confrontation in the Modern East

Whatever else, I would like to think that this too—rapid analysis will have made clear two indisputable characteristics of urbanism in Islam.

1) The subtlety of spatial treatments: they make the city become not the opposite, but rather the counterpart and, even to some extent, the total realization of the open country.

2) The unity of a system which from dimension to dimension and from level to level plays upon reminders, landmarks and connections. It is quite justifiable to qualify it as "organic" in the sense given to the word by utopic socialism—whence the strength of appeal that still emanate even today.

For a century at least, and in an increasingly ravaging manner, the expansion of industrial societies (powers, models, languages) disturbs the Afro-Asiatic world to such an extent that its very identity is being compromised. It seems Muslim towns, by necessity, have undergone the change in a more conspicuous and more irreversible way than many other categories of these societies. The madina, which was already encumbered by suburbs and whose competitive energies have for the most part been undermined by centuries of decadence, is now in unequal competition with the new quarters. Its ancient labyrinths, torn up by road workers or speculation, are being emptied of their riches. They are becoming proletarianized, while the imported new town, a place of acculturation and deterioration much more than of contact and exchange, is superimposed or added to the old site.

In 1924, over most of the Islamic world, the end of the Ottoman caliphate marked the founding of a point of reference and the end of a plenitude. Most of the Muslim countries were colonized and they resented the intrusion deeply. Pan-Islamism seemed inept, ineffective in new situations. Nationalism, a growing force at the time, is far from being able to maintain the old harmonies. It was born out of trouble and it spread trouble. Even without having to cope with rising socialism, it is out of context. Similarly, the deterioration of moral standards, the distortion of psychiatry, the breaking up of a social order are all reflected in the face of the towns, where the foreign presence is no longer the only visible sign of the rupture of the ancestral whole. From the '30s on, the suburbs and the slums have erected countertypes that are endlessly gaining in importance and which both contrast to the new town and the madina.

The right: for life claimed by these innumerable arrivals was a challenge to both the colonial power and the old hierarchies. It was also felt, to use Henri Lefebvre's phrase as a "right to the town." Perhaps these still disorderly energies are not devoid of a sense of values; their participation in decisive struggles proves it, and the battle of the Cashbah of Algiers is the symbol of it. The old dialectic of the regular and the accidental, which was formerly illustrated in the heart of the madina by the opposition between the legal populace, dominated by high-class business and religious authority on the one hand, and by the masses in their rags, hazardous and rebellious on the other hand; will this dialectic adapt itself to the new times? Democracy would find its reckoning there. Architecture, as well as urbanism, should assist in this.

The realization of this hope, which we expressed in an already out-of-date article written in 1959, does not depend on the decision of experts any more than on the attitudes of the intelligentsia. However, the intelligentsia and the experts could propose questions, if not solutions. Questions which keep in mind that it is not simply a matter of coping with the technical imperatives of a modernization of urbanism and architecture, or just the demands for an answer to the multiple needs of an urban life. It will be a much more urgent matter of participating in a debate between different civilizations.

The organic, then, is dead or will die. We are all involved in a critical era. An iron age, if you like, one which will not be satisfied with eclectic solutions. Not only is the well-being of the happy few at stake, but the terrestrial destiny of multitudes. Likewise, the arena of action has changed. The town is no longer the enclosure where the conflicts between the norm and the accidental were resolved in forms and in rhythms. It has become the battlefield where there is confrontation between galloping democracy and exclusivity, luxury and poverty, cosmopolitanism and traditionalism, demands and repressions.

To be sure, this problem is not peculiar to the East. Aside from national and cultural idiosyncrasies, it has common denominators, both technological and sociological in many countries. These have been well described by Lewis Mumford in the United States and by the Buchanan Report in England, among others. But in Islam it takes on a more serious and more implacable turn. It is aggravated by the telescoping of eras and strategies. It is not that rival schools of modern urbanism (culturalist with Camillo Sitte, sociotechnical with Gropius or Le Corbusier) cannot find an application in the East. They, in fact, find many. But the option for industrialization or revival, the more or less enthusiastic or restrictive attitude to the latest techniques, the social choices
that the styles of architecture and urban designs from the West imply, have been introduced here into the uncertainties of identity. The argument over decisions does not arise only from aesthetic and sociological rivalries, as in Paris over Les Halles, but also from the moral antithesis which in the East opposes two imperatives which are apparently equally powerful: that of the safeguard of an authenticity backed up by religious faith versus that of a modernism haunted by the movement of the world around it, an antithesis exemplified by Gourna or Chandigarh!

A Working Hypothesis

In Europe the succession of fashions and the rivalry between schools of thought allow a certain degree for correction and equalization. Someone like Ricardo Befill can today react against the rather excessive impact of industrial dynamics and the effect of functional reduction on the architecture and the urbanism of the last fifty years. His new aesthetics will not appear as a disavowal but rather as a useful complement, a compensation of industrial progress. The same is not true in the East. The countries there have so many glories to re-establish, so many delays to catch up on. There, in every case, modernization constitutes a preliminary for a return to authenticity. How else could this return succeed without arms and equipment and, indeed, popular support? This dilemma, in which so many talents are involved, is largely fallacious. It smacks rather of timidity in the analysis than of actual contradictions.

First of all one must make the following assertion. All things considered, in the East of the last third of this century, one can no longer safeguard this authenticity, because it is besieged on all sides, dislocated in entire sections, and, in the best of circumstances, deformed by its very resistance. Still, if one can no longer safeguard authenticity inasmuch as one assigns it to the past, another no less realistic (but this time optimistic) hypothesis does not prevent one from constructing a new authenticity which would belong to the future.

Let me explain. The conservation of remains, brought to light more or less exactly from their heritage, is largely a matter of nostalgic idealization and is felt by most to be incompatible with the demands of what is commonly called progress. Is it, therefore, necessary to denounce the “myth of progress,” the dangers of primary education, of democracy, of technical achievements, large architectural projects and cancerous suburbs? Will it be necessary to contrast the splendour of lost paradises with the sad ransoms of modernity? All is possible, and we must realize it if we cling to an elitist philosophy, to a khāṣṣa ideology. But it would be impossible to envision seriously the scope of collective achievements. There is no monasticism in Islam (Lā raḥbāniyya fī al-Īsām). The initiatory rituals seem to us no more adapted to the extroverted and largely community-oriented attitudes of historic Islam than to the contemporary impetus of the masses. Besides, in what country can one reckon that the peoples’ hopes confine themselves to demands of salary and of well-being, or intercontinental exchanges, or is it the expansion of the media which is making the universe simultaneously accessible? As we can see clearly in the case of the ecological movement, which was born in industrial societies at a time when the peasant classes were being dispersed, nature exists no longer, ergo nothing organic either, except by and despite artifice. But it is up to us to master and finalize this artifice.

What is more legitimate, then, is that man’s completeness, his harmony with the universe should depend both upon his instinct and upon his utopia. They can be achieved from now on through struggles with and problem-solving of the present. We have no hope of attaining them except through the afterlife of the industrial age. As sovereign as this age might be, truly it has been unable to create a civilization equal to its needs and its means. Instead of concluding from this assertion a fallacious need to turn back, we should realize the existence of a need to build the very civilization that an industrial age has been unable to build. We must try to build it beyond its deficiencies with the help of its material and conceptual means. This civilization would have to be pluralistic, or nothing (i.e., both wide and transcultural or nothing). Therefore, we can predict the certainty of the role Islamic civilization would have in this rebuilding. A civilization, true, and hence to be renovated in its basics and according to its basics. Did not the Prophet say: “At the beginning of each century I shall send a reformer to my people; that he might renew their religion”?

For a True Defense of the Specific and the Authentic

When one studies the Basilica of Monreale in Sicily, several indications come to light concerning the way in which the conflicts of different civilizations were presented and resolved. The identity of the whole has incorporated numerous Arab accretions, especially ornamental ones. Reciprocally, the Mosque of Kairouan, of which it has been said that “the space alone is Arab,” has collected Romano-Byzantine features but integrates them to its system. Despite its heterogeneous character, it is as Islamic and Arab as Monreale is Christian and Norman. These two cases confirm what we already knew, namely that the meaning of a whole resides not in its elements but in the combination of those elements. This is true of every product of the mind and of work, in every social and cultural category: economics, religion, arts and customs. This fact could throw a decisive light towards the solution of the theoretical and practical problem that we have introduced in this study.

We believe that for an Islamic architecture or urbanism, it is not a matter of inserting, in a cosmopolitan reconstruction, a motif taken from Fez, from Isfahan or from the Taj Mahal. Pointing to the Taj Mahal, one might add in passing that it has had such a
strong appeal for international artisans. Unlike the Taj Mahal, reincorporation of fragments of an old style into a building conceived according to a system adopted from other systems can be charming on the aesthetic level. On the national level, it can be reassuring. For all that, it does not serve an identity. What would be necessary, we believe, would be the revivification of the original system, the Islamic one in the generic sense, by incorporating into it all foreign elements (materials, techniques, even styles) that could be considered suitable. Of primary importance is that the system be safeguarded. Every great civilization, in the long run, is but a system of variations and constant reuses.

In fact the falsification of the system is not at all due to such reuses, which Islam has used to a great extent in its great centuries (think, for example, of the civilizing influx that it drew from Greek philosophy, from Mazdean theosophy, from Nabatean agriculture). Instead, it is due to the fact that one clings to certain aspects, taken out of their original context and where one would search in vain for a paradoxical continuation of sameness in the adherence implicit in otherness. And it is that, unhappily, which is the most often seen.

It is true that the task or revitalizing a system (and not of making a fetish of a motif of it, of inserting it into an alien system) can be seen to be arduous both in theory and in practice. "So difficult is the usage of what is national," said Holderlin. And in that we find once more one of the dialectics of our times: that of the specific and the general, of the particular and the global. To elucidate these antitheses is to define a problem. Alas, the treatment of this problem comes up against a multitude of practical difficulties, as well as mental habits. A vicious circle is formed.

The first true procedure is then to come up with a specific system. This specificity no longer resides within our familiar horizons, which, obviously, are a result of haphazard sedimentations of time. We have no reason to accord privileges to those sedimentations. And the Muslims have less cause than anyone else, for they were led to dependency by them. For example, how far back in time should we search to elicit a model? As far as the "great centuries?" But which century would one choose for Cairo? That of Ibn Tulun or those of the Mamluks? According to us, the model is nowhere to be found. It is necessary to create an abstraction based on the strength of factual and historical and architectural studies, and literary and psychological studies too, through a process of rigorous analysis.

An added problem crops up with the first difficulty of a rigorous investigation which, on every level or sub-level of civilization, would provide not only the aspects of a style, but its internal number, so to speak. The art of the urbanist and architect functions in the empirical present, and must respond to a concrete need, which is generally uninterested in any deeper investigation. The investigation will produce a system that, inasmuch as it will be an upholder of true authenticity and not of its circumstantial accretions, will be far too cold. Since it will be abstract (as scientific rigourous demands), it will only work if it rallies the "human, all too human" support of the city—dwellers and of everyday life.

Our present time has to take advantage of all its modern means for a persuasive rhetoric (an Aristotelian rhetoric, of course) of urban and house settings. The "functional," the "useful," the "bargain" are only one side of it. The "beautiful," the "unanimous," or at least the "suggestive" and the "convincing" should guide them just as much. One or another of these different qualities, which in fact are quite contradictory, are very often pursued concurrently, by this or that urban or architectural project, which will put them forward as a justification or raison d'être. If what I have just said is right, these qualities should from now on be considered as mere means of persuasion, the axis of the project being always this stubborn reconstruction of authenticity in the modern and of the specific in the global, which should be one of the moral codes of our times.

Here, however, among all the difficulties which arise from the removal from the usual environment, from acculturation, from influences, from the pressure of the outside world on the Islamic habitat, there intervenes a favourable adjuvant: the
extraordinary continuity with which this society turns to its sources, its attachment to the inaugural, its faculty for perpetual recurrence, for indefatigable recuperation of identity.

From the Model to Utopia

One can, in any case, legitimately assume that the unifying and singular behaviour which is characteristic of Islam will survive the upheavals of modernity. It is by and in modernity that it aspires to self-realization, an ambition that is fully justified by its impact in history and its capacity for the future. This ambition is one that is very widely shared, and one which the architect and the urbanist, among others, must keep in mind as long as their aim is to serve the hopes and crying need of the majority with their art. Here again they will find their surest guarantee in their fidelity to authenticity and to specificity. But may I say again that these two qualities do not reside in the empirical restoration of the past (cf. Viollet-le-Duc’s Carcassonne). They consist in reprojecting into the collective living, both present and future, the algorithm of an identity. By algorithm we mean the dynamic configuration that the analysis will have extracted from realized works and even more from their potentials. At this degree of abstraction (but of an abstraction that is provisional), the model that we are going to propose will have but little connection with the radiocentric image of the madina, and let us admit that we will minimize the value of its polygons, domes, minarets and fountains, perhaps to keep them simply as points of reference in a system.

1) This Islamic town, a circumscribed modulation of space, will cut through the space around it, but will at the same time respond to that space with a sort of inverision of rhythms and forms.

2) The town will attempt to integrate in a reciprocal manner, order and movement, which would balance each other out in the allotment of empty spaces and filled ones, aiming for harmony between the regular and the accidental, between need and desire.

3) The distribution of light and shade will organize in the town the respective domains of public and private life. Correlatively, it will define the collective and familial and the productive and cultural.

4) The neighbourhood will be the module where these different dichotomies will function, inasmuch as the neighbourhood is an autonomous sub-multiple of the town. This sub-multiple will itself be articulated, according to case and level, in individual or collective habitats.

5) The diversity, or even the organized heterogeneity among the neighbourhoods will be functional, or more exactly multidimensional. Four main foci (religious, municipal, university, economic) will command the general layout with their reciprocal interference, and large avenues will stress their relationship of exchange.

In the last paragraph can be recognized the modernist avatar of the great mosque, of the citadel, of the madrasa and of the qayyariya, familiar motifs of the old madina. In earlier paragraphs one can recognize the transposition of ancestral elements which to us seemed most characteristic. This demultiplication does not mean a renunciation of unity. If it seems necessary for a long time yet to admit the dichotomy in knowledge and its expansion in a religious and in a non-religious centre, the public services themselves will have to manifest their ability to complement each other. To put it differently, the initiative of the neighbourhoods, which operates for a “vital community,” will have to manifest its links (by diverse details of urbanism or architecture or decoration), with the central municipal agency. Later we will see what I plan to do with what were formerly the town’s ramparts.

As it progresses, our model will also become utopian. By that I mean the project will include the participation of dreams and games, with this forced corollary that rationality could never reign alone in the model, but should make room for what Hegel called “the irrational concept.” That was already present in the madina of the golden age and that is why we are still excited by the evocation of adventures in Granada, Cairo or Baghdad. Utopia also reminds us of those plans of a radiant city, the Heliopolis that every nation dreams of at one time or another, and in whose series Farabi lies between Plato and Campanella.

An Islamic Heliopolis

We see this madina of the future undominated by empirical reminders, by vain restorations of Cordoba or Basra. Distributed according to a quadridimensional order, it will arrange a quadruple radiation in multiple waves, whose intersections will determine a woven pattern. The design of its avenues will enhance the liaison between its four foci. Thus it will obey their presence in every one of its areas and neighbourhoods, just as formerly it was intended to obey God’s presence. But it would also know how to organize a variety of games, of celebrations and contingency for the poor and the marginal.

City in the sun, it will also be city in the shade: squares enclosed in neighbourhoods, the curvilinear network of secondary roads, interior courtyards, the sun-screens of façades and still more features our present technique allows for; all will recreate an interplay between light and shadow to offset areas where daylight will systematically reign. For sure the madina will remain faithful to the aesthetic features that its sensitivity demands, but it will not confine itself to these. Of more importance for it will be the fact that its urbanists, architects, painters, sculptors and decorators ignore the academic diffusion of genres and create forms which, from volume to surface, from basic structure to ornamentation complement and complete each other. The algorithm, like the word of God formerly, will not only
underlie the order of the whole. It will also blossom forth in images and blazons at the level of the neighbourhood and indeed within the very dwellings.

Justifiably anxious to solve its municipal problems, the madina will temper its municipal order with the organization of peripheral energies (e.g., neighbourhood committees, syndicates, youth organizations). Anxious to create (which naturally it does not confuse with productivity only) it will alternate work with leisure, regularity with the effervescence of numerous mahrijans.

Exalting in its configuration as in its economic and cultural roles, its ability to complement the surrounding countryside, it will all the same maintain the clarity of its message. It will not be dilated into suburbs; it will not grow tentacles. It will have replaced the ramparts of former times with another aureole of demarcation, with an aureole of stadiums, of palestras, of communal houses where the cultural and the magistral will re-establish their former fertile alliance, far from the four part loci of order. This encircling vestibule of urban life, in some ways its accomplishment, will be much more worthwhile, will it not, than the zone of lowly professions, of cemeteries and dung heaps which used to surround the madina? But the madina would perhaps have kept the monumental door of the enclosure (which did survive), to keep the feeling of a threshold.

The town will be without enclosure. Encircled neither by pressures from without nor by prohibitions within, it will safeguard its distinctive being through the thousands of references and the solemnity (in the eyes of God as well as man) attached to an act of entering and leaving a system. And this act will, of course, be free.
The Islamic Environment: Can the Future Learn from the Past?

Fazlur R. Khan

Today, as at no other time in the history of Islamic civilization, there is a critical need to reevaluate the essence of Islamic environment and architecture to successfully meet the demand for new environments in many Islamic countries. A new economic reality has engendered unprecedented programmes of building new cities and total environments for living, working, studying and praying. The force of modern technology, whose base is primarily Europe and America, is so overwhelming, so deceptively attractive to these countries and so responsive to their desire for fast construction of unprecedented scale and volume that it is almost impossible to resist the temptation to copy by and large their methods, forms and technology. This technology has hardly had time to be filtered through the Eastern and Islamic philosophy and to emerge in a form which could adequately transform and translate the experience of the West into a relevant planning and architectural basis for the East and Middle East. As a result, buildings of steel, concrete and glass are mushrooming all over these countries almost overnight, perhaps especially in the Middle East, all looking very much like their counterparts in the West. Unless one is aware of the actual site of a given building, it is indeed virtually impossible to guess its regional location. The technology of mass production is a significant contributor to this phenomenon. It has evolved in the West, and Western lifestyle and urban character have had time to evolve with it and to adapt to it. Its direct application outside the West, without proper modifications for the local culture, heritage, climate and building tradition, can only express a barrenness of spirit and create an environment that is irrelevant and inefficient.

What can be done to modify this trend? It is only possible to do something about it if we can identify the primary essence of the Islamic architectural heritage and then examine whether or not it is at all possible to retain the essence and the meaning while using contemporary technology. On the other hand, if the essence of the Islamic contribution to architecture as a whole is not at first understood by each country and region, and the forms of well known older buildings are simply copied, the result will be false in meaning and irrelevant as contemporary architecture. It will neither be truly Islamic in character nor contemporary in technology.

What Is Islamic Architecture?

To talk about Islamic architecture we have to define what is Islamic that may affect architecture itself, the real details, the real orientation, the real forms, the real spaces and the real relationships and, finally, the environment that may be called Islamic.

The visual image and identity of architecture in the formative years of Islam’s spread east and west can be best defined by two types of buildings: the mosque and the palace/fort. If anyone gives an example of Islamic architecture, he would normally point to one or the other of these two types. The architecture of the mosque as well as the palace/fort varies from country to country, but the overall arrangement, form and spatial relationships tend to have great similarity. As Islam spread from Central Arabia to Morocco and Spain in the west, and India and Indonesia in the east, these edifices adopted many features of the local pre-Islamic architectures, but blended them into the basic form and space with an emphasis on symmetry and continuity of space in all directions. A sense of unity, equilibrium and peace emerged. The commonality of the architectural attitude from the beginning of the seventh century to the end of the eighteenth century is founded, on the one hand, in the willingness to adapt to local materials and local image, to respond to local climate and, at the same time, to hold onto the thread of the basic principles of Islam. Teachings of the Koran and Shari’a, which affect the concept of overall Muslim life, ultimately shaped the Islamic environment. The immediate question, then, is: what are the most significant principles of Islam and their interpretations which determine the character of architecture?

Islamic Principles in Architecture

The revelations in the Koran, set forth through Prophet Muhammad, make an individual understand the supreme nature of God. Every individual Muslim must be upright, righteous and just on his own account, but humble and totally submissive to the will of God. The Muslim is reminded over and over again that while he is allowed to enjoy the normal and serene pleasures of life, excess and grandeur in any form is contrary to the will of Allah. In the pursuit of one’s activities through life, it was therefore important to search for simplicity and humility and to avoid waste through the frivolous use of resources. Excessive expenditure on buildings was a frivolity. It is in this spirit that the first true Islamic architecture took its shape in the first mosques ever to be built. In Basra in 635 A.D., a mosque was built by simply defining the boundary of a lot approximately square in shape and enclosing it with a fence of reeds. In Kufa in 638 A.D., the mosque had only an unenclosed covered colonnade. Since the purpose of the mosque is to provide a place for communal prayer, there was indeed no preordained form of architecture at all. The covered colonnade on the qibla side provided the first hint of any architectural form in the Mosque at Kufa. As the might of the Islamic rulers spread out from Arabia, churches as houses of worship had a definite influence in the first mosque architecture in terms of actual buildings. Frequently, materials for columns and beams were taken from other edifices of previous cultures; but the simplicity of the mosque form, generally a square overall plan with covered colonnades along the qibla wall, has remained the primary mosque-type to the present time. The function of the mosque is to let Muslims at prayer time stand shoulder to shoulder in rows facing the Ka’ba to perform the prayers. Columns supporting the roof structure, in fact, always blended into the mass of people standing shoulder to shoulder at prayer time. What was really important was to create a sense of space evoking spirituality of the environment, a
feeling of peace, harmony and the humbleness of the individual. Monumentality and embellishment were not predefined objectives in creating such spaces. It is only in later developments, with the contribution of creative artisans and builders, that we find a third dimension of spirituality created through patterns, colours and calligraphic designs based upon quotations from the Koran. Every pattern and graphic design was directed to creating a sense of peace and harmony and dedicated in praise to Allah. The resulting multitude of artistic creations today stands out as the hallmark of Islamic art in architecture, on the one hand, and the very essence of humility and submission to God on the other. It is through the understanding of this evolution of Islamic art and architecture in mosque constructions that one can begin to see its potential continuity and transformation in contemporary architecture.

The palace/fort on the other hand has been primarily the expression of political leadership and power. One of the important forces in the formation of its plan

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_Tunis, Tunisia: plan of city centre showing public and private use of space. Areas of private use are shaded._

*Plan. After A. Lefcine*

_The courtyard as a temperature regulator._

_Diagramme: After The Development Workshop_
and layout was the concept of family privacy and the role of women in the family and in the society. Thus, there evolved a very special juxtaposition of the public, semi–private and private spaces. Men and women did not socialize together outside the immediate family environment. Palaces utilized one or more outer courts dedicated to various levels of social interaction among men. Separate and distinct from these were other inner environments dedicated to women only or to the entire inner family. The inward–looking courts of such palace/fort complexes were invariably designed to create a sense of peace and beauty with delicate play of water flowing through the court, evoking paradise. What could be better examples than the Court of Lions and the Court of Myrtles in Alhambra?

There was also an environmental justification for such courts. These courts not only provided the intimacy of space in these building complexes, but also a temperature regulator. Thus, the inner court took different shapes and characters in more temperate or tropical climates.

Islam requires that each individual stand on his own merit and be responsible directly to the Supreme God. There is no intermediary in this process, and individuals must make decisions on their own and also must take the consequences of the decisions alone. It is this attitude of life that permeated the individuality of architecture within the overall commonality of forms. This has a direct bearing on why standard dimensions or standard forms of spaces and plans have never been developed for everyone to follow. Consequently, the significance of the Islamic architectural tradition has never been in quantitative proportions, but in the overall inherent quality of inner and outer spaces. Therefore, what is a right proportion in one building, can seldom be taken directly and used in another building in another setting.

The individuality of Islamic architecture expresses itself in mosques, but perhaps more clearly in the palace/fort design, in that both semi–private and private inward–looking courts in the same building are seldom similar. Reflecting different use and function, the spaces differ from one another; each assumes its own identity and functional justification.

Symmetry and Centrality

The concept of symmetry in plan and elevation outside buildings as well as inside courts has been a hallmark of Islamic architecture. And, inherent in the symmetry is the strength of the centrality that is strongly expressed even in Islamic town layouts. Centrality and symmetry help harmony and unity and are extensively used in the mosque as well as palace/fort structures. One must, however, make a distinction between actual symmetry and conceptual symmetry. For example, the actual dimensions of two opposite sides of a plan, or two opposite elevations of a court in many historical buildings often differed considerably, such as in the Great Mosque of Kairouan. Frequently, the dimensions of intended rectangular or square shapes were not exactly maintained, and therefore, frequently had different side angles and lengths. These technical and measurement discrepancies notwithstanding, the symmetry and centrality of the spaces created were essential in their effect on the inherent quality of space and the sense of harmony.

Respect for a Limited Resource: Water

The description of paradise includes a stream of water flowing beneath the garden. Water is a life–sustaining and very limited natural resource in contemporary and historic Arabia. Islamic architecture in the arid lands, therefore, always acknowledged its limited supply and considered its restrained use a very important aesthetic element. It is not the gushing, spraying fountains that represent the ideal, but the gentle, single, thin jet of water making soft, trickling sounds in a delicate setting. Instead of using water in abundance out–side buildings, it was always used in sensitive settings inside buildings. Almost every court was adorned with a fountain, each different from the other. Frequently, in the search for creating a bit of paradise, a small channel of water would flow gently out of the central fountain, or one located at the edge of the court. In mosques such fountains also served as the ablution centre and in some large courts as the source of water for irrigating small trees. The Mosque in Seville, the madrasas of Fez and the courts of the Alhambra are all exquisite examples of the marvel created by a trickle of water when used with architectural sensitivity. It is this symbolic use of water that has remained a strong element of Islamic architecture.
Form and Climate

In a dry environment, the sun is strong and the day very hot, but the evening cools down with a gentle breeze. Natural architectural forms using appropriate local materials have evolved to retain the coolness of the evening throughout the hot day. At other times, forms evolved to catch the cool wind when it blew.

For such a climate it is understandable that the building elements of walls and roofs would have to have sufficient thermal resistance. This dictated the use of heavy, thick walls of mud, masonry or stone. The openings to the outside were only small windows placed strategically on the outside wall and protected from vision as well as strong sun by a decorated grillage of masonry or wood—the mashrabiya. The inside plan of the building frequently used the court form. Surrounding the court were covered colonnades and the rooms were arranged to open onto balconies overlooking the court. This arrangement, which must have evolved over years of trial and error, allowed cool air to flow through the building into every room in the evening. In the daytime, when outside windows were closed, the coolness was maintained inside the rooms by heavy walls which absorbed any heat built-up.

The courtyard then became the controlled source of light, provided shade as the sun moved across the sky, and allowed a portion of that light to be used all day for indoor living purposes. Thus, the open courtyard was in effect the inner living space.

In more densely built cities such as Holy Mecca, the building lots were too small to provide reasonably-sized courtyards and, quite often, buildings used only exposed mashrabiya on the outside walls and had inner windows opening into small light-wells. In most cases, the streets were narrow enough so that buildings provided shade throughout the day. For the mashrabiya timber was considered the most acceptable material, primarily because it did not retain sufficient heat during the day to radiate it back in the evening.

Wood is, by touch, a cool material and its use in the mashrabiya provided a sense of coolness during the daytime. Also, it could be easily adjusted for the proper level of privacy. Additionally, it is easier to create intricate patterns with wood than with stones.

Islamic architecture in tropical countries, such as the Indian subcontinent, used local material and many pre-existing details of architecture for flow of air as well as shading, but rearranged the overall exterior forms and the openings into the building to respond to the basic attitude towards privacy. In some cases, the orientation of the entire building could be dependent on the direction of the Ka’ba. Most often, however, it was not a crucial determinant in the organic urban growth.

Vertical Space

In religious as well as ceremonial buildings, the spirituality of interior spaces was invariably derived from the loftiness of the space itself, but it was never expressed in visually barren terms. Therefore, while standing in such space, the eye moves upward and meets transitional elements, such as beams or arches, which modulate the space and gradually allow the eye to meet the ceiling without a sense of abruptness. Intermediate vaults, arches or cross beams with a dual structural purpose were frequently used. Their continuity of vertical space created a distinct visual quality.

What more beautiful example of this can be found than in the Mosque of Cordoba? There, the vertical space is mediated by the treatment of the horizontal plane of columns and arches that give it the
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Cordoba, Spain: an intermediate vault in the Great Mosque
Photo: R. Holod

against the sky. Looking at an Islamic building from a distance, there is always a feeling of interweaving with the sky as a backdrop while seldom creating a sudden linear cut-off at the rooftop. Looking closer at the top of the walls, one sees an interplay between the top edge of the walls and the sky above through various designs that break the linearity of the roof and wall top. Once again, the unity of the sky and the earth becomes affirmed through these details.

Adaptation of Local Materials

The architecture of any culture at any time has depended greatly on the structural materials available at that time and their potential limits of use for creating spaces. When we go to Mecca, to the Hajj, we find one of the most important shelters is the tent. In a village in Bangladesh today, we find a little mosque in the environment of trees and huts where someone has decided that the mosque must still have a minaret.

If we went to Zululand today where they are converting to Islam, would we suddenly say that their huts are not Islamic? Do they suddenly have to build the structures of Arabia, Morocco and Iran to make an equivalent of Islamic architecture? Or would we be willing to accept the huts, organized according to the rules of Shari'a, as a valid Islamic form? The origin of Islamic architecture was in the Arabian peninsula and the Mediterranean where the most prevalent construction materials were stone of various kinds, imported timber and sun-dried or baked brick. It is in the context of these materials that architectural forms were evolved. Bearing walls with vaults and domes were the resulting most common forms. Domes were the natural roof forms to span larger covered spaces. For colonnades with flat roofs, wooden logs or cut-timber beams and purlins were the most natural choice. From the early tents in Arabia to the gabled, tiled roofs in Morocco to the masonry and stone domes in Iran and the Indian subcontinent, Islamic architecture has taken the most appropriate materials of the time and place and used them to create spaces of tranquility and unity.

Today, one must add contemporary materials such as concrete, steel and glass to the inventory of building materials and complement them with traditional materials with the same sensitivity.

Islamic Town Plans

The character of Islamic towns emerged from the organic growth of dwellings, mixed with shops and other business buildings, keeping the community mosques as the focal points. Mosques were frequently integrated with a community madrasa having different levels of schooling facilities. The mosque complex became the reference point in the urban fabric. Meandering streets all seem to radiate and merge from one mosque to the next. The division of land was not based on a uniform method and was seldom done with geometric discipline, therefore hardly ever followed straight lines with no end. The size and alignment of lots was due to the continuous subdividing of land and, often, the result of uncontrolled urban homesteading. This organic character was further enriched in the Islamic towns through surprise vistas at every corner of the street and every bend of the road, a characteristic which can be identified today as a part of the Islamic heritage in human settlement. Behind the walls on these meandering roads were often delicate plans of small and large homes, each responding to the local climate and, most importantly, to Islamic life with its accent on privacy. If a house had no separate court for the inner-family environment, it would at least have distinct separate entrances within the main gate, so that female visitors could bypass the general living area and make direct entry to the inner-family living area.

When we look at architecture of the habitat of the old Islamic towns, we see that the affluent tended to borrow from...
both mosque and palace concepts of space and form. It was often a deliberate copy of both themes. The dwellings for the masses, as in many other cultures throughout history, were not a matter of deliberate creation of architectural edifices, but the organic approach to providing shelter and satisfying the basic needs of family living. Architecture, such as we often seem to admire, is something the average man could seldom afford. But the non-standardized and individualistic solution of each home is what makes these urban environments so human, spatially distinctive and devoid of any sense of monotony or repetition. One must remember however, that the growth of urban centres in the early Islamic cities, as indeed in all cities of the earlier cultures, evolved over long periods of time, brick by brick, and stone by stone, with masons and craftsmen of a wide range of expertise and sensitivity working through generations. It took many years, and when the substantial portion of a town was built and completed, there was a great diversity of age and style in architecture. The technology of mass production had not yet arrived.

**The Challenge of the Future**

The indiscriminate creation of irrelevant and inappropriate architecture in the Islamic countries should be a concern for anyone who has an interest in history and preservation of the Islamic architectural heritage which evolved over long periods of trial and error. It took hundreds of years to gradually develop and refine the quality of space and environment. It is becoming apparent that in the next few years, with the use of intensive mass production in construction and the explosion of urbanization in Islamic countries, that the resulting architectural products will be irrelevant copies of the West. The new environments will have none of the original architectural sensitivity of their regions. No doubt, they will be very efficient but certainly not very human. It is perhaps easier to understand the basic principles and values of the Islamic heritage in architecture, but not so easy to find an adequate and appropriate solution for planning new cities and designing the new buildings of today.

We recently had an interesting problem in Jiddah: the **Hajj Terminal**, an international airport for about 80,000 people waiting to go to Mecca at any one time. The question was, did we want to air-condition this space in fancy style, or did we want to create an environment evocative of the entire experience of the **Hajj**? Should the pilgrims come through an environment for ten to twenty hours that is totally artificial and divorced from the environment in which they are going to be? So what we actually created is a terminal that is nothing but a series of covers. It is a kilometre square area with tents that start at twenty metres’ height and rise forty metres. Whether this solution is Islamic is something we can discuss. But should we not consider environments as the primary element and then see whether we can create the spirit that is needed? It may or may not be successful, but an effort must be made to do that.

The root of the problem lies, perhaps, with the trends and technology of building construction on the one hand and the need to create instant cities with mosques, offices, schools and dwellings on the other. Some of the Islamic countries are finding themselves in a great rush to plan and build these new cities and, in desperation, they turn to Western technology for a total solution. Contemporary building technology, like all technology, is impartial and

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*Façade Architecture: An Instant Solution?*

Travelling today through some Islamic countries, one notices the development of a type of architecture which can only be classified as façade architecture. Eager and innocent clients are made to believe that putting on a façade of arches or false vaulted cantilevers will automatically guarantee an Islamic nature to architecture, no matter how badly the interior spaces are designed, both in plan and volume. This kind of architecture is now vigorously practised by some. It is a definite menace and a roadblock to those sincere, thoughtful planners, engineers and architects who avoid reproduction of traditional forms by directly copying those who attempt to evoke spirituality, tranquility and beauty through honest and sensitive use of contemporary structures.

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*Jiddah, Saudi Arabia: Skidmore, Owings and Merrill project for an airport terminal to facilitate movement of Hajj pilgrims*

*Photo: Skidmore, Owings and Merrill*
inert. Without proper understanding of or empathy for the cultural, social and religious characteristics of a country, Western technologists, often innocently but forcefully and efficiently, propose the direct use of Western mass production. Such an approach, applied first to the overall plan of the new towns, and then to the row-after-row placement of complete lookalike buildings creates a totally alien environment. They cannot then respond to the cultural needs or the need for the individual expression of each occupant. Such an approach, nevertheless, produces the required quantity of buildings for the given quantity of people within the given time limit.

The situation is being further complicated by the deliberate choice of some architects and owners who have had more time to see the West and less time to appreciate their own architectural heritage. Some of these individuals, after their return from Europe and the Americas, simply decide that what they saw in Switzerland or Finland or the American West is what they want to have copied exactly on their property in their own country. The results are architecturally irrelevant to say the least and, more importantly, they are philosophically devastating. Unfortunately, if the construction of such irrelevant architecture should continue at this rate for the next few years, most of these countries will end up as graveyard copies of Western architectural copies. It will be so, because most of these copies are unworkable, artificially sustained buildings that will eventually become unusable and uninhabitability once the affluence of energy supplies ceases to exist. It is time, therefore, that a renewed awareness of the essence of Islamic architecture be encouraged to change this pattern. This effort must be directed to each level of ownership, and to planners, architects and engineers. Indeed, it is also time that the governments, through rigid requirements of environmental compatibility (similar to environmental impact studies in the U.S.), encourage the evolution of contemporary Islamic urban forms and architectural/engineering solutions within the constraints and freedom of contemporary materials and methods of construction.

Checklist for a Prototype of Contemporary Islamic Environment

If one takes the hypothetical case of a new town being planned and developed for occupancy within the next few years, one can create the following checklist of objectives which might help to evolve an appropriate Islamic solution from the macro-scale down to the micro-scale.

I. The Plan of the City

In developing the master plan, the planners should remember that the city is an organic process of human growth and, as such, should not be laid out immediately on a methodical grid just because it is very easy to keep track of the location of buildings and the construction of services. If possible, large areas should be kept free from automobiles. Pedestrian ways should be free of vehicles except under special conditions for emergency vehicles only. In the desert environment, broad four lane streets with sidewalks within the urban cores are useless and only create disharmony. Mosques and community centers should be located throughout the town, but not at a definite pattern of spacing. Flow of air and shading of sun should be considered in developing roads and public spaces. Landscaping should be used only where it is realistic in terms of available water. Lifestyle must be a key factor.

II. Habitat for People

Prefabrication techniques using precast concrete or simply block construction should be used in a flexible manner that will allow some level of individuality and uniqueness in each home, perhaps by encouraging each occupant to expand and add according to his own needs. Local materials certainly should be used as much as possible in a manner that allows full expression and form in the finished architecture. To provide individuality, monotony of exterior walls or interior courts should be avoided. Traditional construction materials should be re-evaluated and technologically upgraded.

III. Mosque, Institutional and Ceremonial Buildings

The mosques and more ceremonial buildings, government or institutional, should evoke a sense of space and grandeur as is necessary, but this should never be developed as artificial forms directly copied from the past just to create an impact. Façade architecture must be rejected in any form. Classical domes, vaults or arches that were natural solutions to the material and technology of the historical past should not be reproduced indiscriminately, remembering that materials of today's technology do not require those earlier forms and shapes to perform their structural purposes. The quality of space and the spirituality of the volume must be created by understanding the meaning of these values and then utilizing contemporary technology and construction methods. It is not the exact copy of classical Islamic proportions or even of forms, but the symmetry, unity, harmony and continuity of space which should be the objective.

Conclusion

Islam has brought its unifying philosophy to many cultures throughout the last thirteen hundred years and its architecture has adapted and responded to these cultures while maintaining the fundamentals of the Islamic way of life. In its stride, it has adapted to a wide range of new materials and methods of construction. It is in this spirit of the past that we must look to the future of Islamic architecture.
The cultural heritage of the Muslims throughout the world in the field of architecture is indeed magnificent. And the Muslims in general have cause to be particularly proud of the major contributions made by them in the art and development of architecture. Having had a magnificent architectural past, the Muslim countries of the world are today facing an architectural crisis, a common problem of the evolution of an architecture which might have a link with their traditions and yet be in line with the latest technological advances. In order to capture the spirit of Islamic architecture, one would have to study the traditions of the Muslims from the earliest beginnings of Islam in Arabia to the gradual spread to Syria, Iran, Egypt, Spain, Turkey and finally to the Indo–Pakistan subcontinent and Southeast Asia. It might be worthwhile to highlight some of the notable architectural monuments built by the Muslims in the various countries, their distinguishing features and their gradual evolution. Naturally, I shall be dealing with the Islamic architecture of the Indo–Pakistan sub–continent in some detail. In analyzing and tracing the evolution of forms and construction methods adopted by the Muslims in their architecture, we should evaluate the basic characteristics of this architecture and whether the means of architectural expression adopted by the Muslims in the past are relevant in the context of present day conditions. For this purpose, an intelligent interpretation of the Islamic traditions and forms is necessary and the logical, functional and structural basis behind them has to be studied and understood. We have first to isolate from the varied forms of expression adopted by the Muslims in different countries the very essence of Islamic architecture, and to see whether it is possible to indicate a path or paths along which we should proceed in order to evolve an architecture identifiable as being in the true spirit of Islam.

There can be three distinct approaches to this subject. First there will be those who will advocate a complete revival of, and return to, the original forms adopted in early Islamic architecture. Second, there would be a school of thought which would recommend a total break with traditions owing to the changed conditions, modern building technology and the availability of new materials. It could be suggested that there is today a certain universality about architecture in view of these new factors. Third, there could be a middle course, a kind of enlightened renaissance of Islamic architecture unlike the renaissance of Western classical architecture in Europe which was largely confined to the repetition of the classical Greek or Roman forms. We have to aim at a modern interpretation of the basic spirit of Islamic architecture, reflecting the principles which were adopted by the Muslim builders rather than the outer forms and symbols... the spirit, rather than the substance.

It must be emphasized here that it would be unfair to assume that the architecture of the Muslims merely consisted of the dome, the pointed arch, the minaret or other similar features. Although the Muslims used these forms freely and with telling effect, they were no more than solutions to architectural problems which faced them at the time. A study of their past work would reveal a flexibility in the approach of the Muslims in treating the same subject in different countries, and sometimes even in the same country. In the Indo–Pakistan sub–continent itself there were tremendous variations represented by the regional character of Islamic architecture from Gujarat in the west to Bengal in the east. To cite only two significant examples, the Jami’ Masjid Mosque in Srinagar and the Mosque of Shah Hamadan in the same city have certainly no identifiable characteristics which are commonly found in mosques in other parts of India or Pakistan. These mosques have neither domes nor minarets of the usual type. Thus, it would be true to say that the Muslims did not apply any rigid rules regarding the external expression of their architecture from Spain to Egypt and from Turkey to the Indo–Pakistan sub–continent. Everywhere they went they took the fullest advantage of the available materials, encouraged local craftsmanship and, of course, took regional and climatic conditions into consideration. Despite these local and regional differences, however, there was a distinct stamp in the architecture of the Muslims and it is for us to determine the common denominator that is discernible throughout their work. We should certainly not look merely for obvious symbols but rather for subtleties of approach.

In my opinion, the six chief characteristics of Islamic architecture were: a bold approach to engineering and architectural problems, as exemplified by the construction of the Tolab Gumbaz at Bijapur, a dome of enormous diame, the adoption of geometric forms and symmetrical and
The Spirit of Islamic Architecture

axial planning. The finest example of comprehensive planning by the Mughals in India can be seen in the city of Fatehpur Sikri. The placement of the buildings in relation to each other, and the interesting spaces created have been expertly handled. This has been the subject of recent research in the spatial relationship of architecture; and third, the close integration of the building with the landscape, the use of both flowing and still water, formal planting of gardens and the treatment of different levels in the form of terraces. The Mughal Gardens in Kashmir and the exquisite Shalimar Gardens at Lahore are fine examples of this feature of Muslim planning which largely owes its inspiration to Iran.

The dexterous handling of scale in buildings is another characteristic. One of the most magnificent Mughal structures which illustrates this point is the Buland Darwaza at Fatehpur Sikri. Although the size of the gate is enormous, it is especially emphasized by the placement of the huge main archway in close juxtaposition with smaller archways which are in scale with the human figure, thus dramatically heightening the scale of the structure. Fifth is the adoption of interesting structural forms, such as domes of various shapes, interlacing arches, stalactite pendentives and squinch arches. Each of these structural forms was strictly functional, but the Muslims also used them in such a way as to create interesting decorative effects; and finally, perhaps the finest contribution of Islamic architecture was the vast field of surface treatment and decoration. In some cases, as in Spain and Iran, the emphasis was on colour and texture, the form of the building being less prominent. In other cases, as in the Indo-Pakistan sub-continent, surface decoration was used to emphasize and heighten the sculptural qualities of the form of the building. The main types of surface decoration used by the Muslims were: 1) The brilliant enamelled tile-work of Spain, Iran and Multan and Tatta in Pakistan. Perhaps the finest examples are to be found in the Alhambra at Granada in Spain and Lutfullah Mosque at Isfahan, 2) The exquisite geometric Mughal jalis or pierced screens in marble such as those in Salim Chishti's Tomb at Fatehpur Sikri or the Taj Mahal and Itimad ud-Dawla's Tomb at Agra, 3) The arabesques of Spain and Egypt, 4) Inlay work of coloured marble as in the Taj Mahal, Agra and the Diwan-i-Khass in the Delhi Fort, 5) Calligraphic inscriptions as decoration in bold relief found in the Qutb Minar at Delhi, 6) Geometric inscriptions as decoration in the buildings at Fatehpur Sikri, 7) Arrangement of mirror-work for decorative effect as in the Shish Mahal at Lahore and Delhi.

Apart from the aesthetic considerations governing Islamic architecture generally, there were usually very sound and logical
reasons for the forms adopted by the Muslims. They especially emphasized the regional expression of architecture and this was conditioned, among other things, by the climatic conditions and available building materials. To give an example, the form commonly known as the Bengal Roof was evolved by the use of the local bamboos arranged in the form of a curved cornice to deal with the problems of excessive rainfall. The pyramidal pitched roofs of the Kashmir mosques were meant to solve the problems of snowfall and to make use of locally abundant timber. Similarly, there was a pronounced use of local materials in other parts of the Indo-Pakistan sub-continent; for example, bricks in the Punjab and stone and marble in Delhi and Agra. Another characteristic feature was the utilization and incorporation of special traditions of local craftsmanship and the indigenous arts of the area.

As an example, when Muslims first came to India, their domes were built in corbeled horizontal courses because this method was familiar to local craftsmen. Gradually, however, they introduced their own more dynamic system of dome construction by means of radiating joints. It would thus be true to say that although the Muslim influence spread over a large number of countries, nowhere did it attempt to forcibly impose an exotic style of architecture. In many cases it adopted the indigenous style but, in addition, embellished it with its special form of decoration and ornament.

Having discussed the general characteristics of the architecture of the Muslim builders, we must now ask ourselves some searching questions. First of all, in view of the vast divergence of external expression in Islamic architecture, from what particular source are we to derive our inspiration? Is it from Spain, Egypt, Turkey, Iran or the Indian sub-continent? My answer would be that we should adopt the basic principles followed by the Muslims throughout these countries, as these are likely to be the common factor in their work.

On the other hand, if we are able to suggest that we should revive all the ancient features of Islamic architecture, the question would be: are they logical or functional in the present-day context? Secondly, are they practical? Thirdly, are they economical, and finally, are they necessary?

Architecture, although a visual art, is strongly conditioned by practical considerations such as function and structure. Great architecture can only be produced when a proper synthesis is created of aesthetics and structure—of art and science. In our search for a new architecture in the spirit of Islam, we should use the flexible approach of the Muslim builders in solving modern problems with a fresh mind and not be slaves to what we consider a tradition. To assume that the last word in architectural development has been said, and that we can do no better than to copy the work of the past, would be a mistake and a slur to the Islamic cultural heritage.

Architects must go back to first principles in order to solve problems for which history has no precedents. By going back to first principles, I mean something more than abandoning the slavery of revived styles. I mean avoiding a pre-conceived idea of what a building is going to look like, but instead working out its external expression simultaneously with its needs. The compromise of leaving off the period ornament but retaining the academic formulae would by no means produce an
architecture appropriate to our times. It may produce buildings that are superficially imposing, but they will possess neither the aesthetic appeal of a real modern building nor the pictorial and romantic charms of true traditional architecture.

By looking at the task of designing a building first as a practical problem that must be solved in a pragmatic way, a problem of accommodating people so that they can pursue certain activities comfortably, conveniently and economically, and at the same time with a feeling of aesthetic pleasure in their environment, a new view of architecture can be taken which puts all the accepted ideas of academic styles into their proper perspective. On the other hand, the architecture of today should not only cater to practical considerations, with beauty compelled to take its chance. On the contrary, aesthetics should be a part of the process of design, and not an afterthought in the way of applied decoration.

The needs of this age are in nearly every case totally different from the needs of previous ages and so cannot be satisfied by methods of building that belong to any age other than the present. We can satisfy them in the practical sense, by utilizing modern building techniques and modern scientific inventions to the full, and we can satisfy them in the aesthetic sense both by being honest craftsmen in our own materials and by taking special advantage of the opportunities these materials offer, of creating effects and qualities in tune with our own times without ignoring the spirit of Islamic cultural tradition. For example, instead of grafting antique ornaments onto new structures as is sometimes done today, thereby making them inconvenient and expensive as well as ridiculous, or else constraining the new structure within limits imposed by the old ones, as either of these would be timid expedients, we can make the most of the precision and machine finish that is so characteristic of modern techniques and set out to explore, as our predecessors so bravely did, the aesthetic possibilities of lightness and poise.

Throughout history both the general appearance of buildings and their style of ornament have been determined by the knowledge of building techniques available as well as by the materials used and the tools with which they are worked. Roman architecture, for example, developed far beyond the Greek model on which it was based because the Romans discovered the use of the round arch and the vault, whereas the Greeks built only with columns and beams. Gothic church architecture blossomed out of the simple solidity of the Norman period into more and more daring feats of construction, chiefly as the medieval architects and engineers learned the science of mechanics and discovered exactly how small a pier could safely carry the load of a roof and how to transfer some of the downward thrust onto a series of flying buttresses. Similarly, the Muslims brought with them to the Indo-Pakistan sub-continent a new system of construction and a bolder approach to architecture and engineering.

Modern architecture is conditioned by the same sort of factors. We know more exactly than our ancestors how materials behave in different circumstances, and we have invented or discovered a number of new materials. For both these reasons our range or vocabulary is greater and for the former reason we have no excuse for building unscientifically. We cannot avoid the obligation to build scientifically. It would, indeed, be an insult to the Muslim builders of the past if we assume that, had they been alive today, they would have built ignoring the developments and benefits of modern science and building technology.

The whole tradition of craftsmanship, on which the architectural style of previous centuries was based, consisted first of fashioning and then embellishing parts of a building by a group of craftsmen who, between them, imagined and made the whole building. The question to consider here is that in view of the dying traditions of ancient craftsmanship, would we be

Isfahan, Iran: the Masjidi Jami
Photo: R. Holod
able to produce the high quality of workmanship evident in the Suleimaniye at Istanbul, the Great Mosque at Isfahan, or the Taj at Agra? If not, no useful purpose would be served by having the outer form without the finish and elegance of these buildings. What sometimes goes in the name of Islamic architecture is nothing more than the architecture of quacks who do not comprehend the real significance of either the form or the surface treatment of Islamic architecture.

All over the world today, architecture is in a state of transition. Every country has gone through a period of experimentation, trial and error. Out of all this, a certain common denominator has emerged: the contemporary or modern movement in architecture. It is for the Muslims of today to apply their creative minds and not to copy blindly either the traditional structures of the past nor to reproduce the modern clichés of the West without understanding the logical basis of either. Most of the Islamic countries, with strong traditions in architecture, are today at the crossroads. With the oil boom in the Middle East some of the countries are in the happy financial position of making a positive contribution towards "architecture in the spirit of Islam." Unfortunately, however, development in some of these countries is taking place so rapidly that there has been neither time for architectural research, nor an attempt at a new interpretation of what was finest in the Islamic architectural traditions. The results have, therefore, been largely disappointing. Both the expatriate and local architects have been content with repeating the superficial forms and symbols such as the dome, the arch and the minaret even at the cost of being inconsistent with the modern building technology used in the structure. Thus, it is not an uncommon sight to see the dome, which was a device to cover a large area and to create a dramatic interior space, misused in such a flagrant manner that it is now adopted as an exterior bulbous form placed on a solid reinforced concrete slab without any relationship to the interior.

This formative period should be utilized for research in all these fields in order to arrive at a satisfactory solution. With a rich common cultural heritage, all the Islamic countries of the world could fruitfully collaborate in the evolution of a national architecture having its Islamic architectural traditions. It would be a real test of our ingenuity to combine the beauty and spirit of the ancient Islamic architecture interpreted in a modern idiom consistent with the technological advances of today.
Many of us at this conference are what I would have to call cultural or technocratic mercenaries, hired intellectual "guns" who move about the world from one country to another giving counsel, doing "quick studies," relying on accumulated knowledge, on too-weak data and too little experience and too often only on intuition; overprogrammed, rushed, and beneath it all, dreadfully unsure of ourselves and our various medicines and recipes. Yes, mercenaries, without uniforms or guns, but potentially just as lethal. Travelling medicine men.

As international consultants we are in the business of translating, transplanting and transforming cultural systems for people often strange to us, most of whom we will neither see nor know. We have to move ahead carefully, very carefully, step by step, always at risk, trying to understand before we know and without even the results of our work that generally come long after we are gone.

For me, at least, it is an awesome responsibility...this consulting in foreign lands. Once the headlines have gone, one is left only with one's naked best judgment and one's doubts. Yet we continue to do it, because it is our trade, and because rightly or wrongly, we feel we have something to offer (hopefully we do).

The interesting fact, I think, that has emerged from these discussions, one I was concerned with before I came here, is that the architect/planner's view of the city, and the kind of physical models and intellectual models and processes that he engages in are changing in a very radical way described very well by Janet Abu-Lughod. The legitimacy of the so-called Western model is being challenged by those people who have been forced, or have chosen, to import it. My guess is that just about the time the Western model becomes slightly more relevant, it will be thrown out altogether. An irony of sorts.

Charles Correa was absolutely correct. Corb did get a lot from India and there is an enormous amount to be learned in this reverse influence. What working in an Islamic country will do to Western consultants may be as important in the long run as what Western consultants bring rightly or wrongly to Islam. And being a Western consultant, I am most interested, in a very selfish way, in what I'm getting, as well as what I am trying to give.

I grew up for part of my life in China, and was, by choice and by inclination, an Orientalist in university. Too, I have always been enormously interested in politics. It is therefore impossible for me to conceive of architecture and planning without thinking of it first as having very diverse cultural sources, and second, without thinking of it as being directly involved with politics.

Architects must come to grips with economics and politics, with the way in which laws are written, if in fact they are to have any effect on changing the way the world is built. As a result, I probably worked with almost every income stratum, every power group and interest group that exists in the United States.

I started working with block associations in East Harlem in the Bronx. I spent almost two years of my life creating community planning boards in New York City, so that localities could have some leverage against a seemingly insensitive central authority, and ended up as a Development Director for the City of New York in the Planning Commission, where I was indeed representing the central authority and spending a lot of time trying to fend off the planning boards that I had created. Just desserts I suspect.

For this reason, I felt both frustration with and sympathy for bureaucrats the world over. It's a hopeless task. However, we will have to work with them and we will have to try to understand them as well as their problems. I sense in nearly all conferences of this sort an absolute disdain for bureaucrats, their processes and their mentalities. I can tell you from the other side of the table, consultants often look absolutely frivolous and foolish, because they don't understand resources and what can be done.

The comments below, then, and the distributed article concerning the planning and design of Shahestan Pahlavi, are given with real reservations in hopes that they may help us to a better understanding of ourselves, our clients' cultures, our methods and our prejudices, all problems common to our calling. They are made without arrogance and with the expectation of your critique, disagreement and help.

It is also fair to say that although we are talking here about Islamic environments, the problems of planning and urban design have certain generic similarities the world over. Our persuasions, backgrounds, sensitivities and perceptions will, more than anything else, explain the differences. Modernizing secular societies in the Islamic world may well, in a very short time, share more in common with their established Western prototypes than many of us want to believe. Certainly, this trend toward the internationalization of large cities, while not predetermined, is indeed already established. The job of protecting older emerging cultures against surface Westernization that is changing the prototype may well have to be undertaken in the West.

Some Conceptual Problems in City Design: Art and Implementation

Town planning is often said to be an art rather than a science. This statement reflects the realization among planners that their field's basic concern is to translate a society's values into an improved environment. To achieve this, planners need a basic understanding of how people's environmental needs have been met in the past, and what opportunities exist for meeting them today. While this must be analyzed in a highly rational manner, a final judgment requires the mixture of experience and imagination that is defined as art. Its contribution to society can be readily seen in the great achievements of Shah Abbas of Isfahan, Pope Sixtus V in Rome, John Nash in London and Baron Haussmann in Paris. In these instances an artistic response to a city's needs was combined with a genius for city
building: the ability to carry out plans on a large enough scale to influence the character of the city.

These examples of great city building transcended the basic requirements of their cities and devised a strong symbolic and cultural setting for their citizens. They became the stage on which their cultures acted out their histories, settings for fantasy, wish, ceremony, aspiration and art. Today's master plans often fail to provide for these basic human amenities and are only concerned with physical infrastructure and the meeting of codes. Such plans cannot become home for their resident communities, and their lack of urban amenities has brought a growing rejection of the idea of cities altogether. Without art and a relentless aspiration to quality, cities fail in some fundamental way to serve those who use them. Perhaps one of the least recognized aspects of what has come to be called "the urban crisis" is this qualitative one: a failure to acknowledge the spiritual and cultural content of cities by not weaving into their fabric special non-utilitarian environments of high design quality and symbolic settings.

In preparing the plan for Shahestan Pahlavi we have, therefore, given as much emphasis to developing an aesthetic and symbolic base for the new centre as we have to setting land uses and housing densities for the new centre. We were committed to creating a beautiful city centre which would give twentieth century Iran a national centre of the high quality that Isfahan contributed to the sixteenth century. We believe this to be a proper goal of town planning. It is not achieved through the application of densities of traffic mixes alone, but also requires a passionate and continuing commitment to design excellence. This has meant that urban design and landscape architecture have been as important to the plan as economic and computer modelling. A balance of this type is needed because the latter techniques, though useful planning aids, have yet to produce on their own any aesthetically satisfying environments.

Unfortunately, the field of town planning has not had a great impact on the design of cities, with the exception of the instances of successful city building mentioned above and a few others. One reason for this is that strong economic, social and political forces lie behind the usual pattern of piecemeal development that shapes urban growth around the world. Unplanned growth of this sort is the rule rather than the exception, simply because it is easier and cheaper than growth which is managed according to an overall planning and design concept.

Clearly, if a planning concept is to be devised and, subsequently brought into being as a built environment, manpower, money and time are required. Most governments have yet to recognize that these and other resources are warranted by their ultimate benefit to society.

Another reason for the shortage of successful town plans has been a tendency in the planning field to put aside the lessons of the past and to emphasize fashionable but untested new ideas. A number of plans, for example, are dependent on such an intricate mixture of innovative building and transportation technology that it is doubtful they can actually be built stage by stage. Other plans are so restrictive of building heights and densities, in keeping with the present unpopularity of tall buildings among planners, that few developers have shown an interest in investing. Still other plans have proposed vast, multi-use projects in modest residential areas. These plans, too, are often exercises in futility because they are inappropriate and create insoluble relocation problems.

We believe that certain sets of planning ideas and responses have proven over time to be more successful than others. Just as in human relations, certain types of conduct have grown to be accepted universally over the years. In any plan, determining the precise balance between new ideas and old ones is difficult. But, like the balance between urban design and scientific planning techniques, this second balance also needs to be struck. Such a recognition is receiving new attention among planners today, for a mixture of old and new concepts is a time-honoured technique for combining what went before with what is to come. This is a simple acknowledgement that the past and future are interdependent. No longer do most planners seek to establish a "brave new world" with no reference to the past. This is not so much because it has been found impossible, but more because such experiments have proven inhumane and undesirable. In the words of Sir Winston Churchill, "If we open a quarrel between the past and the present, we shall find that we have lost the future." In fact, a future without a past would be very bleak indeed. Much of the rhetoric of the "new architecture" fails to recognize this simple reality.

Our approach in the plan for Shahestan Pahlavi was, therefore, to address present-day problems in a realistic way, in keeping with our belief that the most effective way of planning for the future is to try to deal as successfully as possible with the present. This is because a specific and creative response to a real and pressing problem often reveals a broad range of future investigations and actions. The great historical examples of city building mentioned above have resulted from relatively deterministic attempts to come to grips with broadly understood needs, both at a functional and an aesthetic level. For this reason, utopian visions of future cities, although entertaining and sometimes even inspiring, are misleading and inescapable ways of living.

In this plan everything we advocate has been tested and proven successful in use elsewhere. This approach is based on the professional conviction that important projects like Shahestan Pahlavi should not be a guinea pig for planners' fancies. We have reintroduced and utilized as many time-honoured Iranian techniques as seemed appropriate and practical.

This is consistent with our belief that plans must be based on a very sure sense of how to get from the "here" of today to the "there" of tomorrow. Such a trip must face a large number of hard choices of policy because a plan's goals and destinations are always influenced by the means proposed to achieve them. It is in the refinement of these means that new routes are opened. Specifically, this means...
that an urban design plan, as opposed to a traditional master plan, will carry with it recommendations about fixed and rather detailed physical systems (e.g., a specific street grid). The layout of these systems will limit the plan's long-term flexibility to some extent. But, precisely because they are specific, they will act as an early test of the more general principles of the plan. And quite often this effort to solve detailed problems will open the way to a better understanding of the larger issues.

Since ideas about cities, and how best to plan them, change more rapidly than they can be built, a careful distinction must be made between which aspects of a plan must be flexible and which need not be. This is because certain schemes are more susceptible to modification than others; yet, there is always a point beyond which a scheme cannot accommodate further changes. A specific arrangement of land uses, transportation corridors and buildings must be decided upon. Thus, although one can talk about indeterminacy in planning, it is by definition impossible to build an indeterminate structure for a plan. Most successful plans strive for flexible and resilient structures, however.

Town planners are not only re-examining the past and thinking about the meaning of flexibility. They are also attempting to narrow the gap between planning and actual city building. The unfortunate tendency in the recent past has been to separate the research aspects of planning (e.g., the assessment of goals and the gathering and analysis of data) from the design and implementation processes which follow. As a result, the goals and data utilized in defining a plan’s intent have not benefited from a testing against the realities necessary later to turn the plan into a course of action.

Recommendations removed from the responsibility of implementing them are usually quite different from those intended for direct action however. In order to put ideas to work, their design requirements and means of implementation must be considered as primary data, just as important as statistics relating to such matters as employment, housing density, movement or age structure. Thinking about “how” should start concurrently with thinking about “what.” Planning without these crucial considerations of design and implementation becomes academic, and plans formulated without them are generally crippled from the start. It is, therefore, greatly advantageous to prepare a master plan or set of development controls while preliminary design and development is actually underway. This allows planning assumptions to be tested against a real model. Such a process is, after all, like life itself: a continuous, incremental, adaptive response to circumstances. And, in order to keep the plan current after it is printed and presented, the mechanism for changing it must be contained in the instructions.

A close relationship between planning, design and implementation has fortunately existed throughout the planning of Shahestan Pahlavi. To start with, a strong architectural and city building tradition exists in Iran. Today, Iranians are showing a growing sense of the relevance of this tradition to current urban conditions. In addition the planning brief for the new centre was not only to produce a master plan for 554 hectares of open land in the very middle of the capital, but also to make a detailed urban design for the project's entire central area, complete with models and preliminary architectural designs. This required that we constantly test our disposition of land uses and our transportation corridors against three-dimensional design requirements. To this comprehensive programme was added the necessity of laying out a road system which could be started immediately in coordination with the construction of a city-wide metro system. Grading of the site and the new roads actually began six months after our arrival in Tehran. It was based on preliminary plans drawn up in four months and amended and refined afterwards. Shahestan Pahlavi, therefore, consisted of a planning–design–development project all in one brief.

Shahestan Pahlavi project, Tehran city centre, Iran: view of the model
Photo: J. Robertson/Llewelyn-Davies Associates
We welcomed this challenge. The resulting plan, we feel, has a rigour that would not have been possible had the work been removed in time and place from actual development.

Shahestan Pahlavi is envisaged as serving three different roles simultaneously: a national centre befitting Iran's capital city, a model community built to meet growing North Tehran's need for a coherent centre and a transportation centre capable of deflecting the city's traditional northward growth to the Tehran Comprehensive Plan's proposed development corridor stretching east and west of the city. The plan for the new centre responds to the great opportunity of its vast, vacant site by proposing a carefully organized multi-use complex. Included among the uses will be government and commercial offices, retailing, hotels, housing and cultural and community facilities. They could ultimately amount to as much as 5,130,000 square metres of floor space. The publicly and privately developed components of the centre will be positioned so that each section has a mixture of both. This will help avoid the sterility associated with the government office areas of most world capitals after dark.

Shahestan Pahlavi's main employment and commercial centre will be built as a linear "spine" above the metro line soon to be constructed north-south through the project site. This will maximize the ability of commuters to walk to their offices from the metro stations; in so doing, it will allow an alternative to the use of the automobile. Apartment buildings will be located next to many of the office buildings in the spine to encourage people to live close to work. The spine will be structured by handsome tree-lined boulevards and squares, which will provide a suitable background for public ceremonies.

Beyond the spine will be vast areas of landscaped parkland to help relieve the city's shortage of recreational space. Six residential neighbourhoods will be located between this parkland and the boundary of the project site. They, and the apartments in the spine, will house some 36,000 persons in a variety of housing types catering mainly to families. Local schools, shopping areas and other community facilities will serve these residents. The quality of these planned neighbourhoods will set an example for the new communities being planned elsewhere around Tehran.

Shahestan Pahlavi will be Tehran's first centre which will bring together living, working and visiting in an attractive setting emphasizing pedestrian movement over auto traffic. The new centre's government institutions and ministries, its many monumrants, fountains and landscaped areas will give Tehran a level of public architecture commensurate with the city's mounting world importance.

But the master plan for Shahestan Pahlavi has not been formulated as an academic plan destined for bookshelves, but as a working document capable of creating the new centre that Tehran so clearly requires. It is not immutable and will (and should) be continually amended. By providing a flexible framework within which changes can take place, the plan will furnish the local development corporation with a realistic guide for coordinating the building of the new centre. Thus, the plan could establish a rational basis for development decisions. Introducing such a process to development in Tehran, especially at its new focus of growth, will be one of the plan's most important contributions; for the successful execution of the plan in an orderly fashion will carry with it a strong force of example for the satellite communities that are being planned around the city. If the plan is abandoned and Shahestan Pahlavi is developed piecemeal in accordance with market pressures rather than as a coherent community, there will be little likelihood that the other planned new communities will be able to withstand these pressures. At stake, then, is the entire scheme of compact, multifaceted centres proposed by the Tehran comprehensive plan as the basis of the city's logical future development.

Shahestan Pahlavi's success will, therefore, be critical if the spread of the city is to be contained in these desired centres. They in turn will help make rapid public transportation feasible; and such a system, as we have noted, will be the prerequisite for a shift away from the private car. Finally, Shahestan Pahlavi will give Tehran and the nation both a precinct of high amenity and a ceremonial centre with which all citizens can identify. It will symbolize Iran's rapid progress toward becoming a leading industrial nation and world power. It will also demonstrate new commitment to quality development. In its achievement, Shahestan Pahlavi can reflect the highest aspirations of Iranian culture and perhaps provide the country once more with a capital that can elicit the admiration of travellers the world over, like Isfahan in the sixteenth century. Shahestan Pahlavi offers Tehran more than the chance to become just another large capital; it affords an opportunity for greatness.

The Notion of Great Cities: Recurring Motifs

All cities are different and reflect their time, place and the culture of their builders. But not all necessarily exhibit the physical qualities which make them memorable or recognized throughout the world as great cities. The development of Shahestan Pahlavi can transform Tehran's image to one of the world's major capital cities; conversely, it could all too easily become a mediocre Western--style twentieth century development like the new downtown areas of too many North American and European cities. Equally, it can be a collection of fine individual buildings by eminent designers which fail to come together to form a meaningful whole.

Various simple yet fundamental physical characteristics are common to the central areas of some of the world's best--loved cities: Rome, Peking, Paris, London, New York, Bath, Edinburgh, Isfahan, Amsterdam, Savannah, St. Petersburg, Chicago and Munich. Such cities emphasize an order for the whole: blocks and streets, squares and courts come together to form
a dense and interrelated pattern of buildings and circulation routes. This produces an urban design context made up of a limited number of standard units. Together, they form a larger whole in a variety of different ways, but which have a certain self-sufficiency in themselves.

There also exists in such cities a greatness and variety of scale and an overlying hierarchy in the arrangement of the main uses and communications networks, yet a flexibility to move these uses within the system. Between component sub-areas there is a combination of "tight" and "loose" fit, and the urban texture is dense enough to provide short walking distances so that pedestrians can move easily and in comfort from one place to another.

The buildings in great cities have a consistency in their design and materials, in which variety is obtained by imaginative use of a limited number of themes. Quality in city design derives from the nature and memorability of spaces between buildings as much as from the buildings themselves. The street is the city's major public forum and its careful definition and design is the major element of urban design. The special buildings on such streets are selectively designed and placed. Overall there is an imaginative exploitation of the special natural characteristics of the site, and an emphasis on a generous and flexible circulation system that is not fixed in any one mode. Finally, the designers of great cities—Sixtus V, Michelangelo, Sir Christopher Wren, Peter the Great, Baron Haussmann, John Wood, James Oglesby and John Nash—have all shown a common approach which must characterize the design and implementation of Shahestan Pahlavi: a relentless dedication to putting design ideas to work.

However, in addition to their physical qualities, great cities are also characterized by a variety and mix of uses and activities in any one area, as opposed to the modern principles of horizontal separation of use and activity. It is precisely the appeal of choice, of being able to live, work, recreate, shop and even find solitude in a single area that has given to many great cities their peculiar dynamism and their popularity. This mixing of the sacred and profane in a natural way has led to cities which people both love and enjoy using. Such a mix of uses—private commercial development, as well as public institutional building, and day and nighttime activities—has been a foremost goal in the design of Shahestan Pahlavi.

Persian architecture and city building has a continuous history of over six thousand years. During this timespan, the country has produced a range of notable urban developments from simple tea-houses and exquisite gardens to some of the grandest and most beautiful buildings and spaces to be found anywhere in the world, of which the most famous are Persepolis and Isfahan. As important, if not as well known, are the great desert towns, large and small, where truly indigenous principles were developed and refined over the centuries. Shahestan Pahlavi must be a part of this continuing tradition.

Historical Persian precedent is relevant to Shahestan Pahlavi at three levels: the city structure, the building form and scale and the surface enrichment. The form and organizational structure of the town and city have, to a considerable degree, been shaped by the hostile and arid nature of much of Iran's terrain, whether mountain ridges, plain or desert, and by the climatic conditions prevailing throughout the country. Thus, cities such as Yazd took on the contrasting form of walled oases in which water, landscape and narrow passageways (kūches) were key contributors to a more comfortable and softer environment. The orientation of the circulation system aimed to ameliorate the harsh climatic conditions, while harnessing any favourable elements. Long streets helped to distribute cooling breezes through the city, while the shorter ones were placed to dispel hot winds. Narrow passageways and arcade systems were used to provide shade from the afternoon sun.
But there were also legitimate aspirations to ceremony and grandeur. In terms of
greatness of organization, Isfahan is the
supreme example of an urban continuity
equal to such other world cities as Rome,
Leningrad, Paris and London. It has many
lessons for Shahestan Pahlavi.

Similarly, individual buildings have been
shaped not only in response to those
unique conditions of place and purpose,
but also by a formal, symbolically meaning-
ful and complex family of geometries.
These geometries spring from the very
heart of the mathematical and spiritual
genius of the culture and act both as prac-
tactical ordering devices and as symbolic
reference systems to the spiritual world
beyond. In no architecture in the world is
the language of pattern and geometry
more crucial than in Iran.

At the scale of the building, or building
group, several themes other than this over-
lying geometric order are evident. The
pervasive small spaces, both internal and ex-
eternal within the larger structure, reflect a
concern with a human scale and, in some
places, with privacy. This is further evi-
dent in the use of small units for doors
and windows. Indigenous building types
include, in addition to the jewel–like
mosque with its formal forecourt (eyvan)
and courtyard, the courtyard house, the
caravanserai, the theological college
(madrasa), the bath (hämâmâh) and the
warehouse (sarâl).

Building forms evolved from a principal
intention to provide a comfortable environ-
ment. The dome allowed easy cooling of
its surface by the winds and ensured that
the intense rays of the sun would only be
directed on any part for short periods of
time. Roofs and walls enclosing houses
had their backs to the sun, and were ex-
cluded from eyvan, the open area facing
the courtyard, which was an essential part
of the living area. In certain areas wind
towers (bâdghirs) were devised to catch
favourable breezes and direct them into
living spaces. Today’s concerns are not so
different and many of the elements of
Shahestan Pahlavi are developments of
these traditional solutions.

At the level of surface enrichment, exam-
pies of exquisite tiling, plaster—work, wood-
carving and other types of detailed decor-
ation abound. Colour and pattern are used
selectively and therefore to the most dra-
matic effect: to establish a level of sym-
bohc reference, to give a sense of cool-
ness, to reduce apparent scale or to enrich
a key building in an otherwise mono-
chrome townscape (the obvious example
being the mosque complex). As mentioned
above, these patterns were not only based
on highly sophisticated numerical systems
which offered a great variety of propor-
tional relationships and geometric config-
urations, but were also understood to have
rich symbolic content. The patterns were,
thus, a reference system at many levels,
both real and abstract, for artist and
public alike. In becoming an intermediary
or translator, the craftsman responsible for
architectural enrichment held a special and
honoured tradition in Iran. That tradition
should be maintained and strengthened to
the degree possible, and the development
of Shahestan Pahlavi provides an excellent
opportunity for helping re—establish
certain Persian craft industries, especially
those associated with paving, tiling and
brickwork.

In such a rich historical context, however,
there is an obvious danger of superficial
pastiche. Shahestan Pahlavi must provide,
instead, a contemporary response to the
same influences of climate, topography,
native materials and vegetation that
are more subtly Iranian and less self–
conscious in the process.

To acknowledge the desirable historical
precedents outlined above, while accommo-
dating the scale and nature of uses appro-
riate to a city centre in the present cen-
tury and beyond, will not be easy. This
problem is not peculiar to Shahestan
Pahlavi. New buildings, for functional,
economic and technical reasons, tend to
be larger in bulk and height than traditional
ones. Furthermore, they are often less
adaptable to change of use and the ac-
modation of multiple uses than their
predecessors.

The influences of economics, modern tech-
nology and present—day modes of living
and business, as well as those of architec-
tural fashion, have created a style of build-
ing which tends to give modern cities a
remarkable similarity the world over.

Shahestan Pahlavi, in its conception, design
and execution should avoid the automatic
ersatz Western or “international” solu-
tions. It must resist the destruction of
traditional values by seeking to maintain
those qualities which make Iran and its
people unique and by drawing on the great
tradition of Persian architecture and build-
ng design. At the same time it must take
full advantage of the possibilities offered
by materials such as reinforced concrete,
steel and glass which the builders of older
cities did not have.

Given the existence of a heavily extended
construction industry and a shortage of
basic building materials, the search for es-
centially Iranian solutions must not be
negated by the superficial attractiveness of
imported industrialized building techni-
ques. Nor should design solutions be pro-
posed which depend upon the import of a
capital—intensive building technology when
Iran possesses both labour and labour—
intensive building technology.

Invariably, modern buildings rely on an
increasing extent on air conditioning and,
as a consequence, fuel and energy costs
are high. The minimization of energy con-
sumption is yet another cogent reason for
the use of the traditional courtyard build-
ing, whenever possible, in preference to
the Western—type tower or slab building.
This is not to say, however, that Shahestan
Pahlavi should not accommodate high build-
ings. It must be remembered that much of
the visual character of the new centre will
derive principally from what is perceived
by the visitor or resident close to ground
level. Thus, the street level and first few
floors of all buildings should come to-
gether to form a rich carpet composed of
pedestrian scale elements: arcades,
glimpses into garden courts, trees, flower
beds, patterned paving and tiling, façades,
entrances, steps. Above this carpet, larger,
bulkier or higher elements can be located,
and indeed, these are appropriate in cer-
tain locations.
The newer uses will also be more acceptable if, as far as possible, they are built of traditional materials. Brick is the most well-known building material of Iran. It is quick and simple to use. By its mass, it protects building interiors from the intense summer heat. In view of the current shortage of bricks, similar advantages might be obtained by the use of reinforced, load-bearing block–work. Moreover, the extensive scale of construction envisaged at Shahestan Pahlavi would make the development of a special "Abbasid block" a practical and appealing possibility.

Finally, the overall plan for Shahestan Pahlavi should avoid features which militate against achievability, such as placements of land–use and communication routes in complex single purpose or inextricably close relationships.

Three main elements are thus essential in a design oriented towards a successful realization. First, a clear and comprehensive framework and organization must be devised to which the many and various public and private agencies involved in implementation can easily relate. Second, a series of simple design rules and principles should be developed. Last, there must be consistent and passionate commitment to quality and to project completion by the city's leaders; no great city has been realized without the support of strong men.

Design and Context

There are a number of general themes, some seemingly contradictory, which underlie the design:

- Search for order and comprehensibility
- Accentuation of contrasts
- Spatial variety and continuity
- Connection to the existing city
- A mix of uses
- The achievement of an early sense of maturity
- Ease and choice of movement
- Reinforcement of the natural terrain and amelioration of a severe climate through building and design
• Accommodation of the automobile and the pedestrian
• The development of realistic design controls
• An avoidance of "science fiction" (the use of tested systems)
• The recognition of how the development process and the budget affect both the shape of the plan and the schedule of implementation
• Flexibility to accommodate change
• Emphasis on physical beauty, most particularly on landscaping and views

Architecturally, an attempt has been made to evolve a rather limited vocabulary of details, forms and organizational schemes, as well as materials for all the public buildings, for two reasons. First, this simplifies the design and building process and begins to create a harmony between different buildings. Second, such a similarity of architectural details has characterized Iranian building from earliest times. The vocabulary includes shape and proportion of windows, doors and other large openings; the soffits, columns and piers of arcades; skylights and roof domes or vaults, as well as the treatment of paved areas and flat roofs.

The way in which natural light is introduced into climate-controlled areas in the middle of blocks, the atria of the ministry prototype and City Hall, as well as the vaulting of the galleria, has been carefully studied so as to minimize heat loss/gain and at the same time mark passage of the day for those inside. Major circulation routes, as in traditional Iranian bazaars, are always top-lit and give access along the route of passage to open landscaped courts.

The ceremony of entry to all major public buildings is accommodated in open courts or plazas, and the lines between public and private areas physically emphasized by the architecture. For example, passage from outside public space to inside private space is handled by means of intermediate transition space, or "lock," designed to prepare the senses for the change.

Generally, large areas of glass at the surface of buildings are avoided altogether, except in isolated cases on the north side of certain buildings facing Shah and Nation Square (e.g., the hotel and City Hall) where the reflecting quality of the glass is seen as an ideal mirror to the backdrop of the mountains. Most windows are small and recessed or otherwise protected against the sun by some form of brise-soleil or jalousie. Major corridors or galleries are designed to aid in cross-ventilation in all but the most extreme months of the year.

Exterior surfaces are of reinforced brick or block with special coloured surfaces in the form of tiles applied on the inner surfaces or flanking walls of openings, a kind of makeup, like eye shadow or, as in the case of buildings around Shah and Nation Square, on major roof forms and parapets as the previously mentioned "headdresses" that give identity from a distance to important buildings. This highlighting and informing through the use of colour is traditional, and seems as appropriate to a modern city as to an old one. Landscaping is given a major architectural role throughout, with trees and water being seen as the major shapers and softeners of outdoor space.

We have tried in this plan to avoid reshaping Iranian culture so as to make it fill any preconceived notions of twentieth century technology or town planning theory. Instead, we have attempted to reinforce and strengthen unique and relevant aspects of Iranian civilization through the use of modern technology and theory. In that sense, our role has been as much custodians of continuity as innovators; and we feel that the test of the new centre being recommended is that it not only be modern, but also recognizable and usable by Iranians.

Tehran needs, and richly deserves, a handsome and functional city centre. This plan is intended to show how such a centre can be achieved and how it might be designed to become the symbolic focus of contemporary Iranian culture. Achieving Shahestan Pahlavi, the next step, will be a test of that contemporary culture.

Reference Notes

2. Speech delivered to House of Commons, June 18, 1940
Dear colleagues, it is difficult to square the circle. I realize that all of us, whether Orientals or Orientalists, are also alchemists more or less. But, in this case, alchemy would be very difficult because we are confronting conceptions which are apparently antithetical to the future. We are forced to make a great methodological effort in order to create synthesis out of this antithesis. I have no illusions about this impact which discussions of intellectuals or artists could have. But, in the end, I suppose that we must be responsible. We have no choice but to take our own opinions seriously and to act as Kant, for instance, asking ourselves at every juncture whether our opinions should still be applied.

When Picasso draws an eye in the middle of a cheek, that has a stimulating effect that develops our concept of design. But suppose the architect places an eye in the middle of a design, the consequences would be a little more serious. Usually the artist, sculptor, musician, painter organizes a dialogue between his own inspiration and the material with which he is dealing and, certainly, the result produces an impact on the people who perceive the work of art. With the architect or the urbanist, the consequences are much more serious. What is the material of urbanism and what is the impact of the urbanist? Is his material steel, cement, glass or a certain technology? Is that his material? Or is his material simply the whole human group which is to live in these forms and volumes. In other words, what is material for others becomes to him his being and his end (Ma huwa ta'bir bi-l-nisba lil-fanunin al-‘akharin fa-saar bi-al-nisba ‘ileygh ghayyahu wa sharatahu). The interest of the architect is to invent his past better than his future. We have the paradoxical result that the architect who is making use of these forms and volumes for the human group finds himself obliged to serve that human group. This is a part of the paradox of which the antithesis forms only a part.

We have to compose forms and volumes of Islam in modernity. So we have to ask ourselves at once what is modernity and what is Islam? On the first question, I agree on many points with Professor Nasr. Many of his objections to the limitation and the servility with which models from industrial society are copied are fully justified for the simple reason, that there does not yet exist an industrialized civilization. What we call industrialized civilization is nothing but a projection of regional cultures of certain countries, cultures which had a role in the history of the expansion of the industrial era. For example, the Islamic World is divided between three so-called industrial civilizations: French, British, American. But we have absolutely no right to claim that these regional influences are part of a world industrial civilization. We, therefore, can easily claim here that this industrialized civilization is still to be invented.

Secondly, the Islamic peoples will have to have their share in this development. And this takes us very far from projects of conservation, restoration or even revival. It is for Islam to reinvent the world and to propose to the world a new Islamic system. When I say a new Islamic system, it is understood that it will be a system which has its roots in the eternal Islamic identity. So then, the question arises what identity have we to project into modernity?

Here we have to give the floor to scholarly efforts because it is only investigation through separate studies that will allow us to comprehend all the experiences lived through Islam and to extract an Islamic model as an abstraction. To my knowledge, this has not yet been attempted. Indeed, do we have any body of works which would allow us to determine what is really Islamic in an Indian, Andalusian or Malaysian mosque? What in them pertains to Islam and what pertains to regional building traditions or borrowings? Furthermore, are we capable of distinguishing between which pertains to permanent Islamic identity and which is characteristic of one or another period of history? Until we are able to do so, then we cannot speak about that identity which we want to project into the future.

Nevertheless, like most of you, I am more experienced in certain regions or periods of the Islamic world. I should like to draw on one of these experiences to begin that which could become an attempt to define Islamic identity.

I spent several years in my youth in the old Moroccan city of Fez, not just as an academic researcher but as a functionary in municipal affairs. Therefore, my point of view is not simply an abstract one, but one that is also based on practical living. The Islamic model which I abstracted in my first studies, a quarter century ago, is a radiating model. This model could be characterized by several traits which I shall try to enumerate. One, the primary focus of the ritual religious centre is a Great or khutbah mosque. The madina is distinguished from the village because it possesses a khutbah mosque. This mosque is by far the most important centre from all points of view: spiritual, urbanistic and even political. From there many streets spread out to all quarters. Another characteristic of this structure is the relative autonomy of the various districts. All these districts take the form of labyrinths, an aspect which has so much struck foreign observers. Each quarter enjoys a certain autonomy and possesses a small, secondary mosque as well. Not only autonomy, but from the functional point of view, a different character. There are quarters occupied by a single trade or craft, by a single ethnic origin. The ensemble makes up a model characterized more by involution than evolution. This is a totality which functions without any imposed rules. One could even say that its regulation emanates from its very existence. And, as compared to a similar European city, the role of form and image is predominant here. What is in our cities aesthetics, in the Islamic cities is really regulation, innate regulation. It is quite different from the European model.

That is the first model which I had observed and which I presented in an article. Very often this radial model is taken to be a typical one for Islam and even of the Orient, to such an extent that, when Crusaders came back to Europe, they also founded radial cities, called villes neuves, imitating what they thought to be the
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eastern city. And, of course, this model can be reinterpreted in theological terms by saying that it is God who fixes the order to the city, the unity and multiplicity, the unity or tawhid. But, alas, if we confront this model with other hypotheses, we have to change it. And myself, I have to criticize my first study because I left out many features which more or less contradict my first opinion. In Fez, we have not just one great mosque, but two. There is the Mosque of the Andalusians which was more important in time past than the Mosque of the Qayrawiyyin.

There were two towns, not just one, the town of the Qayrawiyyin and the town of the Andalusians separated by an open space. However, the first town eventually invaded the second, so that in this radial model there was not one centre, but two or three. Surely, there is a religious centre but we have also an economic centre, the qaysariyya (or the Market of Caesar) specializing in import trade. We have another centre, the centre of power; it is quite important. But the centre of power is situated in yet another town, Fez Jlid. And perhaps we have a kind of decentralization in other aspects of urban life. For instance, the world of the crafts is quite decentralized.

More than that, we had forgotten one of the main aspects of urban life: man. The crowd flows through this model and it is the crowd which fills the streets on Fridays. And it is the crowd which makes the city live, because it brings in raw materials from the country and buys from the trademen in town. Now, can we make an abstraction in our model of an element which gives it life?

If we consider the crowd, we become aware of many other things, too. This model of the city represents the standard, the order while the crowd represents disorder. Really, the city adjusts itself by the confrontation of the order and the dis-order. The crowd represents the essential element because it is the crowd that seizes power from time to time.

And now let us consider another well-known antithesis. We are accustomed to assume an essential difference between town and country. One even considers this opposition as a basic characteristic of Islamic civilization.

Let us suppose that the town has a three-dimensional form: prayer, commerce and manufacture. Indeed, if we analyze the urban bourgeoisie, we find that it has arrayed itself among those three elements. This can be an additional proof of my first hypothesis of radical order. But this hypothesis is incorrect. How can we ignore the dimension of power which is, in a way, the military aspect? In most Islamic cities we see the mosque, the adjacent market, but we also notice, off to the side, the qal’a or the citadel. Can we, therefore, say that the city presented a fourth dimension?

Now to proceed to the country. We will also find that the country possesses three dimensions. It is the country which the Arabs call bedw or the nomad. What are the dimensions of nomadic life? First, there is an agricultural and pastoral dimension based on the fertility of the soil and the herds. And there is the religious dimension, which unfortunately is subjected to all sorts of deviations in the customs of the Bedouin. These last are objects of constant attempts of orthodoxy to rectify their beliefs. And lastly we have the military dimension. Indeed, this last dimension affects the synthesis between town and country, because we often find that it is the base on which the authority establishes itself, consisting of either nomads or foreigners. This indicates to what extent the life of the Umayyads was a life that reflected integrating the values of this society, for their own life alternated between town and country. And even today we notice that whenever there is a unified positive effort of this group against occupation or reconquest, it is when the country is allied with the city in resisting all efforts at division. I can give you many examples drawn from recent history. Those people
gained independence through new alliances between the town and the country. Colonial powers tried very hard to disrupt this alliance. But if my theory of dimension is correct, we will find that town and the country were parts of a synthesis and that these are the poles of dissimilarity. I have found the correct translation of that term in the Koran, khilfah.

If my model is correct, we find that the ideas that we had about the structure of the city have to be revised altogether in terms of specific cases. And this proves to us also that evolution is possible within the Islamic model since we have examples of many of the traits of evolution during the most expansive periods of Islam. This raises two interesting problems, I think, which we ourselves should consider because they have direct bearing on our present concerns. The walls that encircle the Islamic city and which are considered by the Western as well as by native researchers to be very characteristic of these cities, are those walls an element of separation or an element of conjunction? I think they are an element of juncture as has been made apparent by the monumentality of the city gates. This is a very important point, because you probably know that aesthetic theory according to which Islam rejects closed forms. If so, how are we to explain the existence of the walls? Only if we would regard the walls and gates as a typological break but not as a sociological one.

Secondly, many of those who study the Islamic model make a fetish of a certain number of forms, like arcades or arabesques or minarets. But do these forms, in reality, have any bearing on the true structure of the model or are they simply embellishments? The arcades are, of course, Oriental but they are also characteristic of Napoleon III. There are many arcades in the Islamic lands but also in the rue de Rivoli. Even the minaret which we see is absent from some Islamic cities. And the call to prayer often emanates from the roof and not from a minaret.

This, I think, leads us to a theoretical stance which I hope will help us to answer our second question. If we seek an identity characteristic of the Islamic model, this identity will not be found in one or another concrete manifestation. If we examine such models through monographic studies, we will find that one or another of their elements could be absent or could change or even develop. Identity does not consist of things, it consists of their system of arrangement. As proof, I who am addressing you, renew all my cells once every seven years. So, does my identity then reside in these cells or in the system which they form? If our identity resides in this systematic structure and not in its separate components, then these can change as long as their relationship to one another remains identical. That is what Islamic thought expresses in Arabic as thawábit wa mutaḥawliyat when differentiating between invariabilities and variables. As long as invariables are maintained with the original system, the identity exists.

Also, the proportion of Arabic words in Persian reaches sometimes up to seventy percent of the vocabulary. But vocabulary is not the language. The language is a system and provided the system remains Persian, it can absorb all the words it wishes and still remain Persian. Some people say that in English a third of the words are of Latin origin. Can we then say that English has only two-thirds of an identity? What counts in languages is the system and not the elements that entered that system. If that is true, you have a key for explaining all periods of history and all the projections into the future. In my opinion, it is the only possible explanation through which we individually or collectively can maintain our own identity in the face of all the changes. So that is true, we have to seek the invariances in the Islamic urban system in order to project that very system into modern terms. And perhaps
then we should allow the arcades to disappear. Possibly the rotating square about which I myself have written, which is both in the Friday mosque of Isfahan and in the Qayrawiyin, is characteristic of Islamic ornamentation. Perhaps in the city of tomorrow, we shall find this form just on an ashtray.

To conclude, I shall try to extract several characteristics from the model I have built. If you are interested in the subject, you will find in my paper an attempt at constructing a Utopia of the city. I have tried to derive from this model the component elements of a system and project them into a future vision of the town. There are four elements. First, not mono-centric but multi-centricism. Second, segmentation into the distinct units, in the shape of the quarters. Third, an alternation between various orders of things: order and movement or order and disorder, solids and voids, light and dark, norm and game. Fourth, an alternation between what is morphological and what is rhetorical, what is rhetorical in the sense of Aristotelian rhetoric or the way of the truth to be applied in terms of human behaviour.

Many of us have made mistakes by taking the rhetorics of the Islamic city as morphology or vice versa. We have to deal with both of them but knowing that they belong either to rhetoric or to morphology without mistaking between them. Thus, I have conceived a new city of Fez which would be a utopian projection, signifying the expansion of an Islamic system into the world and not an inversion of that system onto its past. I was inspired by the magnificant twenty-fourth Sura of the Koran, the Sura of Light where we can find many elements on which I have relied. Lastly, I should say that if I deal with this question with so much passion, it is because it is not only of concern to Islam but to all the old civilizations and mine to begin with. I want to project my own civilization into the terms of the future. But I don’t think that would materialize by imitating the Place des Vosges or Notre Dame, nor in setting out a structure similar to that of Centre Pompidou, because the Centre Pompidou is the future without authenticity while Viollet-le-Duc is authentic without a present or a future. As an extreme example, I refer to the fort of Carcassonne rebuilt (re-made) by Viollet-le-Duc in “medieval” terms. I avoid this forced antithesis by the conviction that our future is the projection of our identity, participating in the expansion of the universe and not a retreat into our past.

Discussion
Grabar

It is rather difficult to comment on fireworks. Professor Berque has suggested to us an extraordinarily original manner of seeing, what I would like to call semiotics of the Muslim city. What he has proposed are the functional operative terms by which the city lives. Some of those terms are common to all cities, others are unique.

Two ideas strike me as being particularly important. One is that it is people who make the signs work. Berque suggests that an originality of the Muslim city consists in the fact that forms are charged by people, that forms (pursuing the electricity comparison with alternating currents) are somewhat neutral in themselves, but it is human activity that charges them. It is people who give them a certain sense, a certain meaning, certain uses.

Secondly, he mentioned the importance of the nature of noise within the city. He points out that in the traditional city the extent of the voice of the muezzin creates the unit. In dealing with the future, it seems to me this is precisely one of those cases which is no longer applicable. With automobiles we cannot hear the muezzin’s natural voice. Also, loudspeakers have extended his range. But I wonder whether those who deal with contemporary sociology may not identify the limits of certain sources of noise within the city that create meaningful entities. In older cities the water carrier, the vegetable vendor and so forth, created certain units through their voices. What is the equivalent today?

The signifying power within the city is created so much by human activities. This one broad issue seemed to be somewhat troublingly transformed towards the end of Berque’s talk when he himself seems, with his two rotating squares, to start worrying whether there are intrinsic meanings in certain forms. I feel very strongly that a characteristic of a great deal of the physical environment of the traditional Muslim World, traditional works of art and of
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architecture does indeed lie in the rapport between forms and in an abstract definition of forms, rather than in any one form itself. I am basing this mostly on things that I know better, i.e., the early period.

I want to stress another point Berque made. It is not only regions that are important but also times. What is true of the Muslim world of the eighth century is not necessarily true of the tenth nor the twelfth nor the fourteenth nor seventeenth. One of the great tragedies of the field is the freezing of certain periods and considering them characteristic of all times. While I like the notion that it is the syntax between parts that is permanent or significant, I wonder whether Berque himself is not tempted to find concrete meanings in specific forms. If we accept this, we might have to accept the arcades as well. I am a little worried on this particular issue, but I think it is clearly a subject for further discussion.

In the semiotics of the city, people, rather than forms, make it operative. Systems are permanent. Forms change and are modified, but the systems remain.

Fathy

Today's discussion was very interesting because we came down to architecture proper and are trying to define something which is very subtle: that is the spirit of Islam. We have in architecture the incentive for man to build, to do something. His psychological and cultural background makes him shape his architecture. If we want to understand the subtlety of the problem, what is not only functional but also what is spiritual, let us give an example. If we take a plate and put sand into it and vibrate it, the particles would take certain patterns. These patterns are guided by the mechanical movement of the plate because every grain of sand has no will. In town planning when we vibrate the geographical area, men do not necessarily vibrate in unison with the forces; they have the will to divert.

Architecture is the most important element in culture because a building to my mind is like the shell of a snail. The soft, living part secretes calcium carbonate and by mechanical forces it takes the shape of a spiral, but once the shell is formed it turns on the living soft part and gives it shape. So it is that the house shapes the individual, the city shapes the community. When we were vibrating in unison with the forces that were acting on our society, we created the Islamic cities. In the exposition of Professor Khan, we have seen the most beautiful examples of Islamic architecture from Spain to India that the Muslim has produced when he was vibrating in unison with his environment. Our architecture was not formed from the individual work of one man, nor in a single lifespan, because it had to have a tradition. There are cycles that need more than one lifespan to crystallize. Now, when we are cut off from our tradition, we are forced to deal individually with problems that need more than one lifespan to solve. It is beyond our means. We oversimplify any problem to tackle it.

We are here to define the problem of culture change and its effect on architecture. It is not only the Islamic spirit that we have to preserve but the quality of architecture. New materials that we have, new possibilities, new techniques in structure make us more concerned with plastic materials like concrete. A plastic material has no character. It is your own will that shapes it.

When I first saw Ronchamp, I was shocked. Here the architecture negates classic symbols of Christian architecture. It looks like the aerodynamic lines of an airplane. Do not bring sacred art down to this level.

We have to recognize that we have the implicit and the arbitrary in all our architecture. What is the implicit? It is, in a certain sense, what we described when we vibrated a metal plate. The mechanical forces arrange the particles into a certain pattern. Some grains of sand are large; some are small. They set a certain pattern among themselves, not affecting the general pattern.

In planning and architecture my will may incite me to diverge from the pattern. This can occur for two reasons. Either I do not know the forces and do not take reality and truth in architecture into consideration, or I am doing so with intent. In either case I am not allowed this in religious architecture, if we consider architecture a communal art, not an individual's will, because the building must be placed in the city.

Architectural forms are like a language; I have to understand the language if I am to talk to you. If nobody understands what I am saying, it is impossible. We have to define meanings of the many words we are repeating without understanding. What are the essential aesthetics in architecture? What do we call contemporary? Is it because this is taking place now? What is progress and what is the progression? If we analyze scientifically most of what we call modern, we will find it retrogressive and anachronistic because contemporary means living, existing, occurring at the same time and so it has a parallel between two things. What is it I am comparing my contemporary with? Is it just because I have put in a glass wall? In the past, the ancients had some point of reference as to contemporaneity. They took, for instance, the temple as a microcosm because they were most conscious, because they were not cut off from the cosmos. They made the temple to coincide with some pattern in the sky. So, nowadays, when we are not building temples, what would be the point of reference, what would be the point from which to judge our contemporaneity? It is applying modern science to all that we built.

We know that a plane of glass, the glass wall, is the last word in modern architecture. Once exposed to the sun, a three metre square of glass generates two thousand calories per hour. Would it be modern to make my building a solar furnace with a huge refrigerating apparatus?

What has changed in the Islamic spirituality to change our architecture? We can have examples from the past, which are wrong architecturally and spiritually and "Islamically" and we can have the ultra-
modern which would be Islamic in spirit, but we have to define what it would be. To define it is a very subtle problem.

I had the same when I was designing the village of Gourna where we had two hundred Christians, and I had to build a small church for these people. I could have designed just a church; I refused. I said there would be something missing. I had to have a Christian friend of mine come and design it because every line expresses a feeling from within which I cannot give technically. A religion is not given to the technician, it is given to the spirit. What makes an Islamic architecture is subtle; the identity we are talking about is that which comes from within the place and the culture. The best definition of culture is the outcome of the interaction between man and his environment in satisfying his needs both spiritual and physical. The physical, very simple. When we come to the spiritual, this is where the sensitivity of man should recognize that something is beyond him. But we architects don’t say so. We put into the ground whatever we want. An architect does not put his building into the interstellar space. He puts it in two environments, the God–made environment and the man–made built environment. If he doesn’t respect the first, it would be a sin. When we come to the man–made environment, including our Islamic or Christian or whichever architecture, we have to respect its past, because if we do not respect this architecture, it would be considered as lack of civility towards those who preceded us. If I have no information or knowledge of why they built this form, I should not abolish it because I do not understand it. If we have a certain architectural feature repeated in Islamic architecture, whether in a mosque or a Khan or whatever, when it occurs three or four times in the city or in different cities according to the laws of probability, it is impossible that it could have occurred by hazard only. There is a will behind it. By analyzing it scientifically, as I have said, we might find a guide to indicate to us true principles.

To my mind, in architecture the most important elements are truth and fidelity to both the environments, to the expression of man, not deviating like the grain of sand that jumps outside of the vibrating plate or having my own will and ruin the whole picture for all mankind.

Ardalan

I wish to look at four of the creative men who spoke today. I look at Fazlur Khan, a man of the East living in the West, who has begun recently to study the East. I find in his presentation a very academic base which says that we are to approach the problem rationally. Therefore, he seeks that which is written; he looks at the Koran and he looks at the Shari’ah. His presentation raises many issues as well as questions of direction. The key subtle element to which he alluded was the state of tranquility and that the state of tranquility might have aspects of both humility and individuality. But could not a good Zen Buddhist garden also be described in the same way? And, therefore, the problem is that the creative imagination within an Islamic vision must have some differences, and this is the point to which Hassan Fathy was alluding.

In Mr. Robertson, basically a man of the West but one who has lived somewhat in the East, has travelled internationally and worked in the last two or three years in the East and particularly in Iran, I find an extremely important man. He is a man who seeks the middle way in the Confucian sense, a sense of reality that is not too much to the right nor not too much to the left, yet not a compromise; a man who generally feels that he should be in the middle of the action, politics, economics and developers. He is also a person who speaks about an attitude and he calls himself a mercenary. I think he’s a very truthful man and in this mercenary attitude, he must make quick decisions. Essentially, he deals with a cookbook sort of necessity to put something together and then, as the man of the western cowboy imagery, he rides off into the sunset. In
dealing with such subtleties and such areas in which research have not been developed extensively, you really cannot do that. Robertson is an example of the man of the West who means so very well, but does not have enough sustained research of the two domains that Mr. Fathy alludes to, to be able to do the job adequately.

One of the important aspects of what has been shown is the idea of a master plan. The idea of a master plan is a conception originally found in geometric layout of cities in many places, in China, in Iran. These cities were geometric statements of cosmic consciousness, of a state of order, where the centre was a place of power. Around it was the settlement of the ministers and then, on the periphery, the body proper of the cells, of the labourer, the slave or whoever held this body entity together. That was a certain master plan. In time, the master plan became much more dynamic than that. Yet today, we re-introduce the aspect of the old master plan to countries who already have become much more diversified than that. The idea of a master plan today is almost antithetical to the dynamic growth of countries such as ours. You will never have enough data, you will never have enough of a model to be able to create a geometric pattern for the dynamism which it is to capture. The idea is to develop a suit though projections of data for what this man will be at the age of twenty-five. However, the man is stunted in his growth, his left arm is cut, something happens but the suit remains the same. So the man feels inferior for being either too small or too large, too warped or too powerful, too thin or too fat. I believe that there is another attitude which allows one to plan for uncertainty. Perhaps it is with a very simple modality very much like the music of the East, a very simple score which, however, you spontaneously interpret as you play your tune and learn from the note that you have performed what your next note should be. And if the drum goes out of tune, you then relate to another instrument to pick up your melody. That orchestration of a basic simple score has much more to offer to us than the conception of the master plan of the seventeenth, eighteenth, nineteenth and now twentieth century.

Going next to the work of Mr. Khwaja, I find so much agreement with a man of the East who is working in the East. I find in his presentations, however, a sense of bewilderment in the answers that are emerging. It is a very significant piece of work about direction that one ought to take.

This is also some of Professor Khan’s concern. I do not find his great engineering imagination dealing with the idea of the new aesthetic of spacemaking. He is at his point of transformation, trying to learn about Saudi Arabia. In his paper he described mosques essentially from a certain world. There are other mosque worlds. There is the mosque world of Iran which is very different from the linear, columned mosque. There are the mosque forms of the hot, wet climates which were not alluded to in this paper. In a learning process, this is all positive. I think this is exactly where we ought to be. What really is needed in the Islamic countries is enough sustained research into the quantitative adaptive architecture to which Fathy alluded when he began his presentation and observations a few days ago. But he is talking about scientific information, about adaptive architecture at all levels.

However, I found that there was another point raised rather obliquely in various other comments. Namely, if we cannot measure something, it does not exist. Consequently, because we could not measure Islamic spirit, we say it does not exist. This is extremely problematic because one can rationalize and quantify the rational. One cannot rationalize the intuitive, the non-rational, a dimension which is the foundation of Islamic vision. If one does not combine the rational and the intuitive, two complementary aspects of our vision of existence, one has lost the whole purpose of this exercise. Of course you cannot document spirit, it is transcendent, it is a way of life, it is a vision. This is a very important aspect of the problem that we have been discussing.

Hassan Fathy, a creative man of faith of the East, asks our point of reference. He alludes to cosmic orientation. He deals with a primary cause. If we neglect this aspect, then we should only call ourselves existentialists. Can you be an existentialist Muslim? Such a category may exist, but I cannot comprehend it. Therefore, if you believe in primary cause, you must have that sense of reality. This sense of reality has a universal dimension and a very personal dimension. The personal sense of reality works in concert with the universal (within the framework of an Islamic universe). This pleases our aesthetic sense of existence. As artists we experienced this pleasurable sense of the beauty of existence and we then recall at will.

The dialogue of the individual with the communal has yet another scale. If the individual exists, then society exists. If this society exists and it views things in a certain way, a nation exists. And, therefore, I believe very much in the fact that national or regional cultural identity exists and it converses with another thing called dār al-Islam, the world of Islam, this wonderful multicultured world that goes from Indonesia to North Africa and beyond. The world of Islam converses with the world in a universal way. The individual parts of the body are talking with the body and living in concert with it. The conversation of these complementarities are the dimensions which have to be addressed. If we negate these dimensions, we are also negating the formula which is very fundamental and essential to the Aga Khan Award for Architecture.

Fathy

We are all trying to uncover the identity of Islamic architecture. Our architecture had a psychological background which we can analyze. Also, it has genes and chromosomes which give it the figure, the same shape of the family; cultural change is an interruption cutting us off from our genes and chromosomes. And we architects are wiping out all of what we have had pretend-
ing that this is not modern. Never in the history of mankind were drafting instruments a determining factor in design. Nowadays, the T-square has become a determinant. I call this T-square architecture, far from man when he was dealing with stone.

I am reminded of the story of a man passing three men dressing stone, conversing with the stone. He asked the first man, "What are you doing?" He answered, "I am earning my living." "And you, the second?" "I am dressing the stone." "And the third?" "I am building a cathedral." So there is a great difference among the three.

We are earning our living as architects; we are not dressing stone, because we don't have the stone; we have concrete, which we pour. These are the major factors that have affected our culture, all our culture. East and West are the same. Facility that is offered man has cut him off from not only the cosmos but from nature. First of all, we are cut off from God-made environment in our modern cities. We are surrounded only with the man-made environment; we are surrounded with concrete, asphalt, street lamps, trams, cars. Town planning has become the domain of road engineers. Where are the architects? Where are the sociologists? The architect who feels with his fellow citizens and tries to put beauty into his building so that it bows to the passerby, that architect is civilized, is civil. Every ugly building is an insult to the gentleman passing in front of it. It is saying, "This is your worth, Mister!" We lose the aesthetic factor, we lose the human scale, if we say town planning is for politics, economics, whatever, and not for men. Town planning cannot be reserved for engineering.

Man is created by God to be surrounded by a certain environment composed of the landscape, the rock, the tree, the animals, the sky, even cosmic rays. The teachings of Islam, the teaching of all the religions, are after the same thing: to find God by your senses, by analyzing, by observing nature. The means might be different because my environment is different. In the Koran it says that Abraham had his people
live in a barren desert to pray. This "pray" is to observe, to think, etc. That is why we have the abstraction in the Islamic architecture. We have sciences that grew in Islam: geometry, algebra and astronomy, because sky surrounds man. When I have nature which is very rich, it is different. I could not have had Impressionist paintings in the desert. I could not have a palm tree and a camel beside a Swiss chalet; this is what we are doing nowadays. We are having Swiss chalets with camels; this is what we are doing with architecture. We have to have truth. Truth to what? To God and to his creation, magnificence in everything, from the smallest to the largest. If I have a full glass of water with 50cc. capacity, it cannot hold 51cc. It would spill over. But if you insist, I will freeze the water and put in 1000cc. of frozen water. When we put men on top of one another, we are freezing something in these men. The spiritual needs of man are most subtle and difficult to recognize, but nonetheless present. How can I admire the work of God in buses, automobiles, asphalt, concrete or glass walls?

We have to recognize what is interchangeable between cultures and what is non-interchangeable. Some elements of a culture I can take, others I will never assimilate. Interchangeables are those elements of a culture suited to your nature and your physiological make-up, things usable to you.

I have been trying recently to use a little musicality in teaching the problems of town planning in schools to produce the harmonics and counterpart of volume and scale. This is the way to be modern but not to have glass walls. In the deep ocean you have flat amorphous organisms. Why? Because there is no change in temperature. There is no change in pressure. There is no light. It is all dark. So when I make my environment uniform with constancy of temperature ensured by air conditioning, I am returning man to that amorphous creature regardless of whether he has already been articulated.

We must find these subtleties and put the emphasis on the spirit of Islam that has been lost unnecessarily. As proof for the necessity of such investigation, we have seen images that have replaced the traditional, most of which cannot even be called architecture. We have to think twice about what we call "modern architecture" and "Islamic architecture."
Toward a Revitalization of Traditional Habitats

Preserving the Living Heritage of Islamic Cities

Janet L. Abu–Lughod

Yesterday we were theoretical, as if Islam were primarily or solely a system of beliefs. What has always impressed me about Islam is that it is a set of actions if one considers the five pillars. It is not the belief in God that is important, it is the declaration of God. It is not the idea of praying, it is prayer itself. It is not the community of equality as an idea, but the pilgrimage in which all men stand equal in community. In Ramadan, it does not matter whether you think you ought not have that cigarette or food. It is not the smoking or the eating, the thing of importance is observing the fast. The fifth, which has been totally forgotten in the theory is alms. They are a responsibility of each man toward his fellow man. I want to talk about practical Islamic spirit. You are practicing architects, let us see if there is something upon which to practice, not something for just theorizing.

Many of the largest cities and now a few smaller ones in the vast territory shaped by historic Islam are the repositories of a precious and irreplaceable heritage (not only for Islamic countries, but for the world) not only for their archaic qualities, but for their living relevance today. Both the preservation of that heritage and the harnessing of that vital relevance are compelling rationales for a concern, practical as well as scholarly, with Islamic architecture and urbanism.

There is not, nor was there ever, an Islamic city or even an Islamic system of city building, if one means by that term a common set of architectural building blocks generated by a common process and combined according to a common set of rules into a common composite urban pattern. One cannot speak of the Islamic city in the same way that one can, for example, speak of the Spanish conquest city of Latin America (which was implanted redundantly during the sixteenth century on a virtual tabula rasa, according to a standard blueprint accompanied by a uniform charter and a set of legal codes). Islam expanded into wide regions with disparate traditions of design, architecture and urban form. It was carried in multiple directions by various groups, each drawing upon a particular subset of those traditions combined in a unique amalgam. These regional amalgams evolved over the centuries, gaining not only by means of internal development and elaboration, but by infusions from related traditions which, thanks to the solvent of the common religion, moved across frontiers with remarkable fluidity.

While the diversity is striking and defies simplification to a single genre of either architecture of urban form, it is equally remarkable that one always knows when one is in the presence of Islamic civilization. Whether it is toward the periphery, in Spain or the Indian subcontinent, or closer to the heartland of the Arab-Persian Middle East, one does know. Is it merely the superficial decoration, the dominant blues, greens and turquoises, the insistently repetitive arches, the geometry
of tiny space aggregating to vast designs, that signals the code? Is it the basic architectural concept of square–horizontal and round–vertical space that announces the unity underlying external diversity in exact shape? Is it the overall emphasis upon enclosing, enfolding, involuting, protecting and covering that one finds alike in single structures in quarters, indeed in entire cities? There appear to be certain basic "deep structures" to the language of Islamic expression in space.

There are also recurring idioms which, while they may not be attributable directly to the religious or legal system, were functionally suited to the social structure commonly found within Islamic cities and to the technology dominant during their periods of maximum definition and growth. Among these idioms are, characteristically: the saq or bazaar, the residential court (contiguous but unconnected rooms each giving out to a common gallery or atrium), the blind or deceptively hidden entranceway to individual structures or quarters, the tri-fold (rather than the more Western bi-fold) division of space into private, controlled semi-private and public, and a clear segregation into male and female spheres, perhaps as an underlying cause of many of the above features.

Some mechanism, common throughout the lands of Islam, helped to generate both the deep structure and the more idiomatic expressions. Without a doubt this was the legal system, which constituted a common base despite the variations introduced through major sectarian cleavages and the chief schools of jurisprudence. Rather than central planning according to certain models (as was true, for example, in the overseas colonies of classical Greece and Rome), it was legal notions of proper behaviour in space and legal regulations in property relations (between theocratically-legalized ruling classes and their subjects, among fraternal members of the 'Umma, between believers and non- or semi-believers, between near and distant neighbours that created, over and over again, certain recurring solutions to the question of urban spatial organization, wherever Islam was implanted.

Whether one speaks of restoring and preserving a heritage, or of incorporating into contemporary planning and building the elements which made Islamic cities both beautiful and functional, one must try to define this essence and the principles that governed its repeated generation. For only if we can identify those essential qualities can we select appropriate buildings and quarters for preservation according to the criterion of exemplarity; and only if we can formulate these basic principles can we explore their enduring worth and determine whether they have any applicability for solution of present-day problems in urban planning.

The purpose of this paper is, therefore, to examine, albeit in most tentative fashion, the kinds of policies that might guide our efforts to preserve and restore the Islamic heritage in historically significant urban centres and to study the kinds of planning principles we can derive from our knowledge of these past creations so that they will infuse present planning efforts with authenticity. In both cases we recognize that changes in social organization and contemporary needs will require creative adaptation rather than blind imitation.

None of these considerations can take place in a vacuum. Ours is not a theoretical exercise to determine the best ideal policies but a very practical exercise concerning real space: space which is already occupied and which therefore must be restored and replanned not for a single end-product, but for a complex process of ongoing compromises. For the cities in Islamic areas which are the richest in architectural heritage are today undergoing extremely rapid and often burdensome changes. They are to be found in the Third World, where economic change is occurring very quickly although economic development may be lagging behind. They are located in regions of both demographic increase and heightened urbanization where cities yearly contain a larger and larger share of the population. Class structures are being transformed from the grossly bifurcated divisions typical during the preindustrial and colonial eras to a somewhat more balanced and equitable continuum. Population growth and economic involution has caused an enormous increase in the number of low income persons to be housed in cities.

Beginning in the nineteenth and early twentieth centuries, sometimes through indigenous efforts and sometimes as the result of colonial conquest and city building undertaken by the colonizers, many of the cities that concern us in this paper grew dramatically in population and area. Newer quarters that became the domain of the ruling classes, whether indigenous or foreign, were built next to pre-existing madinas. These newer zones first attracted the local aristocracy, but eventually even the bourgeoisie began to desert the old cities for the new. The places they vacated were more than filled by the growing number of working-class and lower-income residents of the city.

Over time, therefore, the old cities were transformed into proletarian quarters. The implications of the population shift were significant for both the social and the physical conditions in the older cities. Not only did the increased segregation according to income split asunder the day-to-day clientage "deference-protection" symbiosis that had prevented brute class conflict over urban "turf" but also zones ceded to the poor. Zones so rich in the heritage we now wish to preserve underwent precipitous deterioration.

The density at which these districts are now occupied, without any real change in building height or land coverage (and, indeed, often with some loss), is today approximately two to two—and—a-half times as great as that which prevailed when the madinas were the cities. Such densities, combined with the low incomes of the occupants, the minimal expenditures on building maintenance (whether due to rent control, waqf/habas proprietorship or simple economics), and the cumulative effects of years of preferential investment in the urban infrastructure of the newer and wealthier quarters have brought about this situation.

In the process of degradation, older residential structures have collapsed from age
and neglect, leaving rubble-covered lots that either remain vacant or serve eventually as the sites for unregulated replacement housing that is ill-matched to the surrounding area. Nonresidence structures of irreplaceable historic significance, such as khāns, wakāla, funduqs, even madrasas and mosques have been converted for use as dwellings to meet the burgeoning demand generated jointly by population increase and the loss of residential structures through deterioration. Empty spaces in courtyards, streets and even cemeteries have been preempted to accommodate makeshift housing rented to squatters. It is these areas that we are talking about when we refer so cavalierly to the Islamic heritage.

There are, thus, two overwhelmingly important problems now centering on the same space. There is the problem of preserving an architectural heritage and of providing safe and decent housing for a large and growing number of lower income persons whose emotional and economic attachment to their location is often underestimated. In general, the solutions to these two supposedly separate problems have been assumed to be incompatible.

Where historic preservation and restoration have been accorded highest priority, the resolution of the conflict is often seen as “clearing” the low income population, either from the specific structures that are to be restored or from the special subareas that are to be rehabilitated or reconstructed for some “higher purpose” such as tourism. Since these activities have generally been undertaken by Ministries of tourism or communities to safeguard and restore historic monuments, little attention has been paid to the needs of the population to be displaced by the planned “improvements.”

At most, it is assumed that the issue is one of providing alternative housing. Ministries of housing are often called upon to assist in this process. Such relocation housing, if provided at all, is likely to be located on the outskirts of the metropolis. This approach ignores the close relationship between location and occupational and residential requirements of the population (i.e., the heavy dependence upon central location of artisans, vendors and service workers). It sacrifices the social values contributed by the intricate kinship and proximity networks with neighbourhoods that are thus fragmented and destroyed by relocation.

On the other hand, where housing quality, per se, is accorded the highest priority, the resolution of the conflict is often seen in terms of clearing and replacing the most rundown structures, regardless of the effects such clearance may have on the appearance and, indeed, texture of the zones in which such improvements are being introduced. Dilapidated buildings or vacant lots are replaced by any kind of multi-family structure that will rehouse at a higher standard. Since these replacements usually command higher rents, the lowest income population is displaced anyway because it cannot afford the better housing, and the historic character of the district is lost because replacements are unimaginatively built following the designs and using the building materials that are standard in other parts of the city. On rare occasions, whole sections of substandard housing may be destroyed to make room for publicly-sponsored projects such as when the evacuated Jewish quarter in the medina of Tunis was razed and rebuilt with uniform structures arranged in orderly rows.

Either one of these policies, pursued single-mindedly, is foredoomed to a separate type of disaster. If matters continue the way they have been going, uncontrollled by policy, both types of disasters are likely to occur simultaneously. There will be a continued degradation of historically significant and architecturally irreplaceable structures, as well as a loss of the spatial organization that constitutes a crucial element in the integrity and authenticity of the older zones. Not only that, there will be a degradation and eventual loss of inexpensive housing accommodations for the poor and its replacement by a melange of ill-coordinated and aesthetically unattractive modern structures of the most minimal type which will be too expensive for the original inhabitants. This latter population will increasingly be displaced toward the outskirts where their economic difficulties will be compounded. In the process, an efficient system of small-scale production and distribution, whose economic contribution goes largely unnoticed and unappreciated, will be destroyed, since it depends upon location in the older central areas for its perpetuation. A social fabric which has taken decades, if not centuries, to weave, which obviates the need for governmentally-provided assistance, will likewise be torn to shreds.

We must ask ourselves, and quickly since we do not have much time to lose, whether the dilemmas and conflicts so apparent in today’s conventional approaches are really inherent and unavoidable. We must search quickly for alternative approaches which might help to make the two goals compatible with one another and with an even higher unified purpose. I would define this higher purpose as:

The creation of self-renewing centres which retain the best of the architectural heritage from the past and which utilize still valid principles of urban physical and social organization drawn from Islamic precedents to create, throughout the Islamic world, cities which are not inferior copies of Western models (which already have proved their bankruptcy), but authentically innovative cities designed to function efficiently for the type of life found in them today.

When the goal is stated in this manner, there can be no question that we are not after the preservation of a mosque, here or there, much as European cathedrals have been preserved, often as empty shells. We are not after the isolated construction of new buildings with a thin veneer of Islamic cliches such as arches or bas-relief. We are certainly not after a Disneyland reconstruction of folk museums in which anachronistic activities are staged for the edification of jaded tourists. These approaches are frivolous and denigrate both past contributions and present needs. Our task is too serious to be fulfilled by such simple-minded definitions of preservation and restoration. We
need to seek a deeper meaning for those terms.

What, in fact, do we wish to preserve? Is it isolated buildings or whole sections of cities? What do we want to restore? Is it a way of life or a principle for organizing living?

Concerning the first pair, we must recognize that the historic city built by Islam was, in aesthetics as well as ambience, much more than the sum of its parts. Thus, preserving the Islamic heritage must encompass not only treasuring specific buildings valued for their outstanding architectural merit and symbolic significance, but conserving exemplars of a unique pattern of spatial organization (street plans and building types) that as a whole define quality of old areas. If such buildings and patterns of spatial organization were once functional, can they be given new functions, new meanings, today?

Concerning the second pair, we recognize that ways of life are products of their times and cannot be falsely “restored” or revived. On the other hand, principles for living may have universal validity and continued relevance long after the material conditions that gave rise to them have altered. Such principles can help to shape new material conditions, provided that the values that underlie them remain desirable.

In the above discussion I have often placed the words “preserve” and “restore” within quotation marks. The terms themselves are quite imprecise, subsuming as they do several potential meanings. Each term has both a passive and an active sense. Thus, “preserve” can mean “to keep undisturbed, safe from harm or destruction,” a rather passive goal, but it can also mean “to keep alive.” The term “restore” is even more ambiguous, since it can imply “to repair so as to bring back (something) as nearly as possible to its original state,” but can also mean “to bring back (something) to a healthy and vigorous state, to a previously normal condition.”

The passive sense emphasizes an end-state and encourages atavism. The active sense, on the other hand, emphasizes growth and change, the conditions of a healthy and vital organism. It is this meaning that should be stressed in our policies, a concept that is perhaps more accurately conveyed by the word “revive,” i.e., “to restore to vigour and activity after decline, to return to a flourishing state after decay.”

This exegesis into terminology is not academic; the way we conceptualize the goal predetermines which of the multiple policies that might be pursued under the
general rubric of "preservation/restoration" will be selected. These policies range from:

1) Reconstruction of buildings to some original state and then guarding them from subsequent deterioration by preventing their use. This is the "Dead Museum" historical monument approach, which has great potential for inauthenticity despite its preoccupation with accuracy of detail.

2) Partial restoration of deteriorated monuments with a clear visual differentiation between surviving (but not necessarily original) fragments and newly-built reconstitutions of missing or destroyed elements. This approach tries to evoke a sense of history rather than to create a movie set. Although it is more authentic than alternative (1), it still tends to preserve "under glass" a functionally-vacuous monument.

3) Reconstruction, or rather reconstitution, of the original form of a structure or set of structures, but for a new use (e.g., palaces converted to museums or cultural offices, **s**iqs transformed into rows of tourist shops, etc.). This policy is less wasteful of space and assures continuous maintenance; it can, however, lead to a disembodiment of the "monument" from the true life of the community that surrounds it.

4) Regeneration or revitalization, in which earlier forms and functions are adapted to contemporary needs. This may include reconstruction or rehabilitation of existing structures but must also involve continual replenishment of the stock of useful and beautiful elements in the quarter in a harmonious way. This policy, in my opinion, should be the goal of preservation policies, for only it emphasizes that we wish to preserve a dynamic community rather than a lifeless shell.

The old, so-called Islamic city was, after all, a living city, and the basic characteristic of a living city is that it changes and constantly renews itself. When "alive," public-ceremonial buildings were not only maintained but also embellished, altered, added to from time to time as their use changed. They were replete with functions and were adapted as these functions expanded or varied. Private commercial and residential quarters, as well, underwent continuous rebuilding, as houses and shops decayed, were renovated or even replaced.

If it is this principle of vitality we wish to revive, then clearly static reconstruction and dead preservation of buildings and quarters as they were at some arbitrarily selected point in time is not a reasonable way to proceed. Only a reactivation of economic functions that are the **sine qua non** of a healthy urban quarter, only a return of functional principles of construction that will yield a desired pattern of spatial organization (not because it is ordered, but because it is functional), only a return to the use of certain legal forms that facilitated and guided urban developments in a particular direction, only these in concert can yield the type of revival-cum-restoration we have been advocating.

Edirne, Turkey: view of the courtyard elevation of the Rüstem Pasha caravanserai prior to its reconstitution into a hotel

Photo: H. Dağanbey
If these are accepted as goals, there is no necessary conflict between policies to restore and preserve a historic heritage and policies designed to enhance the well-being of the poorer populations that presently occupy the older quarters of major Islamic cities. As we shall try to demonstrate in the remainder of this paper, the needs of that population can be met though the preservation and revitalization of older forms of economic and spatial organization and its skills and resources can be mobilized, duly assisted by the state and other public agencies, for the joint task of revitalizing core areas of historic importance and contributing to the satisfaction of their own needs for jobs and housing.

How can this be done? Each country needs, of course, to devise its own plans commensurate with prevailing economic and social conditions and drawing upon its own particular heritage. Nevertheless, it is possible to outline some of the principles that could generally be followed in any reconstruction programme and to illustrate, through a few more detailed examples, how the problem might be approached.

We begin by distinguishing three basic types of land uses which were found in the historic core and which still exist today: commercial/industrial uses; public–religious and governmental–service uses; and domestic–residential accommodations. Each of these types of land use requires a somewhat different approach to revitalization. But about each type we must ask: What were the characteristics of these productive, ceremonial, civic and domestic functions in the historic city? What types of physical–spatial accommodations were invented to house and facilitate these characteristics in the realms of production and public and private consumption? Are any of these characteristics still in existence? In what ways have they changed? Given present characteristics of life and needs in the poorer quarters of the city, do the older physical–spatial arrangements have anything to offer to the solution of present needs? In what ways will they have to be modified to meet changed requirements? If we respond negatively to the final set of questions, believing that characteristics of production and consumption have changed so drastically that older forms are no longer functional, then it is probably impossible to revitalize Islamic modes of urban design; they must be relegated to antiquarian exoticism. On the other hand, if the answers to these questions are positive, as I believe they are, then a creative period of urban revitalization is not only possible but long overdue.

I. What were the characteristics of these three land uses during the so-called traditional period of the Islamic city?

**Commercial and Industrial Uses**

The scale of operations was generally quite small. Labour was utilized intensively and was often family–organized. There was, except for long–distance trade, low capitalization which made it possible for entrepreneurs to enter the field “on a shoestring.” Skills and knowledge of the trade were learned through a system of apprenticeship, not in schools. Specialization in plant was minimal and shop uses quite interchangeable. Many operations could be done without fixed plant in places such as the domicile. There were fairly direct and personal relations between producers and sellers and between sellers and buyers.

**Public Uses**

Most public uses were religious, broadly defined. Religious buildings, however, were always much more than specialized places of worship. They served educational, political and communal functions and often had attached to them more specialized facilities, such as hospitals, clinics, housing for resident or itinerant scholars, etc. Government officials not only held open court, but often circulated from one point in the city to another, bringing services to the quarters and dispatching neighbourhood–related duties within the neighbourhood.

**Domestic Uses**

The city housed itinerants, institutional groups and family units; these domestic groupings spanned the entire spectrum of the class structure. In addition, living accommodations were also provided at the place of work, although family units were usually segregated from workplaces. Residential propinquity was not only often the outcome of some prior tie (such as kinship, ethnicity, clientage, or common occupation), but tended to reinforce more particularistic ties, because of shared needs and responsibilities. These might entail shared responsibility for the upkeep of common facilities such as party walls, accessways and the like; shared desire for protection and security, and joint responsibility vis-à-vis “the authorities” for the morals and administration of the quarter. Subdivision of property rights was legally possible and common. Land ownership, separable from building ownership, individual ownership of separate floors of a building or portions of a floor a possibility, and title separable from usufruct, etc., cooperation among multiple neighbours was enforced out of necessity.

II. These basic characteristics yielded fairly universal physical plans throughout the lands of Islam. These spatial arrangements were highly functional, given the characteristics of economic and social organization.

**Commercial and Industrial Spatial Arrangements**

Except for the few large–scale noxious industries, such as slaughterhouses and occasionally tanneries, and the few operations involving resource extraction, such as quarries, etc., most industrial/commercial enterprises were concentrated by type within a relatively narrow belt (or in the more important cities within several belts) of maximum accessibility. Multiple outlets for the same product maximized labour and competitiveness while their concentration together
maximized range of choice for the consumer (theoretically, at least). Proximate locations for production and sale, on the other hand, mini-
mized transport costs and made it possible for the business of the city to be conducted without elaborate facili-
ties for the movement of goods or people. Foot or animal—back were the chief means of travel. Since the public 
ways were primarily walkways, any wider portions were preempted by itinerant traders who provided cooked 
meals, sweets and drinks to passersby as well as vended goods too modest in value to warrant rent. The general 
rule of distribution was that bulk items of relatively low cost, purchased by wholesalers or seldom but in large 
quantities by individual householders, were located toward the periphery. High-cost small—bulk items (such as gold, jewels, rugs, etc.) were located as close to the centre as possible, while shops offering goods and services of low value but frequent purchase (groceries, baking ovens, baths) were scattered at close intervals throughout the quarters of the city.

Public Spatial Arrangements
Mosques were of two basic types, related to their principal function: the congregational or prayer mosque (the earlier form) which was a square court, increasingly enclosed by arcades on all four sides, equipped with, at the minimum, a source of water for ablutions and a mihrab to show the direction of prayer; and the madrasa mosque (a later development) which was a covered building, usually domed, having four eyvans arranged in cruciform, as well as numerous outbuildings designed for residential, medical and to predominately in the cities in which served the multiple functions noted above.

There was an elaborate hierarchy of mosques, from the central cathedral type in which the khusba announced changes in dynasties and other major political events, down to the modest neighbourhood centres at which locals gathered for prayer. All, however, maintained some type of school and many offered, at least on an informal level, a range of social services.

Government offices were similarly dispersed. The office of weights and measures was of course in the sâq, as 
was that of the muhtasib or his deputy. The chief qâdi had a central 
court, but he also heard cases in his home and in mosques or other public structures throughout the city. Police 
functions, on the other hand, were usually well segregated from other activities. The major characteristics of 
most public activities were that they were decentralized, depended upon sharing time with other public func-
tions, and made little distinction between sacred and secular buildings.

Domestic or Residential Spatial Arrangements
The dominant physical form was a set of inter-nesting cells, each focused on an open core commensurate with its 
scale. The single dwelling or group quarter consisted of separate noncommunicating rooms, strung out 
around a common courtyard (or separate male and female courts), to which there was limited access from 
outside. Visual privacy was assured by means of bent entranceways. The next larger unit was the cul—de—sac, 
around which individual dwellings were strung out, preferably with entrances staggered to preserve privacy. 
Access to the cul—de—sac was limited and might be barred and privately policed at night. Multiple cul—de—sacs 
in turn aggregated around a common square linked to a feeder road having only limited contact with the major 
street. Most daily necessities were available within this medium—sized cell which during times of civil 
disturbance might be barred and defended. Several of these quarters (I have particularly refrained from using 
any specific term to designate these cells, since terminology varies from region to region while the basic cellular 
organization itself is more common although not universal) may, in turn, have aggregated to larger units before they joined the final and largest cell, the city itself, surrounded by a wall, having only limited and controlled access (gates) and centering upon the major mosque and the core sâqs.

The advantages of such a pattern of spatial organization are its flexibility (units can expand or contract, de-
pending upon exigencies) and its distinctions into differential levels of intimacy. Dwelling units can expand 
to multiple rooms or contract to single ones; extended family life is possible through preemption of adjacent build-
ings on a cul—de—sac, but nuclear families can contract into single dwelling units. Core space, what I have 
referred to earlier as semi—private space, may be used to unite neighbours in common activities or it may be used as a buffer zone to separate incompatible groups or activities. In any case, the existence of such shared space requires a modicum of cooperative activity among neighbours and makes it impossible for isolation or extreme anonymity to take root.

Often, restriction of young children to the confines of the semi—private protected space creates neighbour-
hood bonding (both positive and negative) not only for the young but for their families. The availability of such 
space makes it possible to accommodate the larger crowds that are generated on special occasions (such as 
weddings or other ceremonies) and make it inevitable that neighbours will be spectators if not participants in the significant events of each other’s lives.

III. Are the functions described above so unsuited to today’s needs? Are the spatial arrangements through which these functions were fulfilled so ill—adapted to present requirements? We shall examine, in somewhat greater detail, the special characteristics of the population which now lives in the older cities in order to determine how these forms can best be adapted for their use.
the covered, enclosed, arcaded shopping mall if it is not a sāq? There has been a rebellion against the large department store and a renaissance of the boutique or small specialty shop. There has been a recognition that automobile travel is least conducive to impulse trade and that more leisurely pedestrian movement is required for shopping. And there has been a recognition that small shops, run by their proprietors, can offer more personalized service than a large bureaucratically-organized store manned by indifferent clerks.

In the realm of public services, architects have been advocating the construction of multi-purpose public buildings that utilize space efficiently through time-sharing. Public schools, for example, now serve in the evenings as adult education centres and meeting places for community organizations. Churches have expanded from Sunday religious functions to include many midweek social services: day care centres, health clinics, counselling centres. Also being advocated is further decentralization of government offices to storefront and other nonspecialized space to bring administrative and health services to the people, particularly in areas inhabited by low income persons.

The newest plans for residential units similarly recall principles that were well established in the Islamic city. Multi-family houses containing modular dwelling units that can be subdivided or expanded by subtracting or adding adjacent rooms are among the most advanced ideas architects are advocating to gain flexibility within the housing stock. The condoninium, which contains both private family space and semi-private shared facilities that can be used for ceremonial and recreational purposes, is another such design. By definition these solutions require that neighbours assume joint responsibility for the maintenance and upkeep of these communal areas which stand midway between the household (private) and the outside world (public). There has been much talk in planning circles recently about defensible space, i.e., the creation through design of protected subareas of limited access. Guards are hired or neighbourhood vigilantes are organized. Protection, not only from physical harm or theft, but from the incursions of noise, through-traffic, and even visual stimuli are also being advocated to create islands of quiet and enclosure within otherwise centrifugal space. And there is no need to recall the reams of written material that have been devoted to the neighbourhood concept, ever since its discovery at the beginning of this century.

Even many of the institutional mechanisms widely used in the old Islamic city and still able to be resuscitated are now being recommended for modern cities. One of the most promising of these is the land trust, where public or mortmain title to the land is established in order to prevent the inflationary and destructive effects of land speculation. Ground rents are adjusted to uses and the proceeds used for maintenance and the provision of necessary municipal services. Students of Islamic history will recognize here that the much maligned institution of waqf or habus which, despite the abuses which were certainly perpetrated, contained much potential for good. Where waqf land still exists, it offers a tremendous advantage to city government seeking municipal control over land uses and a non-corruptible vehicle for subsidizing the housing of the poor.

A second legal mechanism for achieving certain planning ends, more and more advocated in the West at this time, is divisibility of proprietorship rights. Islamic law made such flexibility possible. Ownership of a structure might be separated from ownership of the land on which it stood; "air rights" were purchasable, which permitted the construction of separate floors of a building by different owners; the family mortmain trust offered the precedent for shareholding in a common ususfruct. Automatic easement rights involved owners of abutting properties in a mutual responsibility for shared space and accessways, and legal precedents enforced the liability of neighbours toward each other's welfare. All of these are
considered highly innovative in the West. Political institutions also strengthened the bonds among neighbours, increasing the influence of direct social control over behaviour and requiring the contribution of cooperative labour to local upkeep. Many of these goals are now being advocated by Western social planners who have been stressing the importance of devolving certain functions and responsibilities and powers back onto the small local subarea, both as a way of performing those functions more efficiently and relevantly and as a way of creating bonds of caring and mutual assistance within neighbourhoods. These traditions are still alive in cities of the Islamic world and could easily be strengthened and adapted to new purposes.

The above remarks are sufficient to indicate that we are not asking that Islamic cities regress to some archaic and no longer viable system of organizing space and human relations. Rather, we are asking that a close and respectful look be taken at existing indigenously developed designs and mechanisms to determine how they can be built and improved in order to solve the urban problems of today. I believe that they have much to offer, not only to the Islamic world as it “modernizes,” but to the rest of the world, even those parts which are considered the most advanced.

We return now to the crucial questions. Do the characteristics for which the older Islamic city was so functional still exist in today’s cities? In what ways have they changed? And given the present characteristics and needs in the poorest quarters of the city, how functional are the older physical/spatial arrangements in satisfying these needs? In what ways will they have to be modified to suit present requirements?

A. Commercial and Industrial Uses

Looking first at commercial and industrial activities, we note that throughout the Third World there has been not only a persistence but indeed an increase in small-scale, labour-intensive commerce and services dependent upon minimal capital, modest or no fixed plant, having ease of entry and requiring little or no formal schooling. At least half of the labour force in city after city in the developing world is engaged in occupations that fall within the tertiary sector of the economy.

It was formerly fashionable to view these activities as pathological, unproductive “make work” necessitated by overpopulation/over-urbanization. Actually, they provide an important livelihood to a population that would otherwise be unemployed. Current views of this informal sector acknowledge that it provides a valuable and economical means for distribution within the city. This is particularly true for poorer persons whose costs of living would be considerably higher if they had to depend exclusively upon the formal distribution sector. Such distribution is accomplished primarily by animate means. This not only conserves increasingly scarce and expensive energy, but uses the existing, though perhaps inadequate, circulation system less wastefully than would mechanical transport. Despite the condescension with which Western economists have viewed this activity, to have one’s own business, no matter how modest, is viewed as success by the practitioners. This is the ultimate ambition of semi-skilled workers in large-scale industry. One must also acknowledge that many of the goods distributed and the services performed enhance life for the residents (we might note in passing that it is also these trades that give animation and flavour to many Third World cities). A large proportion of the people living in the remnants of the Islamic city are engaged in these occupations. The daily crowds in the oldest quarters attest to the continuing demand for their goods and services.

Industrial activities are somewhat less thriving on the small-scale informal level. Many of the former handicraft activities in the old cities were long ago undermined by the forced incorporation of their regions into the world system of trade, as sources of raw materials and markets for manufactured goods. While these handicraft activities continue, chiefly in the oldest quarters of town where they are increasingly mobilized for tourism, their role is dwarfed by two other types of industrial activity. One is large-scale factory production, highly capitalized often by external sources, which is located chiefly on the outskirts or in the newer parts of town and employs many new migrants to the city. The other, still centred chiefly within the oldest quarters, is small scale but not traditional, although it employs many of the old time craftsmen. This latter may be called, for lack of a better term, the industry of recycling. Either the detritus of the modern sector is used as the raw material from which hand-crafted consumer goods are produced for the poor (e.g., used coke bottles melted down and reblown as glassware or containers), or items which have been discarded as broken or obsolete by the upper classes are repaired or reconstructed for sale to the poor. These operations are of incomparable importance, both in giving occupation to workers and in salvaging scarce resources that would otherwise be wasted.

Petty commerce, nonmotorized transport, traditional handicrafts and industries of recycling are all potential bases for economic viability in the oldest quarters of the city. These should, therefore, be encouraged rather than suppressed or neglected. For most of the uses, the spatial organization of the old city is ideally suited. The open courts surrounded by small storage rooms that can be closed at night (i.e., khangs), offer low cost space for handicraft and recycling operations without interfering with circulation. If bulky motorized vehicles can be prevented from competing for space, then pedestrains, nonmotorized transport and semi-stationary vending can be accommodated without blocking movement on the streets.

Let us list the major problems: How to improve access to, and articulation with, the remainder of the city; how to gain adequate room for storage and expansion; how to exercise some control over hazardous, noxious or extremely noisy activities in quarters that are chiefly residential. Additionally, some assistance to innova-
tive entrepreneurs may be needed to provide the seed capital to get them started. Rather than suppressing mobile or semi-mobile vending because it interferes with automobile transport, it would be better to prevent the latter by providing adequate parking facilities and mass-transit terminals at the edge of the old city to integrate it better with the new. Rather than devoting subsidies to large-scale industries, often foreign-controlled, which use little labour and require significant public expenditures in infra-structure, it would be better to subsidize the smaller indigenous enterprises that provide so many of the jobs needed by residents in the older cities. And rather than encouraging the introduction of new methods of mass building into the construction industry, it would be better to utilize and develop further the construction skills of the un- and under-employed.

In summary, then, we note that enormous changes in economic production and distribution have occurred which have reduced the small-scale labour-intensive sector to only a part of a large system that now also includes mass production and large-scale operations. These changes have not done away with the types of activities which find a natural home in the older city sections. Our goal must be to enhance these functions and to help their workers adapt to new products and processes. This can be done within the spatial format inherited from earlier times, although planning will be needed and subsidies may be called for occasionally, so that the joint goals of achieving economic viability and of preserving a heritage can be reached. It would be too much to lay the complete burden of preservation upon the poor, since they operate too close to the margin to allow them this luxury. Public subsidies for rebuilding and restoration should be used to create efficient workplaces for the many small-scale industries and commercial ventures that, for a long time to come, will have to provide a livelihood for many urban residents.

B. Religious, Ceremonial, and Other Public Uses

Religious beliefs and practices, once universal throughout society, have increasingly become less important to the middle and upper class in the Islamic world, as secularism and Westernization enter and move progressively down the class structure. Mosque attendance and the centrality of religion in life are more and more found as the most important communal connection only within the poorer classes. The fact that religion remains crucial makes it very possible to maintain mosques as living centres in the older parts of the city.

Unfortunately, many of the functions that were previously associated with mosques have been removed to more secular institutions or to larger, more centralized facilities. The natural connection between social welfare functions and communal religious centres has been broken. In reviewing the Islamic cores of cities, a return of these functions would help enliven structures which are now used only at time of prayer. Even worse, often they are used only at the Friday noon prayer. Such a return would give new meaning to structures which have been deprived of these reasons for being.

There seems to be no good reason why public health facilities should not be located in conjunction with mosques, since the old mārisṭāns prove that such functions are not considered incompitable. There seems to be no reason why adult literacy classes and other types of educational activities should not be located in mosques, for the association of the kūṭāb and the mosque is a fundamental one. There seems to be no good reason why the mosque should not regain its use as a social meeting place for ceremonies and celebrations, especially in overcrowded areas where adequate facilities are often lacking. The structural forms of the older madrasa mosques would lend themselves to such multiple uses, for they are equipped not only with sacred space for communal prayers but also with numerous outbuildings and appendages of somewhat less sacrosanct character. In most Islamic cities I know, this space is empty and unused; only the prayer hall is functional. Most of the functions noted above have become activities of the government which has become a secular institution separate from religious life. And yet the constitutions of many states adopt Islam as the official religion, revealing that such secularization is not really intended. I am not suggesting that religion and government be more tightly integrated, for that would be an anachronism, but merely that governments become less defensive about associating social services with the strongest existing communal agency in the older portions of the city, the religious institution. Certainly, government social agencies could make important use of at least some of the under-utilized space in religious structures; this would not only revitalize them but would also, at the same time, decentralize these services and thus make them more accessible to the people.

C. Domestic and Residential Uses

Just as was the case in industrial-commercial uses, we find that many of the older domestic patterns of life for which the Islamic city was spatially adapted are still very much in evidence in the city of today, although they may now represent only a sub-portion of urban dwellers. The upper and middle classes have largely left the old cities and it is very improbable that more than a handful can be lured back into them. The people remaining in the old city cannot make use of the larger and more commodious dwellings vacated by the wealthy without modifying them in such significant ways that their architectural qualities may be destroyed. Even then, the modifications are rarely sufficient to achieve the degree of privacy and flexibility possible within such equally traditional forms as the apartment court or rabā`. A distinction must be made therefore, between structures for which demand is still healthy in terms of their original functions and those for which there is no demand today, except for uses quite different from those originally intended.
Within this latter category one must further distinguish between those structures having special merit architecturally, historically and other lesser values.3

There will be, in each city, selected palaces which the society wishes to preserve, even though they are no longer demanded as residences by the wealthy. These can neither be left vacant (at risk to vandals, scavengers and squatters) nor allowed to be subdivided and extensively occupied, as so many already are. Salvageable palaces need to be emptied of their residents, where they are occupied at high densities. They need to be restored so that original portions can be made safe and structurally secure. A system for opening them to view and ensuring their continued maintenance must be found.

In a number of cities a few such palaces have been minimally restored for new cultural uses, such as offices, museums and meeting halls. This seems as good a solution as we are likely to find, provided that the installation of modern utilities (heat and electricity) is done tastefully without defacing the building and with careful attention to safety standards. Most of these older buildings are, of course, made of stone, but the decorative elements (ceilings, window screens and doors) are often of ancient wood. Thus far, the absence of central heating has preserved this wood from excessive dryness, and the absence of electricity has minimized fire hazards. There is the potential risk of utterly destroying important buildings through modernization, but if care is taken, the risk can be reduced. In any case, it must be weighed against the certain, if piecemeal, destruction ensured by neglect and overuse. Hard decisions need to be made about how many of such structures one can indeed afford to preserve: the answer will depend in part upon how many can be given new meaningful uses and how many the society can spare, given the pressing needs of residents for more practical housing.

Palatial dwellings that do not constitute a significant part of the architectural heritage can be subdivided for multi-family or institutional group housing, but there are challenging architectural problems that have thus far not been addressed. By examining the plans of these kinds of structures within a given city, creative architects should be able to devise functional plans for subdivision and conversion that offer privacy and safety to the present occupants while preserving the structural strength and harmonious design of the original structure.

The same challenge exists with respect to buildings which, while originally constructed for non-family or even non-housing uses, have already been converted to multi-family residences, albeit with scant attention paid either to livability or to external form. Many families now living in these structures often pay significant rents, since conversions are not covered by existing rent control laws. They would benefit immeasurably both from financial and technical assistance in the redesign and renovation of these buildings. Ten-
ants, however, will have to be given some equity and secure tenant rights if they are to invest their time and labour in rehabilitation.

Finally, we come to most buildings in the historic core quarters, which are clearly not palaces but rather multi-family units. These units were built at various points in time according to varying patterns and are now at varying stages of dilapidation and rebuilding. The bulk of the population lives in this kind of unit; therefore, if a joint solution to mass housing and urban revitalization according to Islamic principles is to be found at all, it will have to be found here. If it is to work, it will have to fulfill the real needs of the resident population at an affordable price. If it is to be affordable, a judicious combination of sweat, equity, public subsidy and self-supporting sources of supplementary funds will be needed.

Before making a modest proposal for a concrete pilot project, I would like to examine briefly some of the resources that exist in the oldest quarters of the city and that might be mobilized for an operation which, to be effective, would eventually have to be done on a massive scale. Chief among these resources are the motivation and skills of the population.

In city after city, when labour force statistics are examined, one finds that perhaps thirty percent or more of the active members of the male labour force, living in the oldest quarters, are now working or have worked in construction. If we add to this number those who took in the industries of small-scale production, carpentry, repair and recycling, we come to appreciate the range of talents that could be brought to bear on housing renovation and reconstruction.

Furthermore, despite current stereotypes that depict the oldest quarters of the city as ports of entry for migrants from the countryside, I have found this to be inaccurate in city after city in which I have done research. On the contrary, these oldest quarters contain disproportionate (above the averages for the city) numbers of persons who were born within the city, often in the same quarter in which they currently reside. The lower income residents who were born in the city are remarkably stable, perhaps because the growing shortage of housing has given them no alternative, but in no small measure because they wish to stay in their own neighbourhoods. Voluntary movement to a different district is not sought, even though housing quality might be improved. Where families have moved after long-term occupancy, the explanations are often that either their former dwelling was destroyed, or a new marriage and family overcrowded the home, and expansion space was not available. Because of this stability, social units which could be used as the basis for cooperatively executed improvements or reconstructions already exist and can be mobilized.

Many residents within the old quarters have strong sentiments for remaining where they are. A high percentage work in the central areas and would experience great hardship if relocated to more peripherally-sited residential areas. Therefore, they may be presumed to have high potential motivation for improving their immediate residential environment. Long accustomed to renting units in multi-family structures, they are not fixated on achieving freehold tenure over their residential unit, although they certainly desire secure long-term tenure at controlled rents.

From the above, it is clear that the present residents have a need to remain, have potential motivation for becoming involved in improvement schemes, and have many of the skills and extant social organization that would permit them to renovate, reconstruct or even build new dwelling units. All of these characteristics should be most reassuring as we contemplate revitalization of the historic districts.

Two additional factors are also important: availability of labour and availability of land. There must be enough slack in the labour force to permit expansion in construction, and there must be enough vacant land to allow some readjustments to take place. Labour presents no problem. In most Third World cities the unemployment rates, even in the central zones, are unfortunately quite high. Mobilizing labour for reconstruction schemes, particularly when this labour will go into improving the level of living of the labourers themselves, should be relatively simple; it cannot, however, be free.

Gaining the necessary space leverage is more complicated, but not impossible. True, new buildings cannot be constructed on occupied land without displacing people and thereby causing hardship. True, the central zones are among the most densely settled in the city. But the remarkable fact is that there is land available, empty land, albeit in small and scattered parcels. This land becomes available, periodically, due to the collapse of decrepit buildings or planned demolition of unsafe quarters. The crucial task, at this point in time, is to devise ways of using open spaces existing in the quarter itself as the leeway in a very tight puzzle of rearrangement and reconstruction.

In the proposal that follows, I suggest that these existing vacant parcels be used as sites for demonstration and pilot rehousing schemes that will show how the principles used to organize space and human behaviour in older Islamic cities could be adapted to satisfy the contemporary housing needs of the lower income persons now living there. They could be integrated into the economic life and vitality of the older areas. Since these lower income persons would be drawn as a unit from a single, nearby badly-deteriorated settlement, slated for later clearance or rehabilitation, the sites they vacate could then be cleared or restored for the next project. In this way, populations would not have to be displaced until they had prepared their new homes. In what remains of this paper, I would like to set forth some ideas concerning possible demonstration projects and the principles that might guide their execution.
A Modest Proposal for Architecture in the Spirit of Islam

Pilot projects should be undertaken to explore the feasibility of constructing residential—commercial—industrial complexes on the pattern of the old rab’; the construction would be undertaken by the occupants of an existing rab’ slated for clearance because of structural dangers (fear of collapse). The projects would be accomplished with the financial assistance of the city and private or public philanthropy (since prototypes are generally more expensive than self-liquidating projects constructed by normal methods), and with the technical assistance of architectural/social affairs consultants.

A. The criteria for selection of the site should include the following:

1) Already vacant site in a historically significant zone,
2) Land in municipal or religious foundation ownership,
3) Site preferably adjacent to a public Islamic monument (mosque, sabil, palace, khān, etc.) which is being restored,
4) Site in the immediate vicinity of the residential structure(s) that are to be cleared and from which the new occupants will come

B. The criteria for selection of the population to be assisted:

1) Long-standing residence in the quarter and in the residential complex (majority of present occupants),
2) Existence of some informal co-operative social organization within the present unit,
3) Desire to participate in the experiment and willingness to contribute time for planning and work to gain sweat–equity,
4) Existence of rudimentary skills and experience in construction, carpentry, electrical work, other mechanical abilities in sizeable proportion of the households and/or

Cairo, Egypt: exterior of rab’–wakāla Qizār
Photo: A. Raymond
the financial ability to contribute funds in lieu of labour,
5) Most occupants dependent upon central location for their work.

C. Prior research required for the planning phase:

1) How do residents currently use their dwelling units and communal space? What changes in spatial organization would facilitate this usage? What are the major areas of dissatisfaction—inequality as perceived by the residents in their current arrangements? What is the different usage of space and facilities at the present time? Are there areas of under-usage within the dwelling unit or within the communal space that could be sacrificed to achieve adequacy in areas now viewed as unsatisfactory?
2) Would there be a demand among the residents themselves for industrial—commercial facilities within the unit? How could these be located to minimize hazards within the rab’ and maximize access to external sources of supply, transportation, customers, etc.?
3) What other uses might be introduced into the complex which are demanded by outsiders but which would not interfere with the semi—private character of the rab’? For example, if storage space for bulky items is in short supply in the historic quarter, could storage space be provided (for rent or sale) within the rab’ without opening it to undesirable infringements on privacy? How could the unit be designed to minimize such undesired infringements? What commercial facilities would be used daily by occupants of the complex? Could some of these be located in such a way that they would yield an income to the rab’ and provide needed services to occupants and persons in the adjacent zones, while still maintaining the semi—private character of the residential court?

4) What are the relative costs of various possible building materials, and what are the different skills required to use them? Does the population involved have those skills? What additional training or supplementary craftsmen would have to be supplied if the construction is to be done chiefly by the future occupants?
5) What is the minimum amount of income residents would require to maintain existing standards of living during the construction phase? What excess labour is already available, in the form of unemployed or under—employed workers, which could be mobilized immediately for the construction phase? What labour could be temporarily freed for construction, if alternate income could be assured?
6) What architectural forms would be functional for the residents, and also beautiful and evocative of the qualities one wishes to preserve in the historic city? Attention should be paid to issues of general design, division of space, circulation patterns and decorative elements, with special attention to ease of maintenance. There will, undoubtedly, be many other research questions that will have to be asked.

D. Finally, one comes to the question of the socioeconomic and political institutions that might be associated with the project. I would recommend that serious consideration be given to the ensuing thoughts.

1) Freehold tenure, in land or in individual dwelling units, is not essential for the successful execution of this scheme and should be avoided. Rather, land should remain in municipal or religious trust, with ground rent waived during the early phases as a form of subsidy to be provided for the project. Once the unit is constructed and begins to derive income from its operations, a ground rent might be charged in lieu of taxes, to help finance public utilities and services.
2) Once the complex is constructed, occupants should be given secure long—term tenure over their units, as compensation for the labour and money they have contributed to its creation. However, this tenure should be secure only as long as residents continue to live in the unit. Tenure rights are not transferable, although, to ease hardships, transfers within a family should be permitted. Where no relatives wish to exercise this right, preference in reassignment should be given to the kin of the remaining residents in the rab’. A schedule of amortization of the initial financial and labour investment might be drawn up so that, in the event of early transfer, fair compensation could be paid to departing members of the cooperative.
3) Rents for dwelling units should be kept to a minimum, paid to the cooperative organized by the residents and utilized for maintenance and internal improvements, as these are perceived and decided upon by the members. Some mechanism will have to be found to ensure payment of these rents. Where temporary economic reversals occur, there must be some mechanism for “carrying” members of the cooperative until they are able to pay again. In cases of loss of employment, contributed labour might be permitted in lieu of payment; in cases of illness, old age or widowhood, other forms of social assistance will be needed. A revolving credit fund subscribed to by members of the cooperative might be a further device of mutual assistance.
4) Some source of external funding should be sought. Rental fees or even sales prices of shops, storage facilities, workshops for craftsmen, etc., provided as part of the com-
plex, might serve as such a source of income to the cooperative. It could be used to pay off construction loans, to maintain and repair the complex, and to serve as the basis for the mutual aid requirements in the neighbourhood.

5) Location of the complex next to a religious monument would offer an additional opportunity for employment. Funds allocated for the protection and maintenance of the monument might be assigned to the cooperative in return for its agreement to assume guard, guide and maintenance responsibilities for the monument.

Should such a pilot project prove successful, it could serve as a model in a chain reaction of projects which would cumulatively contribute to achieving the joint goals set forth in this paper: revitalizing the Islamic tradition of architecture and city building, and improving not only the economic but social conditions of the people who now occupy the historic districts in Islamic cities. In my opinion, such an approach would, in the deepest sense, create an architecture in the spirit of Islam. That spirit has traditionally valued fraternality, equity and mutual responsibility, values which are as relevant today as they were when the message was first preached.

Reference Notes

1 A third type, the pilgrimage “shrine,” will not be discussed because of its local peculiarities and variations.

2 It was primarily absent in planned royal cities which failed to evolve because they did not grow much larger.

3 The closest parallel to a waqf I have been able to identify in the United States is Radio City in New York, where the land is in trust. The rents pay not only the upkeep of an elaborate structure, but help to support Columbia University.

4 Even this small leavening, however, should not be minimized for its symbolic effect in raising the prestige or status of these quarters and for its more practical effect in enhancing the political support for programmes designed to improve them.

5 An important ancillary criterion of selection should be location of the building. Preservation and revitalization of a “complex” of structures is probably preferable to the restoration of an isolated building.

6 Implicit in the following discussion is the idea that such an experiment could be undertaken in medieval Cairo.
My own cultural centre is situated in the heart of the Fatimid section of Cairo. We have concentrated our efforts on the area where the centre is located, but have tried to develop policies which could be applied to other areas of old Cairo. The areas we are interested in are the Gamalaya quarter and the Darb al Ahmar. Our idea has been to try to determine what are the important pressing social needs, policies and practices for our Ministry of Culture to adopt (apart from any plans for physical restoration).

Let us start with the immediate needs of the community in terms of operating and improving social services. Our first priority, as I saw it, was to help those people whose dwellings have collapsed. It is one of the lowest income areas in Cairo, and the buildings are very old and in very poor shape. Great numbers of people have to leave their accommodations in this part of the city, either because their houses collapsed or because they are being evicted.

The laws do not adequately protect the poor in these quarters from speculators. Business people buy houses for extremely low prices and tear them down to make room for apartment buildings. The people have no alternative but to move into monuments in the area, usually historic mosques. Thus, the problem of providing adequate housing for the people and preservation of historic monuments is interrelated.

In Cairo, there are about a quarter of a million people who have come from the countryside and live in historic buildings, cemetery areas, superstructures of the tombs or air raid shelters. It is a problem that has to be attacked on a larger scale. We can try to solve the problem in our own area and provide a model for the Ministry of Housing. It wants to build in the area, but finds it too complicated. Presently, people are moved to the far outskirts of the suburbs of Cairo. They lose the place where they were socially and economically integrated into a community.

The way to do this properly is to look closely at the traditional forms of housing to see if the function is still appropriate for contemporary social needs. As an example, look at the traditional rab'. Let us consider one in particular. Built in 1610, it has not been restored, yet is still in good condition. The ground floor has a workshop, which was always the case. There is an entrance to the living quarters, and a separate entrance to the wakala or the khân, a commercial area. Another important feature is a fountain (sabil). Usually these structures were on the sides of the buildings, less frequently in the centre. The rab's or wakala were income-bringing, and the income was used to support the religious school (kutâb) and the fountain. These rab's of Cairo were built of duplexes or even duplexes with mezzanines, a very modern conception when we think about it. They are really quite adequate for contemporary needs.

In the 1610 complex people have moved into the business area and are now bring-
ing water into it and making small changes for sanitary and living accommodations. The building belongs to the Ministry of the Awqaf, which, of course, does not spend a penny on upkeep because the income from it is minimal. The tenants pay seventy piasters (one dollar U.S.) per month for rent. When we asked them whether they would prefer to be in a government housing development or this type of housing if the price were the same, all answered that they preferred this type because of the spaciousness and of the adaptability of the old design.

In this area of Cairo three-fourths of the wakāla have been torn down and the Ministry of Housing has built what it considers to be modern accommodations. They look like little cubes. To preserve the rest of these historic buildings, a concerted attempt must be made to bring adequate services into them. With even minimal upkeep they could become viable, even desirable housing for lower income groups.

All problems are interrelated when it comes to historic cities. There is no use restoring a monument if sewage is bad, especially when the sewers continue to flood the ground floor that is below the present street level.
There is little that I take issue with in Janet Abu-Lughod's paper; therefore, my commentary is an interpretation of questions raised and references to subsequent presentations and discussions.

In my view, there are four key questions which I feel able to address in ways that complement the excellent and stimulating paper presented: How should the rapid deterioration of inner cities be evaluated? What kinds of instruments should be used to deal with this deterioration? Who can and who should decide what is to be done and how? Will the Award be for completed works as "product" or as "tools"?

While there are many possible answers to these questions, and an even larger number of permutations and combinations amounting to alternative policies, it is my belief that there are but two common and predominant alternatives to each question. I think I share a common viewpoint with many participants at this seminar. These issues can be stated as follows: 1) Is it the buildings that matter? Or is it the relationship between the built environment and the inhabitants that matters? 2) Can the physical, or social, or both the physical and social heritage be saved and regenerated at large-scale, centrally administered technological and managerial systems? Or do these aims demand the use of locally controlled decentralizing technologies and administrative systems? 3) Who can and who should control the system used? The city and nation through representative government? Or the people and their neighbourhood communities in directly democratic ways?

These are not either/or questions in my own mind. And from the eminently reasonable and deeply informed discussions, I am sure that most, if not all, participants would frame answers to these questions in ways that would recognize some validity to both sides. Practical answers, I am sure, must be in terms of balances, and these, in turn, must be determined by clear distinctions between elements or aspects of the subject matter.

I will reveal my own bias in the following paragraphs elaborating these issues, but I do not want to be misunderstood, especially with regard to the principle agreed upon by the Steering Committee: No one school of thought or action should be selected for the Award. To do that will be in direct opposition to the aims of the Award. I agree wholeheartedly since I am certain that no one person and no group or organization of any kind has the answer. Truly effective answers to the fundamental questions courageously confronted can only come from the synthesis of new knowledge and the deepened wisdom that comes from the experience of doing. So, while I make no bones about the identity of the school of thought and action to which I belong, I see the others not so much as rivals, but as complements and potential partners in the discovery of new ways.

I take as the text for my commentary Janet Abu-Lughod's precisely worded statement of the higher purpose of the Award for work in such areas:

The creation of self-renewing centres which retain the best of the architectural heritage from the past and which utilize still valid principles of urban physical and social organization drawn from Islamic precedents to create, throughout the Islamic world, cities which are not inferior copies of Western models (which already have proved their bankruptcy) but authentically innovative cities designed to function efficiently for the type of life found in them today.

The First Issue: Ends or Values

In reminding us that people are the material of development, Jacques Berque reinforces what others, as well as Janet Abu-Lughod, have said and shown so eloquently. Janet's paper, reinforced by Nawal Hassan's pictures, tells us what the inner city of Cairo does for its inhabitants. They show how vital the environment is.

Cairo, Egypt street market

Photo J. Turner
for the support of the people who live and work there. The paper, especially, explains how the Old City enables so many to live in spite of acute poverty. It provides the poor and the very poor with some security through social supports and access to a wide variety of jobs, thanks to the amazing diversity and intensity of economic activities. These supports are physical, but this may be secondary to the social and the economic.

It is still generally assumed that techniques demanding powerful machines rather than hand or hand-powered tools, both for the fabrication of building materials and for their assembly, are more efficient and productive than traditional methods, or their adaptations by innovations that lighten the burden of excessively hard labour. Almost any conventional modern housing scheme disproves the previous generalization. In the great majority of cases, centrally-administered housing and other kinds of building schemes are extremely costly to build in the first place. They are often extremely unpopular, sometimes rendered uninhabitable by their unwilling occupants. It is now becoming evident that they have extremely short life spans.

There may well be circumstances in which there is no alternative but to use highly centralized and industrialized building methods. It is increasingly clear that these cannot be the permanent norm, even in wealthy societies. It is now difficult, if not impossible, to justify the use of heavy industrial building systems and large building organizations for small structures on economic grounds. Even the myth of the necessity of high-rise buildings to economize on land has been exploded (most devastatingly by Sir Leslie Martin and Lionel March, who concluded, “The only sense that high buildings make in nucleated centres is in terms of real estate speculation. In terms of accommodating built space on urban land they are extravagant and irrational gestures”).

The contrasts between traditional forms of housing and urban space and modern urban-industrial forms speak for themselves. It is ironic that the rapidly diminishing supply of surviving traditional architecture commands ever-higher market prices from those who are enriched by the modern forms that are displacing them.

The Second Issue: Ways of Authority or Authenticity

“Inferior copies of Western models” are certainly the last things any of us at this seminar should wish to increase in the Islamic world (or anywhere else, for that matter). “Authentically innovative cities designed to function efficiently for the type of life found in them today” can be achieved only, if the above positions are correct, if the tools of city building are in the hands of the people. As an illustrative example of a perception of these needs, let me cite an inscription found on a wall in Ismailia:

From the people of Ismailia to the cabinet (a request for)
A speedy transfer of all factories in the Government to the city with an accompanying expansion in industry,
Conservation of the touristic appeal of Ismailia while improving its appearance,
Speedy construction in the public and private housing sectors,
A facilitation in approving generous loans for homeowners and merchants to encourage commerce and construction in the city while the government assumes a percentage of the bank loan interest,
A freedom in the exchange of building materials accompanied by a decrease in their costs when possible.

We call upon the mighty and able Allah for success under the leadership of our faithful president.

The economy of building depends on the artisan and his local client more than on the large organization and the corporate or collective client. The latter certainly have their place in the installation, and sometimes in the management of major infrastructures, but these are mere supports for what really matters and for what takes up, or should take up, the greater part of urban space: people’s homes and dwelling environments. Extreme Western models, like Los Angeles and Sao Paulo, are dominated, not by people’s homes, but by the real estate and automotive interests. The ground is covered by roads choked with cars, whether in traffic jams or travelling at high speeds, in either case rendering the ground useless or dangerous for people. And the skies of many modern cities are dominated by indistinguishable towers of offices and dwelling units deprived of any urban context, totally isolated from each other by the elimination of the street. These opaque and impersonal environments are generated and dominated by heavy machinery and large organizations which cannot be handled by people in or from their own homes or workplaces.

Edward Sapir’s essay on “Culture, Genuine and Spurious,” states the case for the dependency of genuine culture, of authenticity, on the personal control of tools, in the broad sense, and as defined below:

So long as the individual retains a sense of control over the major goods of life, he is able to take his place in the cultural patrimony of his people. Now the major goods of life, in the Western system, have shifted largely from the realm of immediate to that of remote ends. That is to say, many non-utilitarian spheres, social, religious, scientific, and aesthetic are pseudo-functionally interwoven with immediate ends while culturally divorced from them. It becomes a cultural necessity for all who would not be looked upon as disenchanted to share in the pursuit of these more remote ends. Harmony not depth or life nor culture is possible when activity is well-nigh circumscribed by the sphere of immediate ends. Nor when functioning within that sphere is so fragmentary as to have no inherent intelligibility or interest. Here lies the grimmest joke of our American civilization. The vast majority of us, deprived
of any but an insignificant and culturally abortive share in the satisfaction of the immediate wants of mankind, are further deprived of both opportunity and stimulation to share in the production of non-utilitarian values. Part of the time we are dray horses; the rest of the time we are listless consumers of goods which have received no least impress of our personality. In other words, our spiritual selves go hungry, for the most part, pretty much all of the time.  

This summarizes more completely and precisely than any other statement I know, the position implicit in Janet Abu-Lughod’s paper and in many, if not most, of the contributions to the seminar. Where authority is not in the hands of the people, or where control over the immediate ends is not in their hands, there can be no genuine culture. Remote ends are divorced from everyday life and culture becomes a spurious activity, or product, even, when manipulated by the minority who control the means of mass-production.

In case I am misunderstood, I repeat what I have already stated and implied: that this issue between “top down” and “bottom up” ways and means of satisfying the immediate ends of life (food, clothing, and of course shelter), is not a simple either/or choice. While I cannot summarize the whole argument in a few words I must, at least, point out the vital difference between complex systems composed of many different people, many things in different ways to the same general end, and the relatively simple and often large-scale support structures and networks on and within which these complex systems develop. More and more, planners are coming to see that complex systems, like housing, cannot be planned without destroying much of their value and without greatly increasing their costs. Clear lines have to be drawn between the supports provided by large organizations often using heavy technologies and the complex, highly variable, local and personal systems supported. I assume the Award will be for the stimulation and development of what people do and live with locally.
The Third Issue: Jobs or Tools?

This issue is raised in Janet Abu-Lughod's paper and by Nawal Hassan in their references to the proposal made and the preparatory research now being carried out. Some commentators have expressed doubt that a small enterprise of the kind described, the rehabilitation of historic buildings to be used as tenements for the occupiers themselves, can be effective. My suggestion is that the judgment depends on whether such a project is regarded as a tool-making enterprise, or as an end in itself. To make myself clear I must define the meanings of "materials," "tools," and "jobs" (or works) in this context: the materials we work with one can say are God-given, whether they are the "earth, air, fire, and water" or the material elements or ourselves and our values, which are inspirational and metaphysical. Obviously, we are not in the business of making materials in this general and deeper sense. The choice, therefore, is between the tools we use to transform those materials, and the works carried out. As this particular case shows, a particular job or complete work can be seen and used as a tool, just as a completed tool can be seen as an end in itself. But in this case it will be useless or, at least, unused. A completed work of the kind proposed will not be useless in either case, of course. But whether its usefulness is limited to the households whose homes are improved and whose lives are not disrupted by relocation and rehousing, or whether its usefulness is shared by society as a whole, depends on the way in which the job is done. If it is approached as though it is an end in itself, if the context is treated merely as a problem to be overcome, its value will be very limited, however successful in achieving the immediate ends. On the other hand, if such a project is approached as an experiment, as an investigation of ways and means by which to achieve the wider and deeper, or remote ends, then any experience will generate knowledge useful for subsequent action, whether it is "successful" or not with regard to the immediate ends.

My own views on this are definite. As a matter of principle, as well as for practical and material reasons related to my own reputation and security, I do not concern myself with jobs that are ends in themselves. I am only interested in the development of "tools." I feel sure that this position is implicit in the aims of the Award.

Discussion

Lari

I must compliment Dr. Abu-Lughod today in bringing us down to earth. I am a Western-trained architect working in the Third World in what is the largest Muslim country and, unfortunately, I fit beautifully into the category of khawāq (elite) as defined by Professor Naar yesterday. I am a Muslim, but not a devout Muslim. I am not consciously trying to create Islamic architecture, but what I am trying to do is to build honestly and relate to the living pattern, climate and so on. If anything, I try consciously not to use a vocabulary, a formula which instantly produces buildings which is commonly supposed to be Islamic architecture.

I do not believe in making buildings musharraf by Islam. We had an architect, a Western architect named Stone, who made a mockery of architecture when he made an atomic research centre look like a mausoleum with an arcade, and built a wedding cake for an office building. Later we had a series of such buildings built by Pakistanis also. Now we have a fire station that comes complete with arches and jali and a dome!

However, architecture is not my overriding concern. There are those who are solely concerned with it, and they will be working in it for the petro dollar. My concern is for a majority of the urban population living in slums in a city of 4.5 million people in a poor country like Pakistan. They do not need an architect with his patronizing attitude. They are doing very well by themselves, thank you. This is the incredible thing about Hassan Fathy. He had the vision to see, more than three decades ago, what most of us cannot even comprehend today. People in the slums are building with recycled materials. Be it eclectic, clay pots, or tin cans, they are using their materials most ingeniously. I am struck when I go there to learn from them by the vitality there. The tragedy of planning, as it exists today, is that once the planners take over, they kill the life there. The planned slum is infin-

Notes

1Leslie Martin and Lionel March, editors Urban Space and Structures (Cambridge University Press, 1972), pp 52-53


3 Prof Graham Ashworth made this point exceptionally clear in his opening address on "Planning, The Inadequate Philosophy" to the Town & Country Planning School at the University of Lancaster, September 1, 1977
olutely worse than the unplanned slum. There is just no excuse for an architect-planned slum.

Dr. Abu-Lughod says that several factors are key to the vitality which is Islamic. To simplify, they are the narrow streets, the multi-functionalism of elements and inter-mixing of functions. I do not think that they are particularly Islamic. The streets are pedestrian. Their width should allow a camel to pass with its load in the old city and a dead body to be taken out easily in the slums. I believe very strongly that narrow streets bring people together, while the wide road designed for the automobile alienates them from each other.

The streets and other public places are multi-functional. The street is not only for walking or carrying loads but also for children to play in, the vendors to sell in and people to stand in. Also, there is the element of surprise that occurs when you go across a narrow street which opens up. The mosque is multi-functional. It is religious. It is a madrasa. It is a meeting place. I think, where resources are limited, human ingenuity comes into play and resources are used in the best way possible. Everything happens right there, the working and leisure cycles. The twenty-four hour cycle has always existed. I think it is possible to translate it today into the real form.

I've done a new housing scheme, a small one of about 900 units. I have used the narrow street. It is pedestrian. Children can play in it. The development is a mix of single, double and three-story structures, but we do not get a façade that is totally unbroken; the profile is irregular. I think it's a good design. This is one way to approach the problem.

Grabar

Dr Abu Lughod's paper pointed out the importance of law itself in making the various systems she described operate. Unfortunately, we do not know this law very well. Working with two Saudi students the past year, we have read legal texts from medieval Medina. Our objective was not to read the official text but judicial decisions, that is, the qadi decisions about fights between people concerning buildings. Some preliminary key terms and key ideas and reasons for decisions made by qadis were collected.

The first one is of preservation of privacy. This was a consistent matter of battle in Medina. Two floors were all right. The third floor was constantly protested. If the third floor had windows opening to the outside, the judge declared it must be destroyed. A building with windows opening to the inside could be preserved. In other words, the notion of privacy was essential.

The student who did most of the work has not convinced me on a second point, but I want to share it with you. It is that there was a notion of zoning. Qadis accepted the notion that certain activities cannot be introduced in certain areas and certain things should not be done in some places.

The third point is that one should preserve an activity that existed previously. One must remember here the complicated problem of the ruins (kharība).

The fourth point that constantly appeared was that there must be a public space, and the terms used vary. The public space that belongs to everybody is constantly emphasized by the qadi. Encroachment of public space is constantly punished so that people even have to destroy their walls. There is an enormous internal documentation based upon actual court decisions. I am sure that chance played an important role when we hit upon them for Medina.


Photo: M. Hasan
feel sure they exist in Cairo, in Istanbul, in Isfahan, everywhere. A job for historians is to look for the actual practices of the system.

I agree very much with Dr. Abu-Lughod that the traditional system had institutions which seem to meet the problems of today, waqf and others. What worries me is that those institutions are precisely the ones against which the whole culture revolted in the nineteenth and early twentieth centuries. I am troubled by the suggestion that we should go back to these old institutions. I would like to raise the question simply because they do exactly the things which all reformist movements have opposed. So I wonder whether it is easy to suggest that things that were in operation in the fourteenth century or the fifteenth century, which disappeared, can be revived and restored.

The last thing I would like to say is that I was struck by Mr. Turner’s slides, and especially by that inscription. It raised a question in my mind. Where are decisions made? Clearly it is on a street, in a block, wherever men know what they want. Help is needed. How can decisions be channeled and organized in contemporary systems?

Kuban

I would like to make a point about the land speculation question in cities. We seldom speak about it, yet it is very important to our understanding of the existing city systems. Without understanding the politics in a whole district, one cannot solve anything. Architects sometimes think they can solve everything. They cannot. For example, I have no hope for Istanbul. We have no money. We have no power system. We have nothing. Still, I try very hard although I see no way out.

There are some specific remarks I feel I must make when I look at my country. We have a wide diversity in urban forms. Dr. Abu-Lughod says that one knows when one is in the presence of Islamic civilization. I think this is not very correct. We associate certain cities with Islam because of our own accumulation of knowledge. If somebody from Mars landed on Earth, would he be able to differentiate whether a community is the way it is because of Islam or of some other reason? The structure of an Islamic city differs in Iran, in Anatolia, in the Maghreb and other places. There are places in Turkey which are closer in structure to places in the Greek islands; others to those in Syria, and still others to Caucasus than to Islamic cities. It is very difficult to say what is Islamic about them. There have been some definitions of the Islamic city mentioned here, but we must be aware of the regional differentiations. We cannot put everything into the same category. I
don’t agree with Dr. Abu–Lughod when she says that the significant urban centres in the Islamic world are based on specific Islamic principles.

One can say that a lower–income person’s emotional–economic attachment to his location is often underestimated. That is true. But it is true only in small cities where the original population still remains. In Istanbul, as in many other larger cities, no such thing exists. Almost all people are migrants from rural areas; their attachment to the city barely exists.

Economic incentives are very challenging. One may be against any kind of “touristy” things, but I think tourism is a twentieth century phenomenon. You cannot put it aside. One must accept it as a phenomenon which exists, good or not so good. Millions of people travel. One cannot stop them. They will come, so let them be used as a source for development.

You recommend a more critical appraisal and say that if the answers are negative, you cannot revitalize Islamic art and design, and it must be relegated to anti–quarian experiences. But you think there are positive answers. In most cases, in my opinion, there are only negative ones; it must be relegated to the past. But I think we can find new functions for old environments. In Istanbul, for example, there are wooden houses of great importance in the old city. There are also more than 100,000 students who need accommodation in the old city. To find money for the preservation of the culture, a new outlook has to be established. It is possible to get money if the political powers are convinced that this place is worth saving. And then students may even be able to have dormitories in this area. This is a start, but there are many such solutions for preservation.

In order to acquire a city property, the government must negotiate with the property owner. Ubiquitous multiple–ownership, the ownership of each dwelling space within a single building by one or more persons or heirs is entangling. A three–story house may have only three of the owners living there. A fifty–unit apartment building can bring about extremely complicated dealings. This is a terrible thing in Turkey. It can destroy even the idea of planning.

Nasr

I think that we have forgotten that we have come here to study and discuss Islamic architecture. We seem to be arriving at the result that there is no such thing as Islamic architecture. Then we should all go home and ask the Aga Khan not to give the prizes. But I think that the problem is not so simple to brush aside. If someone did come from Mars, I beg you to differ with Professor Kuban, I think you would find that there is a logic or some kind of resemblance between the bazaar of Fez and that of Isfahan.

I want to come back to the important comments made this morning by Dr Abu–Lughod. First of all, I would be the last person in the world to deny the significance of the Shari’a. But it’s quite interesting that architects are in such love with concrete. That is why we have so much concrete in our buildings! But you cannot really discuss the concrete without the abstract. In fact, there are many aspects of the Shari’a, in addition to those Professor Grabar mentioned, that are extremely important for the Islamic city. The question of the right of the neighbour (haq al–jar) is an important part of fiqh. Special studies should be devoted to it, because the question of relationship between neighbours is, of course, fundamental for architecture. We have an expression in Persian which is very significant from an architectural point of view. Neighbours are called hansaye, “he who shares the sun’s shadow.” And I think it’s a key for understanding our own architecture.

But real questions, of course, are why the Napoleonic code was adopted, why enough people do not practice the Shari’a and why those who plan for the vast majority who practice it are often totally unaware of what it means to practice the Shari’a. That is where the fiddling of theosophy, as you called it, comes in. Fiddling is not too bad because, as Goethe said, good buildings are the crystallization of music. So one should have little fiddling beyond crystallization! It is the philosophical problems which, in fact, have become impediments for the practice of the Shari’a which, in turn, influences architecture.

Moreover, there is another aspect which you did not discuss (it was not really the subject of your paper), and that is the significance of form for an architect. No matter how much we discuss the social functions, which have not been analyzed and which relate to the Shari’a, once again I come back to the significance of forms to geometry, of forms with which an architect has to deal. I believe that one cannot really understand the significance of these forms within the context of Islamic thought without going back to their roots and their meaning. There are two complementary aspects of architecture and city planning; one is the social aspect, one is the artistic aspect. I don’t think architecture without art really has much significance. That is why I beg you to come back to considering the significance of philosophy and theosophy.

I would only conclude by saying that you made some very profound comments about the relationship between the traditional Islamic city and the avant–garde ideas of the city planning. They can be of importance for the preservation of Islamic cities by inducing administrators not to consider it avant–garde to destroy them. But, as far as an argument for the preservation of Islamic culture is concerned, everything which is avant–garde is going to become arrière–garde in a few decades. To look only upon an external avant–garde model as the only reason for the preservation of one’s culture proves to be false. I beg that whatever is done in the future about the Award, some attention should be paid to the role of the Shari’a as well as philosophy and its function within the Islamic city and within Islamic art.
Kandiyoti

I think that seeing the way towns look while ignoring the urban power structure is a mistake. This is why, I think, the practice of the Shari’ah is reflected in spaces, fortunately or unfortunately, having been mediated through the market mechanisms. How does one affect these market mechanisms? How does one legislate to help deal with them? I do not know.

In my opinion, neither architects nor Islamic philosophy figure at all in the way towns look. What does figure, I think, is a combination of changing systems and changing social structure coordinated with certain types of mechanisms and a certain type of power structure. Perhaps the Award should not go to architects at all, but to grass roots administrators, persons who have the courage to support programs that run counter to the kinds of markets that bring about deteriorating towns. Neither bad architects nor unbelievers are destroying the cities.

I want to move on to a sociological point, which relates quite closely to what Janet said. I think something very interesting is occurring with architectural determinants.

We now have architects telling social scientists what should be done, and not challenging the conjectures claiming, “The people know what they are doing.” Both can be equally wrong. I will tell you why.

At the moment, architects and archeologists alike are marveling at traditional systems making normative statements just like social anthropologists used to do. One cannot have a value-free environment. All environments reflect values.

However, sociologists have something to say about value and I think that we have not been talking about value change at all. I see major parallels being made between the values that Western avant-garde architects are striving for and the values which were implicitly imbedded in traditional Islamic architecture. I think that it is wrong to say, “Look, people in San Francisco are making pots and selling them. Why aren’t we preserving traditional craftsmanship?” This is very wrong. Extremely wrong. Why? Because, the people in San Francisco are imbedded sociologically speaking, not ethically or morally speaking. I’m not making a value preference, please don’t read me wrong here. I think it’s beautiful that all crafts should be protected in San Francisco. But I do not think this revival of craftsmanship has anything remotely to do with the craftsmanship that is now artificially and most perniciously being maintained in Third World countries. Each system has its own equilibrium. The reason we’re confused by Third World countries is that transition has its own mechanism and produces breakdowns in values which are reflected into space. Those, in turn, are reflected into city space, then into household space, and then into people’s heads. So I think that you can make a parallel between post-industrial equilibria and traditional equilibria. They are equally balanced. However, I think that when we are talking about transition we must be very careful.

I have found, working in Turkey, that the fundamental equilibrium between function and space has broken down. This is how great the infiltration of postindustrial values has been. I think that we are deluding ourselves when we look at the shantytown now and say that people know what they’re doing, at least in Istanbul, and that they are uniting function and space spontaneously and beautifully. This is not true. On the contrary, I have found that probably there is a kind of curvilinear relationship in the process of development.

There is an equilibrium at the traditional end and there is probably some kind of new equilibrium that postindustrial societies are striving for by not saying they have reached it. Actually, for the sake of transition, there is chaos of values and chaos of forms. I think architects will be really disappointed when they think they can go to the people to come up with something that is functional and beautiful. They cannot. When I interviewed people, they were doing hideous things. They were cooking in their ablation area, putting refrigerators in the living areas, etc. The architects were about to throw up. They did not want to look at this. They refused to believe this. I said, “This is what the consumer wants now. You may not like it. If you want to be democratic about it, you must acknowledge it.” These people have been raped, and this taste is the result.

Faghih

I think that even today we are putting the problem too theoretically. The state of affairs which we have found in cities, Islamic cities, is one of emergency.

Nobody, no government, no private enterprise is interested in the poor areas. They all think that we are Don Quixotes working for causes and talking to them as if asking for charity. These are the attitudes which I myself found working in Isfahan and with which colleagues in Iran are faced. So we are very interested in those who preserve, who conserve isolated buildings and who don’t think that a derogative term.

For the time being, it’s very important for the Award to look at those people, architects, administrators...unknown, not famous, who are doing isolated projects. No matter how large our action would be, it would always be a fragment within the total transformation in each of these cities. It is a fragmented and isolated action.

Therefore, it cannot, by nature, include all the totality of Islamic art and Islamic culture. We are mostly involved in physical action, because we want to preserve some aspects of the traditional matrix; we know we are a minority trend. If we talk about a creative adaptation, it means that young people have to get interested. We have to look at successful experiences such as in Italy or in England, where the young generation became interested in living in older areas because the houses were cheaper, and converted them into viable neighbourhoods.

I think we have to reject two uncompromising positions. One is that of the conservationist; he is very fanatic about getting exactly the same image that was there. The other is that of the developer
who wants to bulldoze and destroy. You have to find ways in which you destroy some parts and leave others, to bring in life and change communication. We shouldn’t be afraid to solve the problem by cutting through the knot. Solving it would definitely not create the Islamic space as it was before. But these are the choices we have to make. Otherwise, everything will be destroyed.

Rageh

I have just a few points that might look contradictory to the presentations this morning, but I should like to feel that they are complementary; they add and do not subtract.

The inscription which was pointed out by John Turner does not support but contradicts his theory. These are the demands of the people to the central government. None of them is practical and none of them can be afforded by the people themselves. So it is not really a way for the people to do by themselves and for themselves. These are things that the people cannot do. It is quite indicative that first they want industrialization and last they want urban development. And they want loans from the bank, they want this and that. Certainly the central government cannot in any way fulfill any of these demands. So that is not really an expression of a will or a desire to develop one’s own environment by his own means and to have housing by the people and not for the people.

Janet’s paper is a marvelous contribution, but I am afraid as architects and social scientists, we really do lack the historical dimension and, consequently, the essence of the Islamic thought. Nawal spoke about Fatimid Cairo and Janet alluded to the fact that we are dealing with the preservation or rehabilitation of Fatimid Cairo. What we saw is not Fatimid Cairo. Nothing is left of Fatimid Cairo but the Al Azhar Mosque. The forms we saw today are Mamluk. So instead of taking a section of our history and making it the pivot of our thought, we should go further and study the underlying essence of the whole thing, what is unchangeable, as Berque mentioned yesterday. So it’s not viable to stick to a Mamluk model but to expand it through history and most probably even beyond this Islamic era.

To some extent, Janet has been a little romantic. If you make a total and intensive survey of the area, you would find a density of seven and one-half people per single room. Although some of them are integrated into the social system, a great number are not. They are part of an influx from the rural areas. They are alien to that environment and are a hindrance to its harmonious and homogenous nature. Many are living there and working outside. These incursions militate against the main concept of having an integrated social order.

As for the notion of having the people develop things by themselves, we all love that, we’re all for that, but let us remember that what really ruined this area were the people, because there is no mechanism for the people themselves to develop these areas. Areas such as around Ibn Tulun on the street of Mar, these marvelous areas, are all but ruined by miserable and ugly apartment buildings built by the people. So really we don’t have to throw this responsibility to the people. We have a role and the government has a role; planning has a role. Unless the people function within a comprehensive and sound planning policy, we wind up with chaos as we have now.

Kowsar

We, as architects and planners, can trans- late concepts into plans and detail. Hopefully, we will be able to convince the population that living in these old sections does not necessarily mean living with poverty and lack of progress. How can we do this? Often in Islamic countries, economic power and political power are in the same hands. Conservation and rehabilitation is not in the interest of economic power, is not in the interest of land, construction and speculation. At this stage, the participation of the population in the construction or conservation or even
the revitalization of their habitat begins at a political level. In discussing this I think we must be aware of every kind of Muslim decision maker. We architects have to convince them that the issues of conservation and rehabilitation do matter.

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**Zubair—Abu—Lughod—Ardalan**

**Zubair:** It seems to me that if we study dynamic societies such as Saudi Arabia where rapid change is taking place, we can identify elements which conspire against all cities. The profit motive, rapid change and rapid development are destroying old cities. So if we want to preserve the city as a total environment, not just some monumental buildings, but the whole city, I think we are doomed to failure.

**Abu—Lughod:** I am afraid I did not make myself clear. In no way have I been recommending that you preserve entire cities. I believe in a system of triage in which we find a sub—area, a set rather than isolated buildings, a locality not the entire city, which we take out of the marketplace, which we take away from the profit motive. We must remove it from land speculation, because we do not have the chance to preserve it otherwise. I have been criticized for ignoring politics and economics. I think if we go with the economic and political system, we have no chance at all. I hope to convince people, who have the chance to make a decision, to place part of that heritage outside of these processes and to see whether it can be preserved. This heritage may also have some valid principles for new building and as Yasin suggested, could guide contemporary construction.

**Zubair:** That is the case, it seems to me the prospect is more hopeful.

**Ardalan:** I think the idea that is presented is that in order to make yogurt you need a little bit of yogurt.

**Zubair:** What would you determine the location of and the size of these localities? I do not think you could leave the matter to the people. In Saudi Arabia, in Mecca, Medina, Jeddah, in every old city, you will not find anybody who would think himself economically astute for renting a building for a nominal sum when the government is encouraging him to build. He will not stand and say, “I will preserve this for the sake of heritage itself.”

**Ardalan:** But we are aiming at creating a sensitivity to this type of legislation. This is legislation which is thought to be progressive, but it may actually be regressive.

**Zubair:** You could leave some of the old areas and build outside them if you want to develop cities and move some of the people out to the new districts.

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**Robertson**

It is always interesting to me that people advocate architectural change, meaningful architectural change, in each generation as being possible only by changing the entire system. I think one of the problems is that we really must be willing to work within established systems. There is no possible way to take the planning and development of cities outside of the dynamics of the existing forces of economics and existing politics. I just think that is hopelessly defeatist. I do not think you will get anywhere that way.

All decisions have design implications and certainly one of the greatest problems that architects have faced is that they really have not taken the time, had the energy or the self—discipline to understand what the dynamics of economics and politics and the legal implications of zoning were on cities.

In fact, all of those features affect the shape, design and use of the city in a very fundamental way. Indeed, some of the most impressive changes made recently in the United States had been made precisely by people who took the time to work within governments, to understand politics, and economics. They worked hard in hand with speculators who were interested in making large profits by recreating, re-adapting, reusing, revitalizing otherwise derelict areas of the city. There is in every society and culture a prevailing dynamic. It has been a tendency of planners to work continually against tides rather than with them and they are nearly always defeated because of this. One must search out the strengths in every system. One must use the momentum of those forces to deflect slightly from seemingly predetermined courses of ongoing development and not to stop it at the barricades.

The Western model is changing. Janet's paper, I thought, was brilliant in its description of that kind of change. Certainly, one of the phenomena that we must discuss here is the effect the changing model or its perception by Western consultants, planners and architects will have upon the people that they are attempting to serve, some badly and some well. It will be profound.

Finally, a point which is fundamental. It is the phenomenon of number and the phenomenon of speed of change, the spectre that stands behind everything that we are talking about. Nearly all of the world’s problems since the beginning of time have been at least addressable because we have applied small—scale organization. We are now faced with problems of mass and there are no operable principles of large—scale organization other than the sword. We tend, therefore, to break large—scale problems up into small bits and to apply the same kind of small—scale organizational solutions to them. But the bits do, in fact, aggregate to a sum that is much more complex than the solution to any of its constituent parts. It is a phenomenon that all scientists have, that all politicians have and that all planners have. This has wreaked havoc with architecture as a language. I think it is absolutely essential to understand that what all of us would talk about in terms of a successful architecture in any period of history is based on a number of assumptions: it must have time to develop and it must have longevity. There must be a resistance to its immediate abandonment. It has to have a common vocabulary. It must have multiple but commonly understood meanings. It
must provide a way in which given words have changing use. It must have a high and a low art form, a sign and various dialects and an esprit and an art. Almost none of these requirements exist now in rapidly changing cultures and that is why it is almost impossible to develop a satisfactory architectural language.

Mousalli

We are gathered here to discuss architecture in the spirit of Islam, and the theme of the seminar, as I understand it, is continuity and change. I want to talk about the development of the Islamic city of Mecca, about Islam as a way of life, and about how the population within this urban centre practices Islam.

The main function of the Meccans throughout history has been, and will be, serving the pilgrims who come annually to perform the Hajj. It is not a harbour city, nor can it be regarded as a commercial centre. It has a single function, service to those who come. The city is in a small valley surrounded by mountains. Its focal point is the main space, the Masjid al-Kahir, surrounded by different quarters.

I would like to point out as a person who was born and bred in Mecca, the image of the city to me is really not just the place where I live with my neighbours, but the difference between the textile and meat markets and other such things. It is really and organic form where everything is next to each other as one complete net or pattern. But the only open space to me is what I can always see and am really close to the central mosque.

As a Meccan, I would like to live as close as possible to the main mosque, preferably next to one of the gates. The older buildings, which we had in Mecca, and some are still in existence, were about five or six stories high. They normally house about four or five families with a place on the roof for sleeping outdoors. We are accustomed to living as an extended family. Having a house in a four or five story building, during the pilgrimage situation, you find the family taking the upper one or two stories and reserving the lower stories for the pilgrims. So everyone is close to the mosque.

With the recent developments, we in Saudi Arabia do not want to show that we are behind the rest of the world, so we have accepted the concept of a master plan. An international firm has been commissioned to do a master plan of Mecca. The first thing they do is to provide two things: modern concepts which prevailed in the 50s and 60s, that is for the car and wide open spaces. A major expansion of the city had already begun twenty-five years ago (I was one of the victims. My parents' house was demolished). Now there is no longer is that harmonious progression from door to alley to open space to city gate. The resulting vast spaces have completely lost their traditional and Islamic character.

Coupled with this change of a new building type, is the introduction of the apartment building in concrete. Less than half a million people live here all year long, but in the season of the Hajj, the population expands to about two million people. This is, in fact, eight times the population in the same area. The recent development provided the chance for people to rebuild, especially around the mosque. Now apartment buildings, instead of being four, five or six stories, are from ten to fifteen stories! This gave the greedy motivated people the chance to commercialize land or to build an apartment building, and instead of renting it to the local people of Mecca, they keep it closed all year long and rent it for only two or three weeks at exaggerated prices.

F. Khan

One of the things I find is that the problem we have been talking about is not especially related to Islam or Christianity or Buddhism. In fact, the urban problem we talk about is the urban problem in an Indian city, in Bangladesh or in Timbuktu, for that matter. But we can see that the planners have found a very interesting way of isolating the poor, finally and totally. If we want to talk about an ultimate Islamic city, we must say that the poor should live near and by the rich. The concept is so strong that we are arriving at the same point somewhere through simple logic. Multiple family housings with a wide range of income groups must finally be put together instead of having distinct separate slums. The planners are trying their very best to maintain the greatness of those slums, but I think that is romantic at best and destructive for the future.

Stambouli

Fifty percent of the urban population throughout Muslim society is living either in slum areas or in the deteriorated quarters of the madina which are often worse than those of the slum areas. With such basic constraints in mind, how can we visualize the future of the Muslim urban scene? What are the alternatives, if any? There is no way to solve the key problems of our urban scene either within our liberal political system or within a socialist one. In fact, the crisis of our urban scene reflects not only the crisis of our societies but also a crisis of knowledge—knowledge of our own culture, knowledge of our own societies in their present and their immediate future. Therefore, in order to create and re-create the spaces we live in in the spirit of Islam, we have to be, first
of all, creative enough, imaginative enough, in overcoming the technocratic rationality or at least in criticizing it deeply, regenerating knowledge and restoring to our people their rights for initiative and their rights for managing their daily life and solving their problems. This is, in my opinion, the essential message of Janet’s contribution.

Afshar

I more or less agree with what Janet Abu-Lughod and John Turner were saying, but I would like to add another perspective to this. Many of the urban problems we are facing have to do with the fact of urban bias. I am afraid that this conference itself might begin to reflect the same bias. If we take as a given fact that everyone is going to move into a few very large cities and we work only towards that, then we might just be compounding the problem and perpetuating it. But I personally believe a policy of decentralization is possible. A lot of these problems can be eased by looking realistically at the urban situation, then turning to rural and small town development and seeing what solutions that can arise out of them. For example, in the case of Iran, it has been projected that by the year 2000 the majority of urban settlements will be the small market towns. These new creations will be based on existing small villages. They will not be totally new towns. What can be done there, what sort of theory and action can be developed? In terms of the new urban settlement and also of the rural development and improvement, such a strategy becomes a viable alternative to more and bigger Cairo and Teherans.

H-U Khan

Oleg Grabar asked where decisions are made. This is all tied in with the question of equality, the rich and the poor, and the rich who wish to stay in power. I have to bring in some of the political considerations which we have been skirting. When we talk about making laws and even planning regulations, we must ask certain questions. Who are we who are making the laws? For whom are we making them? Whose laws are we trying to evade, or whose laws are these people in towns thinking about? They do not care about the laws of the moment; they are taking
action into their own hands. I think they have every right to do so, because it is their city and not that of the remote people who make the laws. The city does not belong to them.

Nasr and other people have brought up the question of forms and their significance in art and architecture. At the moment, architects have no role to play in development. I believe that architects have no significance because they have been thinking of themselves with a capital “A” in terms of art and architecture. Architects should start redefining their roles.

Correa

I just want to re-emphasize Fazlur Kahn’s point that the Islamic city needs the poor living next to the rich. The reason it probably will not happen, I am sorry to say, is due to the land ownership and the land policy followed in many cities. If we want to get the Islamic city, we have to look at this aspect of the question and perhaps the Award should also be given to people who make real efforts to change that.

I agree completely with Mr. Ragheb; I felt that there was a sentimentality in the slides that Nawal Hassan showed of that lovely family (not that I was not moved by it). The question, however, is what do they represent? It is not a problem of housing forty-five such families or four hundred, but it must be forty thousand, and you can’t put them all into those houses. But putting them in a squatter colony also is getting them out of the way, because they live in an area of town where they can’t reach their jobs.

The poor come to the city looking for jobs, not for housing. You give them houses; it is like “Let them eat cake.” To do anything for these people, the scale of the problem necessitates complete restructuring. It begins with the recognition where the jobs are, where the desire lines are, where the pressure points in the city are. That’s what will save the city. I agree with Robertson when he advocates using the existing forces, but I don’t see the existing forces in my kind of city being just developers, but probably many other forces.

Ardalan

The conversations that we had yesterday dealt, very necessarily, with some of the philosophic base of what Islam is. Today, looking at some of the social, political and economic dynamics certainly gave us the complement. I believe that these two working in concert are the type of directions according to which we can grow in the new ordering of Islamic cities and revitalization of an Islamic point of view.
Toward an Appreciation of the Diversity of Architectural Forms

Economics of Traditional Buildings in Yemen

Alain Berthaud

In Yemen there are buildings under construction, buildings built in recent decades and others two hundred years old. One is not always able to see the difference. Many architects love this architecture and find it very beautiful. Beauty is not the point. I happen to like this architecture very much, but the important point is that it is the people who make it like this, because they are in full control of their houses. I am not saying now that Yemen is the “City of Light,” although to many it is close to it.

You may not see any form here which is familiar to you, but I trust that nobody will dare to say that Yemeni architecture is not Islamic because there are no arches or stalactites.

This is an architecture which is under full control of the people. Is that going to last? I am not sure and this is a problem. How many people have access to this type of housing? One point that we have not discussed so far is, which part of a housing stock is slum? We are talking about people living in slums or people living in public housing. Solutions are really linked to the numbers of people. It may be possible to relocate ten thousand people, but not one million.

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Saada, a town in the northern Yemen Arab Republic

Photo: A Berthaud
Yemen has a varied environment. There is the desert, extremely hot climate, extremely cool climate with some plateaus as high as three thousand metres, and some places have monsoons. In each area, you have an architecture that is completely different but, at the same time, is an extremely high quality of architecture. When I say architecture, I'm talking about housing. You will not find the Fatehpur Sikri or the Taj Mahal or the Al Azhar Mosque, but each village is a Fatehpur Sikri. Could it be that the manifestation of Islam in Yemen is the adaptation of man to nature in the extreme economy of means for a maximum of use? Terraces are cultivated during the whole year and it rains only for two or three weeks. Everything has to be ready for those three weeks. If there is one mistake in the way the fields are connected together, if there is one stone missing, the whole ground washes away. Then people must starve and die, because there is no way out. There are no banana trees at the corner! They have nothing else.

A village in another area uses volcanic stones for building. The extreme care and labour put into this architecture is characteristic.

Now, look at the economics of it. How much space does each family have? How much room per inhabitant? You will be amazed. This is rural housing. Usually, in developing countries, rural housing is in a most sorry state. Here, each house has a bathroom. This is in a country where people have a GNP of $80 per capita, so there must be something wrong with our economic analyses.

In another part of Yemen, there is much more rain. It is completely different when we look at the details of the architecture. Yet, there remains the same quality of building, the same quality of space and the source of it all, the complete control of the inhabitants over the building. They are the masters of the technology, the masons are the people of the village. The building materials are local ones and they are free. Every country has stones. It happens that the Yemeni know how to cut them very quickly and very cheaply. And that is why they can afford this type of housing. Stone is abundant so there is no problem of depletion of the material.

In other villages houses are made of mud. In the Tihama Plains some are made of reeds. Each time there is the same quality of space, the same comfort.
An aerial photo of Sana’a shows very interesting features of the densities, the way in which the spaces are allocated. Empty space is not leftover space. It has not been bought by speculators. It is land which has been allocated to the mosques. It is a garden irrigated by the water of ablution from the mosque and onions are growing in it, a good way of keeping it green and clean. In the old city the density is lower than 350 per hectare with buildings which are up to eight stories high. There is one family, an extended family, living in each house with only one bathroom on each floor. I could give you the detail of the figures and the amount of floor space per inhabitant but the most important thing, of course, is the distribution of floor space among the different income groups. It is not a high density for an Arab city. The Casbah of Algiers has 1600 people per hectare. I do not propose Yemen as a model. In entirely new sections of the town, there is little difference between old houses and new houses.

The craftsman knows his job. He is an artist with no ego to defend. He does not have to make something to show that he has done it. Still, he puts some individuality into it.

In a rich man’s house, or a poor man’s house, status is more important that cost and function. All the floors are not used. The people accumulate little wealth; they build higher because they like it, because it is cheap and because they can afford it.

_Sana’a, Yemen Arab Republic. The aerial view shows the gracefully tended gardens of the city centre, where water used in the mosque is recycled for agricultural purposes_

_Photograph: A. Bertaud_
We’ve been talking a great deal about some of the values of Islam as related to architecture. But I would like to tell you some of my practical experiences in architecture, working only in Kuwait and only in Islamic countries with the conflicts in some of these values. I will limit my remarks to the conflict with the religion of Islam. It is very good to look at religion and look at the positive factors. In the final analysis, however, the only way you can evaluate it is the way it is interpreted and used by the people in power, the people who make decisions. It cannot be dealt with on abstract or academic levels.

The Ministry of Housing was taken over by very devout Muslims about three years ago. It started at the top and went all the way through. We were asked to come and do a project for them, a quite large one, about six hundred or seven hundred houses for three thousand to four thousand families. We walked into the initial meetings. Of course I knew everybody in there; I grew up with them. My colleague, a woman, was project designer in charge. They totally ignored her presence. She did the talking. However, all responses were made to me only. Questions were directed to me. For two and a half hours the client would not look her in the face. Well, I thought this was a little strange, but it continued, on and on. He ignored her presence absolutely.

We came to the problem of designs. We were asked to develop ten alternative housing plans, one each for different types of people from medium income to very poor for different social status and different types of families. These ranged from courtyard houses to the duplex system to the individual house. He let us present our scheme for about an hour and a half; then he told me, “This has nothing to do with our country.” I asked, “What do you mean by that?” He said, “This is contradictory to all values of Islam, this is an Islamic country. You have produced houses for American families. They are not for Arabs, the people of Islam.” I asked, “What do you mean by that?” He replied, “Take this opening between dining room and living room. It is not acceptable. Suppose you are having dinner and a guest comes in. What should your wife do? Go upstairs and have her dinner? You cannot have that. You have to put four walls on each and every room, and you must be absolutely sure that the woman of the house can walk from one part of the house to the other and be totally sure that no strangers will see her.” Now you see the implication in design. All our schemes, when it came to this, were totally useless.

But I told him, “Listen, there is a problem here. I agree with you that there are maybe ten or twenty or thirty percent of the people who are as devout as you are, but seventy percent of us are not. We are willing to give you thirty percent of the architecture, according to your values, but let the seventy percent be different.” He answered, “No. This is a Muslim country, and we are all people of Islam. You design houses for us. You follow instructions.” The rest of the designs were thrown out, and only the houses which had this division were accepted.

Then came the problem of sanitary equipment. They checked our plumbing drawings. He said, “You have to redo all the plumbing systems.” “I am sorry,” I replied, “I don’t know why.” He responded, “Because, in Islam, the water supply line and the w.c. line are not mixed together. There are two separate sewage systems.” What he meant was that when you drain the sink, the water should go through one pipe, and when you flush the toilet, it should go through another. If you combine them, it is not Islamic anymore. But I told him, “Wait a minute. There is a public works sewage system outside where both are joined.” He said, “That has nothing to do with me! It is not the domain of the Housing Ministry.” This is not one client. These people handle the equivalent of twenty thousand housing units a year.

On another project, when we came to the problem of communities, we argued that the separation of Kuwaitis and non-Kuwaitis and now Muslims and non-Muslims should not occur. He said, “We do not want all foreign influences to come to our children.”

These principles are reflected in education also. For instance, they want all schools to be completely segregated according to sex, from the age of eight all the way through university. We now have absolutely duplicate systems. It is obvious what the implications are. I am just giving you a few examples. When you say that you would like to use Islamic values, just remember that the people who will implement your decisions will not only take the advantages, but take all the disadvantages also and apply them. And from my experience in Kuwait, the disadvantages are major.

We come to another problem which has to do with political power. When you produce a set of principles, whether or not they succeed depends upon the individual who will stand up and speak for them. Islamic values today in the Arabian Peninsula depend on a single power structure. On top are the rulers, the sheikhs. And next come the ‘ulama. Parliaments don’t exist anymore. When you want principles to come back into Islamic architecture, the ruling hierarchy will not interfere. The ‘ulama, however, will pick it up and magnify it way out of proportion to its place in history. In the past, when the concept of co-education was being introduced in Kuwait, the people who fought the ‘ulama were the members of Parliament. These religious people are not that numerous, only thirty percent, but they are highly organized and have a puppet that they use very, very well. At the moment, the organization to counterbalance the ‘ulama no longer exists in the Peninsula. So when Islamic values are introduced, chances are they will be magnified out of proportion.
Social Aspiration in Tunisian Architecture

Fredj Stambouli

Here are a few illustrations of the housing experience in Tunisia. In 1975, the Ministry of Housing tried to relocate the people who lived in a shantytown or slum called The Red Mountain which is only 100 metres from the Hilton Hotel and from the brilliant new campus of the University of Tunis. You will not be surprised to learn they pushed them nearly one kilometre away. There, they tried to build houses in the spirit of Islam and to stop construction of those anonymous military boxes prevalent for the past twenty years. And to show that they build in the spirit of Islam, the new city is called Ibn Khaldun. They imitated the madina in the privacy of the houses. They tried to build intimacy within the available space.

First, I ask my colleagues here to look and see if the architecture is correct and in the spirit of Islam. I am not an architect, and therefore not qualified to judge.

The second remark is a sociological one. The relocated people have made modifications and additions to the houses. The main orientation of this change from the sociological point of view is that they would like to emphasize privacy within their house.

My final remark. Some of them have put other symbols on their houses which show the values with which this population would like to identify itself. These values are very clearly bourgeois. These people are from popular origins. They project themselves into the future, a Tunisian bourgeois, decadent, aristocratic future.
My words will be few, but the images I project will, I hope, add both another dimension to, and a summary of, the ways in which I view some of the proceedings of this seminar. The areas of my concern are on the edges and boundaries of Islam at the interface planes between the non-Islamic and the Islamic world. My own research over these past years has focused on the way in which the material expression of human experience is transformed in response to shifts in man's conceptual frame of reference.

My concern is with meaning in architecture, and for me, meaning derives from identity. Identity in turn evolves through involvement itself. The sequence (photographs taken from western Sudan, from the northern Ivory Coast and from Mali) documents a process of architectural change, wherein indigenous host cultures add a new dimension to their own existence by incorporating elements of Islamic form.

The first monument is a simple pillar. It represents the ancestral pillar which marks the centre of the indigenous universe as Man sees it within the frame of his own cultural reference. With the introduction of Islam, the same pillar is incorporated into a new Islamic gestalt as its meaning...
expands. The very same ancestral pillars have been transformed into the buttresses and mihrabs of the great mosques (djinguere ber) of Timbuktu and its sister city, Djenné. The latter mosque was built under the aegis of a French administrator in 1907, on the consecrated site of the former mosque but its entrance replicates the shape and form of a classic pagan African Dogon masquerade mask.

What I have tried to suggest in these pictures is a direct iconographic continuity, in time and space, from the ancestral earthen pillar to the great mosques. The ancestral pillar is an indigenous, pagan expression of a belief system which is totally unrelated to the tenets of Islam. But it has become transformed over time and incorporated into an architectonic creation which is a symbolic expression of a new conceptual order. But the form itself, and the names by which people designate it in the two different contexts, remains the same. Multivocal, they read multilingually. This is another dimension of process which, I think, we must attend to when we speak of the change over time.

*Koa, Mali: entrance to a new mosque*  
*Photo: L. Prussin*

*Mopti, Mali: Friday Mosque*  
*Photo: L. Prussin*
Architecture as a Development Process: Some Examples from Iran

Farokh Afshar

The Development Workshop

The two most common types of contributions that are made to advance the state of architecture in Muslim countries are the academic (manifested through a scholarly work on some aspect of architecture) and the professional (manifested through a building or planning project). There is a third type of contribution which is much less frequently made, but which can be at least as important. This type of contribution integrates educational and practical objectives. It does so by using the design and construction process as a research and training tool. Two projects that utilize this third type of contribution will be discussed here, but first we would like to outline the premises upon which these projects are based.

First, there is an urgent need for practical examples of appropriate architecture in Muslim countries. The foundations on which an architectural revival can be based are being rapidly eroded—either directly, by the bulldozing of our traditional built environment, or indirectly, by the inappropriate and misleading examples presented by much contemporary construction. The urgency makes it legitimate, even necessary, to integrate research and training with practice. Second, concern for the revival of an architecture appropriate for Muslim countries must be accompanied with a concern for the material and cultural well-being of the majority of the people (that is, the lower income groups of those countries).

A third premise is that such people can be a primary source of inspiration and information, and can even be the major vehicle for the realization of an appropriate architecture. They incorporate Muslim traditions with a strength and authenticity that many of us among the elite do not.

Fourth, placing the emphasis on the majority of people implies a corresponding emphasis on their built environment. Thus, the architecture of the older historical centres of Muslim cities, the informal settlements of our urban areas and the rural settlements should gain in recognized importance. The majority of Muslims live in these areas; our building traditions are often most clearly manifested in them, yet they are often the most neglected and are in the worst environmental conditions.

That the builders, craftsmen and artisans who work in these settlements are of particular importance is our fifth premise. Our building traditions are kept alive in their system of work and their skills. In an immediate and practical way they are doing the most to keep these traditions vital and to house the majority of Muslims. As our sixth and final premise, we maintain that the elite can play the role of catalyst in the revival of an architecture appropriate for Muslim countries. We can aid in stimulating creativity within the people, and in transforming the lessons of their traditional built environment into practical building and planning concepts appropriate to contemporary needs. To play this role, we must learn from and work closely with the people.

I shall now discuss the two projects which serve as practical examples of the premises just cited. The first project is the implementation of a village public bath (hāmmām). The second is a workshop in indigenous building methods. Both projects were part of a comprehensive programme of rural development, the Selseleh Integrated Development Programme. These projects were implemented in Iran during the period 1975–78.

The Hāmmām Project

The hāmmām has played an important role in the villages and towns of Iran for centuries, both as a social and practical health-promoting facility. People gather in the hāmmām to bathe, massage, shave, receive medical attention (customarily provided by the village barber) and simply to chat at leisure.

Selseleh region, Iran: hāmmām constructed by SIDP. In the foreground is a bio-gas experimental unit.

Photo: F. Afshar/The Development Workshop
Most of the traditional hâmâms in the Selseleh region had fallen into disrepair. Their use had been prohibited because bathing in the communal pool (khâzeere) was declared unhygienic by the government. The substitute—standard government–designed hâmâms—consisted of a narrow corridor leading into a row of shower cubicles. This arrangement ignored traditional designs and in particular limited the socializing function of the hâmâm.

The need for steel and concrete in construction required the importation of both materials and builders from outside the region.

The hâmâms constructed by the Selseleh Programme were based on research into traditional hâmâm design and discussions with users and builders. The design integrated the shower cubicles required by law with the traditional ‘in-the-round’ seating and bathing arrangements. The new hâmâms consist of a series of chambers with bent connections which lead from reception room through changing room to bath room. Such indirect connections increase both privacy and thermal insulation between rooms. Furthermore, the arrangement of rooms also reflects the traditional bathing procedure. A separate room was also provided in which women could wash clothes and utensils and bathe babies. Such a room is not found in either traditional or government–built hâmâms.

The construction method was brick vault and dome roofing, with a lime mortar. Such a technology obviated the need to depend on imported materials. The construction process was also useful for training local builders in that technology. This acquisition of skills was facilitated by the existence of a regional tradition of vault construction. Furthermore, the technology lent itself to on-the-job training and quick assimilation. Apprentice and master would work on either end of the same arch, vault or dome in quite close contact. A geometrical construction system was followed, such that the positioning of each brick was indicated by that of the brick preceding it. The tools for calculation, primarily rod, string and plumb–line, require empirical judgment and are familiar to most local builders.

The village donated both the land and the unskilled labour. The traditional system of cooperative effort, such as that used in harvesting, was followed in the division of labour. Under that system the village was divided into six sections of extended families, with each responsible for providing a certain number of workers at prescribed times during the construction.

From the experience of constructing the first hâmâm and from further discussions with the villagers and builders, the design of hâmâms subsequently constructed in other villages was slightly modified. Only
vaults were used, because they are simpler to construct than domes, and the hāmmāms were partially sunk underground, as is traditional, to improve thermal insulation. With each hāmmām built, more local builders were trained and the construction programme was thus progressively accelerated.

The project was completed at half the cost of the equivalent government-constructed hāmmāms. The cost included the additional women’s wash facility as well as the estimated value of the voluntary labour. These savings were accrued despite the fact that village participation and the builders’ training caused inevitable construction delays.

In summary, the hāmmām construction programme developed a design that respected both the form and practice of traditional hāmmāms, demonstrated the continued relevance of traditional technology; established a procedure for on-the-job training of local builders; stimulated the participation of the rural community in the process of defining and implementing an important community facility; and acted as a vehicle for close interaction between professional architects, builders and local users.

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Workshop in Indigenous Building Methods

The local builders in villages and small towns are traditionally responsible for most of the construction, both public and private. These builders are a valuable source of experience on indigenous building methods, as well as an appropriate channel for the introduction of improved building techniques.

In February and March of 1977, a two-month workshop was conducted by the Building Section of the SIDP. It was held in the city of Yazd, in central Iran, for two reasons. Yazd possessed fine examples of traditional construction which would be educational for the Selseleh builders to see, and winter conditions in Selseleh at that time made outdoor construction practice difficult. The participants in the workshop were the SIDP architects, the master masons and the builder-trainees from Selseleh. The workshop followed a year of on-the-job training of the builders in such projects as the hāmmām described above. Aims and methods pursued in the preceding year were developed in a more intensive and organized manner than had been possible during active building construction. The workshop had two aims: to improve indigenous building methods through a pooling of knowledge and participation of the village builders, and to train the builders in practical and organization skills. They would thereby be equipped to meet most rural shelter needs without depending on imported building materials, city contractors, architects and engineers.

The process of learning through discussion, practice and experimentation were all utilized in the workshop. For example, a discussion on building methods, design and drawing principles was introduced by
asking each participant to draw his own house and discuss its advantages and disadvantages. From these discussions, typical village housing and detailed building problems were identified, and drawing skills were developed. Each aspect of building construction, from different soil types and foundations to walls and roofs, were discussed in turn. Each potential building solution was tested in a practice yard set aside for that purpose. At the same time, experiments were carried out on local materials like timber, stone and mud–brick. Soils were tested using simple sedimentation techniques that could be mastered by any local builders. Stabilizers for mud–brick and renders for improving earth walls against weathering were developed for local soil types. The most widely applicable vault and dome types were isolated, and the builders learned how to construct them. Identification of techniques employing local resources to improve traditional buildings’ resistance to earthquakes also formed an important part of the training.

Yazd, Iran SIDP workshop in indigenous building methods: architectural drawing class
Photo F Afshar/The Development Workshop

Resource persons were also brought to the workshop: a local stonemason conducted a two–week session on stone technology, and a very well–informed Yazd resident gave an illustrated talk on the historical buildings of the area. In the evenings, literacy classes were conducted for the largely illiterate village builders. By directly relating the literacy programme to the builders’ work (e.g., reading building plans and keeping their own building records), a keen interest in becoming literate was developed.

The workshop developed an educational methodology which even barely literate builders could use to educate themselves and improve indigenous methods. This methodology was based on problem identification and problem solving via a sharing of knowledge through discussion, practice and experimentation. It proved successful during the workshop, but the results were even more clearly demonstrated in the following building season: the number of builders who could assume independent responsibility for projects increased significantly. The builders also took on new apprentices, applying the same training procedures from which they had benefited. Just over a year after the architects left the project, the builders independently organized another workshop to educate a new generation of trainees. This evidence that a methodology for development had been internalized by the village builders was of great significance, far more so than any specific knowledge or particular innovations in building techniques. Such internalization was imperative if innovation were to become an ongoing and grass roots phenomenon.

In conclusion, one can say that the field of Muslim architecture has been the object and recipient of much scholarship. There has also been a great deal of conventional construction by architects in Muslim countries. Now we also need to develop a third avenue in our search for architecture in the spirit of Islam. This avenue would seek to integrate the scholar’s thought and the architect’s expertise with the aspirations and potential of the people in the Muslim world.
Discussion

Notes

1 This presentation is largely drawn from work jointly undertaken with other members of The Development Workshop: A Bain, M R Dariee and J Morton. The Development Workshop is a research and development, architectural and planning group.

2 The Selsileh Integrated Development Program (SIDP) implements projects in agriculture and animal husbandry, rural industries, health, education and building in the rural region of Lorestan, Iran. It was initiated in 1974. The Development Workshop, of which this writer is a co-founder, was responsible for the building Section of the SIDP between 1975–78. For further details on SIDP and the activities of the Building Section, see Dariee, Bain, Alshar, Norton, "The Selsileh Integrated Development Project," Proceedings of the International Conference on Rural Development (Bangkok: Asian Institute of Technology, 1977).

Grabar

I really do not think I quite agree with you. I am not sure that the ‘ulamâ had more or less power or importance in previous centuries. I do not think one knows that. And I fear romanticizing the past until I have the documents to prove it.

Nasr

Let me give you a concrete example. When the city of Isfahan was built, when the Maidan-î Shah was built, one of the major figures involved was the Sheikh ul-Islam of Isfahan, Sheikh Badr al-Din Amoli, who was at once a great architect, landscape designer and one of the leading ‘ulamâ.

Grabar

I am sure that it happened, but we are talking about some forty thousand cities over a period of one thousand years. One needs a great deal more information. But I do not feel that I have enough information to be able to make a coherent picture of what was urban architecture in the old Muslim world. I can see elements here and there. Something that was true of Isfahan’s seventeenth century was not necessarily true of Cairo’s eleventh. I am terribly afraid of romanticizing a certain kind of past. The Yemeni buildings trouble me. It seems to me that they reflect a very unique and remarkable sense of design and historical, economic and geographic factors that are typical of or peculiar to Yemen. I don’t think the Yemeni model is applicable to Cairo or Istanbul. What is the evidence that would allow us to draw conclusions or prescriptions of any kind? I am afraid of using one or two examples and extending their applicability too widely.

Ardalan

The work from Yemen is essentially rural architecture, the vernacular architecture of the people, that is. In the terms of classification it is a good physically adaptive, ecologically adaptive architecture.

Wherever you travel, whether to the Wahuacke Indians of Arizona or through the villages of Iran, or of Egypt or of any rural vernacular, you find good common sense construction which is very beautiful. Rudofsky documented it excellently in the building projects he presented in Architecture Without Architects. I think, however, that to say there is actually no Islamic element in it is too premature. There is obviously the factor observable here that you have 1400 or more years in which these people have grown within a cultural attitude.

Orientation to the south or to Mecca is a very important aspect. I think that orientation to important religious places or places of the saints or the pirs in many towns and many villages, especially in Iran, are very evident. So, although I think your word of caution is good, I do not think that in any way it eliminates the fact that this is good adaptive architecture. This is really architecture of what we call natural order, and then there are elements of Islam within these cities, within these villages, which are very powerfully evident.
Toward a Synthesis:
Reactions and Directions

Discussion

Berque

Dear colleagues, I was very impressed during these three days by the value of the comments and the materials provided for us. I was also struck by their variety and by their contradiction. The purpose of the seminar was to search how Islamic architecture and design can manifest themselves in the modern world. Some of us recommended a return to the Shari'ah or even to mysticism and theosophy. Now, certain of us wonder if it is possible or even convenient; why are the so-called Islamic societies so affected by universal change that their sense and denomination are altered? However, all the authors consider “Islamicity” a necessary characteristic of their own identities. How can one define this identity with temporal and regional variations? Would it be manifested in the relationships between forms and behaviors? Some of us spoke of partial revivals or of the maintenance of marks and orders.

Architecture is just a part of the whole and reflects collective necessities. Have we the right to speak of abstractions? Can one analyze concrete things without concepts? My puzzlement was complete when I was informed that in a period of transition, we cannot hope for anything but an unsatisfactory solution. Yes, but must we understand that we can do nothing in order to make such a solution a little less unsatisfactory? One can prolong those contradictory remarks and I understand perfectly that our colloquium has just to constitute a preliminary step, a step of confrontation rather than conclusion or recommendation.

But if we can expect a second step, perhaps it is convenient to foresee a second stage of problems and means to solve them. Hence, I should like to propose the following four points as preliminaries to future discussions: a systematic inquiry into the adaptation of Islamic design to the various periods and situations where it manifested itself; a systematic inquiry into its achievements in modern time and the flexibility it has displayed facing a variety of situations; an evaluation or rather an attempt of evaluation of its present successes and failures, an attempt of testing them according to social, psychological and aesthetic criteria; and, if it is true that manifested aspects of any category of social life insert themselves into a system, and if this system must be investigated from the surface into its deep structure (generative or not), numerous cases could be studied in several Islamic countries for appreciating the real sense of this hypothesis. I hope that the Steering Committee can take these suggestions into consideration.

Grabar

The initial purpose of this gathering had essentially two concrete objectives. The first was to identify issues sufficient in number for the Steering Committee to formulate while it proceeds with its work of organizing the Award criteria, categories to be awarded or approaches for judging the built environment.

The second objective was to identify topics of such burning interest or such controversial interest that further discussion
seems to be required in the four additional seminars that are being planned. This first meeting had the objective of being a free-ranging meeting where all kinds of thoughts, frustrations and feelings would be brought out. Now it is the task of this group, then of the Steering Committee and especially of the Convener’s Office, to try to impose some order on them in order to organize and think through the subjects and topics for the coming seminars. These were the initial objectives.

Twelve points seemed to me to be underlying almost all of our concerns, around which we can focus further discussions.

The first one would be a sense of a certain crisis within architecture, architects and culture, specifically within architecture itself. It could, perhaps, be phrased in the following form: that the immense building activity of many Muslim countries today runs the risk of leading not only to a bland neutral architecture, a sort of zero architecture, but may especially lead to a further diminution, eventually almost to a destruction of cultural identity.

The second theme, not in any order of importance, is that two opposite poles or two possible extremes exist in dealing with the importance of Islam within the problem of architecture and perhaps within the problem of cultures. At one end, there would be prescriptive Islam whether one sees it as a Sunni Shari’a-centred one, theosophic or whatever, but essentially a system that has prescriptive implications; some things are possible and good, some things are impossible and bad. At the other end, there would be the pole of indigenous, local, regional, even national traditions which are only Islamic to the extent to which the people of the region prefer Islam as their major way of life.

A third point is of a totally different order. I detect from this seminar a clear mandate for the encouragement and development of local techniques, not so much of a folk tradition but the development of local means of construction, decoration, building. This certainly could be one topic for a future seminar.

A fourth theme that occurred constantly is the extraordinary unclarity of the relationship to the old. The relationship to the old Muslim tradition appeared to me this morning in Professor Khan’s paper as a very strange one, a strange relationship in which the old fascinates—and yet one does not want to do the old Nostalgia or use, the active preservation, passive preservation, preservation of a single great monument, preservation of a social setting, the relationship to the old which gives the rules of the Islamic architectural game is still something which to my mind is not fully explored.

The fifth point that clearly came out, I felt, is the city and the country. More has been said, I think, about urban centres than about anything else from grandiose new plans to slum dwellings. However, urban Islam was, the Muslim world today is not only an urban world, and there are all kinds of other aspects of that world that are pertinent to our attempt to evaluate its new architecture.

The sixth is a sense that many of the problems are universal, but that what we are seeking are specifically Islamic solutions.

The seventh point is perhaps slightly outside of the purview of our gathering here, but it underlies many of the problems and this is education. It was clear that there are varieties of levels of ignorance that exist everywhere. Architects don’t know history, historians do not know what goes on today, sociologists don’t look at things, urban planners do not read and so forth. In other words, what we do feel is that there is an absence of an education in the problems with which we are concerned at other levels of the culture. Whether it is for those of us who teach abroad to instill some knowledge of Islam into our colleagues, and Islamic art into architectural students in the West, or whether it is for schools in Muslim countries to instill a sense of history and of their own past in their own students, these are educational tasks which exist even though we have not talked much about them.

The eighth problem is again slightly outside of the purview of the Award process, but is so clear that it has to be mentioned. The lack of knowledge is not that people do not read what other people write or do not look at what exists. It is that a certain number of things are simply not known. The number of instances when people mentioned the need for a study on one or another topic is so great that some system of research must be the base for dealing with the broader questions.

The ninth problem is one which was alluded to much more today than in the past days, but is clearly behind a great deal of our discussions. This is the nature of architectural patronage. In the contemporary world, the nature of the patronage, the public and private powers, the importance and impact of bureaucracies, is clearly something that worries and affects the practitioners enormously. Varied solutions seem to exist in dealing with it: revolt or adaptation or compromise.

The tenth problem is the significance of expertise from the outside, external to the cultural itself. It is very clear that, for a number of reasons, outside “experts” are brought in and play an extremely important part in the shaping of the new environment. This creates certain problems. It raises issues, not only practical issues of knowledge or no knowledge of local conditions but, I think, also psychological issues, emotional issues, such as why do we need outside experts, why should we follow what they say, and so forth. This is clearly an area about which we should think, an area which is important to develop.

The eleventh point is something hardly mentioned for two days yet repeatedly stated today forms. It deals with the nature of the aesthetic that is involved. What is the nature of the social and especially the semiotic contract of any society? What is the nature of the relationship between people and what is built? Are domes necessary to make something Islamic? Is it that there should be no straight lines but there should also be a complex relationship between the sky and
the building? It can be as simple as concrete, formal elements. It can be as complicated and abstract as the wonderful image of light that enters a building. Whatever it is, whether it is light or whether it is a concrete form, we have only barely begun to explore the notion of whether there is a semiotic contract between Muslims and their surrounding architecture. We have not talked about the question of forms, yet we have raised formal complicated questions, complicated questions of visual symbols: whether they exist, what they are, whether they are consistent from one part of the Muslim world to the other.

The twelfth point is that we have all been influenced by generative grammar, the discernment of surface and inner structures. This is a topic that would be terribly difficult to deal with without masses of monographs. But, eventually, we must begin this process.

Rageh

In my limited knowledge I remember that the basic tools of Islam as a dynamic religion are ijithad and ijmâ’. Ijithad means individual creativity, an attempt by the individual to reach his own conclusions. Whatever his conclusions are, they are perfectly acceptable as long as there was an honest and truthful attempt behind them. This is very much of an Islamic value we should not lose.

Ijmâ’ could be translated in as superficial a way as the collective consciousness, the spirit of the community or the spirit of the group. So, whatever the group agrees to as a goal, and whatever conclusions it comes to, are perfectly acceptable in Islam. And I do not know of any other doctrine that allows these two forces to be working in a very dynamic and lively way within the individual and within society. Dialogue between these forces has always been a very basic and fundamental tool throughout Islamic history. It is possible that this lies behind the continuity of Islam and provides the basis for renewal from one epoch to another. So we have to use the same tools to revive Islamic architecture. Ijithad of the individual and ijmâ’ of the community and the group.

I was very much fascinated by my friend, Fazlur Khan when he spoke about simplicity. I disagree with him when he defines simplicity, symmetry and centrality. I think it was a little bit beyond that. Simplicity is very much an Islamic value. I will explain what I mean here by simplicity. The Sultan Hasan Mosque and many great mosques have been mentioned by several speakers as great examples of Islamic architecture which should be emulated, should be admired. We should be descendants of the builders of these great edifices. I shall refer to Egyptian mosques. I know little about them and practically nothing about other mosques. Well, Sultan Hasan Mosque, which is considered one of the greatest landmarks in the history of Islamic architecture, is a deviation from Islam, in my opinion. It was built when Islamic thought and civilization was at a nadir, when the Islamic religion was very static, when secret groups proliferated throughout Egypt and the Islamic world probably. It was not built at the time of Ma’mun when he was surrounded by learned people (ulama’). It was not built at the time of al Mu’ayyir bin-din Allâh when his best time was spent talking with wise men. It was built to be a symbol for the power and authority of the sultan and his government. And we forgot at that time that Islam came for man. Where is the humility and humbleness (khushu’)? Where is the truth of me? If I stand in Sultan Hasan’s Mosque, where is my place? There is no place for me. I am not trying to say that this is a bad architecture; it is one of the finest pieces of architecture, but we are talking about architecture in the spirit of Islam. I think mosques like Ibn Tulun or like Al Azhar are closer to man. I feel that I have a place there. I feel that there is some basic Islamic value in it. The mosque or the building should and must be related to man as defined by the Koran and defined by and in the Islamic doctrine as humble, truthful architecture. Monumentality has never been a part of Islam. I think architecture in the spirit of Islam might be something different.

Professor Nasr spoke about tawhid. I think the unity of the universe would lead us also to an aesthetic concept of the universe. After all, unity in essence is an aesthetic concept. And we should be careful in the words we are using because Islam really is neither polarization nor compartmentalization. It is a very fluid, very active and a very dynamic doctrine.

In Islam alone, the thesis is its own antithesis. The dialogue between the different diversities is the essence of the belief. And I think we should know and search and look for the Islamic concepts of reality, truth and beauty in architecture in the spirit of Islam. We should look at it not only by our intellect, not only by our instinct, but also by a thing that is more into the Islamic spirit: wijdan.

Finally, we spoke about architecture. We spoke about city planning. We were wrong, because Islam does not know either architecture or city planning. Islam knows ‘umran, meaning architecture, meaning planning, meaning sociology, meaning civilization. This is the way it is used by Ibn Khaldun in his Muqaddimah. The detachment of building from the city, from the people, from the whole life, is only for the compartmentalized mind. When you give the Award to ‘umran, you give it for all these things together.

Kuban

We are gathered here for the promotion of some architectural activity in the spirit of cultural tradition. Architecture is the final, basic product of a historical situation in its totality. The face of our cities expresses this situation in which traditional remnants fight a losing battle. What are the resources for the re-establishment of a livable environment which would still preserve the Muslim heritage and would express it? I think nothing is stronger as a manifestation of the spirit of Islamic culture than the traditional architectures
and traditional cityscapes. Therefore, the preservation of the historical environment seems a good starting point for action. Old forms are the most obvious points of reference for formal as well as spiritual continuity.

Certainly, it is not possible to preserve everything, to impede the change of our physical environment or to find solutions to the new functions within the traditional schemes. But the part that we will be able to preserve, that we still find beautiful, that is to be integrated with the new is still to be created. I would like to use a commonplace example: the family structure. Children are not like their parents. Family life could be harmonious if old and young respected one another. In the actual situation of the Islamic culture, respect and harmony are key concepts for regeneration and creativity in our environment in architecture, respect for traditional forms and harmony between old and new.

Respect, in this context, means respect for the traditional built environment, the untouched surrounding nature preserved for and social life it sustains and the expectations of the human being still living there. In addition, respect means understanding. An active respect means scientific evaluation. We all know that, although they may seem beautiful to some of us through abstraction, the inhabited traditional houses are not kept up well. They are abandoned as unhealthy. They are decaying. More importantly, they are not respected by the inhabitants. They are not adequate for the new exigencies of life, at least, in their present condition. Here we have the problem of preservation, restoration and regeneration of old quarters and old houses. This is respect at its finest, because Islamic spirit is expressed and symbolized in them. This is where we have to keep the old forms, not in their imitations, but in themselves, giving them the possibility of survival.

The concept of harmony substantiates our demands for the creation of an architecture in the spirit of our culture. In the training of architects, the concept of harmony is used partly as synonymous to
the concept of respect for the existing environment, but it is generally more than that; it stresses more the physical qualities of architecture. What we have to ask from our architects is to build in a spirit of continuity with the still existing traditional environment. For creative architects, this never means imitation.

The formal character of the new architecture will be the outcome of both the interpretation of this continuity, and the harmony which will be created between the one we cherish as the expression of our culture and the new. I think it is better not to insist too much on the formal aspects of the new architecture; instead, insist more on behaviour. I refer not only to the behaviour of architects, but to that of their clients: the decision makers, politicians, administrators, greedy businessmen, simple but money-thirsty contractors and all kinds of speculators. The well-intentioned architects cannot counteract the massive speculative, political interests of these groups. But, though inseparable, this is a problem of much greater scope with which we can deal only on a general level. To be more effective, we must limit ourselves to one group, that of the architects, and to their behaviour in actual circumstances. We propose to sponsor good will and good work among the ranks of architects. If they build respectfully and harmoniously, then the good qualities of the old will influence their sensibility and permeate their sense of form. They will find rational ways of creating in the spirit of their own culture, the Islamic culture as we define it today. What I say here is not simple hope. All over the world, capable architects have built beautiful, modern buildings in harmony with the pre-existing environment. Such architecture should be regarded as being in the spirit of one's own culture. The problem is to make the Muslim architect believe that the traditional has an intrinsic value for his cultural identity and, therefore, for his originality.

One more point I feel compelled to make about the building activity itself: Mr. Robertson presented to us the project of Shahestan in Tehran. I found it a reasonable, modern project. We know many such grandiose, kingly projects. Can they define a new image of an Islamic architecture? I doubt it. Even if we were to do a hundred projects such as this, we would barely influence the physical environment of the eight hundred million Muslims, when hundreds of thousands of apartment and office buildings and other structures are being built each year. In the time it would take to complete one project like Shahestan, uncontrolled, speculative building activity would define a new shape for Muslim cities.

The direction we can take in dealing with this situation is quite clear. Our priority must be humble dwellings. A new spirit, one which the majority of people would understand, could evolve from simple experiences. Monumentality in today's world might still excite simple minds, but it cannot be respected.

The continuity with the past could best be preserved in the everyday life of people and in their home, not in tall office blocks, airports and palaces.

Islam as a living tradition is to be found more in today's daily life than in the frozen forms of the great architecture of the past.

**Turner**

More thought should be given to the differences between materials, tools and jobs. Jobs, I would understand as work; tools, the means by which jobs are done; materials, those resources which the tools use in order to do those jobs. The issue then is whether it is appropriate to focus on tools or on jobs. It seems to be taken for granted that we are making awards to jobs. It is my feeling that the greatest influence which people like ourselves can have is as toolmakers, rather than as actual builders, although we may have to do actual buildings in order to develop the tools, for they are the central or most influential area of our creativity. For instance, the most interesting work that we have heard about is that of Hassan Fathy and Farokh Afshar. This does emphasize the fact that I regard the significance of those particular works as the developers of tools. The word tool is used broadly to include simple hardware such as drills, pots, syringes, brooms, building elements or mentors, and not just large machines like cars or power stations. Included among the tools are productive institutions, the produced tangible commodities like cornflakes or electric current, and productive systems for tangible commodities such as those which produce education, health, knowledge or decisions. I use this term because it allows me to place into one category all rationally designed devices, be they artifacts or rules, codes or operators, and to distinguish all these planned and engineered instrumentalities from other things such as basic food or implements, which are not deemed to be subject to rationalization. School curricula or marriage laws are no less purposely shaped social devices than roads or networks. Tools are intrinsic to social relationships.

An individual relates himself in action to a society through the use of tools that he actively masters or by which he is passively acted upon. To the degree that he is mastered by his tools, the shape of the tool determines his own self-image. Convivial tools are those that give each person who uses them the greatest opportunity to enrich the environment with the fruits of his vision. The industrial tools deny this possibility to those who use them, and they allow their designers to determine the meaning and expectations of others. Most tools today cannot be used in a convivial fashion. The convivial society, and I take it that the characteristics or the qualities of Islamic culture are profoundly convivial, should be designed to allow all its members the most autonomous action by means of tools least controlled by others and least value-oriented. The growth of tools beyond a certain point increases regimentation, dependence, exploitation and impotence.
Kandiyoti

I did not plan to say anything today, but I was really provoked by Mr. Rageh's comments concerning values. I feel the need to make some kind of sociological statement of values as they relate to social structure. In order to keep Professor Grabar's guidelines, I will try to relate my comments to the unclarity of the relationship to the old or the transition between the old and the new.

So far, we have been talking about values in absolute terms as they are found in prescriptive codes of behaviors, such as the Koran or any other law. I am thinking now of the sorts of environments that ordinary people live in everyday; there, you have prescriptive rules and values which translate into cultural preferences. Then, at another level, these translate into behavior having an effect on the environment people use. Because of these different deviations, I think that it would be wrong in planning terms to take values at the absolute unmediated level and to look at their reflections in space, especially, if the space is habitat. I think we can have a clearer idea if we complete the equation by having values embodied in prescriptive codes and systems as a shaping form on the one hand, and social structure with its own dynamics and its own pace of change on the other. Look, then, at the resultant behavior of the user as an intersection of the two, because I think that values are responsive to changes in social structure. The reason they are responsive to changes in social structure is that there are so many things changing the material culture; people cannot but respond to these changes. I want to illustrate this very briefly with some data from a study I did in a central Anatolian village in Turkey. I was really looking at something quite different. I was looking at the effect of mechanization and capital-intensive farming on changes in stratification and values.

Part of my interview had to do with religious sins. I took a series of what were considered to be religious sins. The list included having pictures around them, drinking alcohol, borrowing or lending money with interest, reading the prayer in Turkish, as opposed to Arabic, etc. I want to give you some illustrative responses, to analyze why these responses were made and to try to see why it occurred that way. Was it because the Shari'a was not well enforced at the national level or was it because of something else?

For pictures, these are the replies elicited. A lot of peasants have many images in their houses. They also have Goodyear calendars with girls on them. So, when I asked them whether a picture is a sin, I got the following response. The picture of Ataturk is not a sin. The pictures on stamps are not sins. Family pictures are not sins. This is a sin (pointing to the girl in her mini-pants on the calendar). With regards to alcohol, they said wine is definitely a sin. Raki isn't. As far as the money with interest was concerned, there too I got an interesting answer. They said interest from banks is not a sin. However, there is one guy in the next town who is a usurer. That definitely is a sin. "He's going straight to hell."

Now, what am I trying to say by this? It is quite clear that whether or not the Turkish state had been guided by the rules of Shari'a, whether or not it had gone through the processes of republican transformation, these villagers now integrated into the national economy are very clearly swallowed up by market forces and confronted by the whole material culture of the West.

Now, this is something we cannot negate. We cannot talk of values in the absence of material culture. I happen to believe that material cultures have a way of changing behavior outside the will of the people. They have a force of their own. My analysis of these peasants' behavior does have an implication for architecture as material culture. These people, subsistence agriculturalists not long ago, were confronted with the market economy and with a new material culture to which they had to adapt whether they liked it or not. Hence, they had to make modifications in their belief systems to accommodate the new features of their environment.

The same is true for the houses I surveyed in a working-class, blue-collar habitat. Because there was television, and new patterns of visiting, they relaxed segregation of the sexes considerably if not completely. They were now watching television in mixed company. The whole idea of male and female spheres within the household has been collapsing.

These things do have implications for planning. If we really do want to be efficacious about understanding values as they relate to behavior in space, we have to focus more on the mediating mechanism. I think this is the key to the problem. We accept the forms a priori. To go to the level of the prescriptive roles directly from the Shari'a is not the answer either. On the contrary, I think we should look at changing structures as they slowly impinge on value systems through a dynamic process of change. It is only when we discover those buffer mechanisms, those intermediary mechanisms which make it possible for people to adjust to change without losing themselves, that we will be able to understand the way in which they shape both their identity and their environment.

Stambouli

During our discussions I think that the substance of our findings was often challenged by two main contradictions whose resolution is vital if we as intellectuals want to take seriously our responsibilities as interpreters of our time.

The first contradiction is between what we call the Islamic idiom, with its characteristics of simplicity, discretion and sense of equity, and what I called yesterday the currently dominant technocratic rationality with its limited profit mechanism. As long as we intellectuals have not, through an effort of creativity and imagination, been able to conceptualize our present correctly in order to give credible alternatives to our societies for the future, we will continue to be confronted with failures in what we call modernization. It is necessary
to remind you that what we call Islamic renaissance (nahda) is still problematic and fragile. We intellectuals share the responsibility for the failure throughout our societies at any level: education, economics, urbanism, architecture and so on. Failures in modernization processes during the last two decades have led to what I call, involutive retraditionalization of great parts of our societies. So neither a passive conception of Islamic revival nor a technocratic conception of modernization, but an effort of investigation upon the present of our peoples will adapt Islam to the challenges of modern time.

The second contradiction is the one that exists between the massive, concrete, basic needs of our peoples, which have abruptly emerged through artificial hyperurbanization during the colonial period and after, and the means at hand to solve such needs. Dependency and hegemony on the international scene and redundant, liberal political systems on the local one do not allow the development of suitable means. Unless such contradictions between needs and means are overcome, there is no way out of the deplorable situation in which many of our people are living. Such contradictions could be overcome, I believe, if adequate educational programmes were instituted.

To rebuild our identity in the true spirit of Islam, not only our architectural identity but our total identity, we must renew our historical personality and its various facets with a creative effort in order to live within our time and not within nostalgic, passive illusions of glorious pasts.

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Kowsar

Since we are rapidly nearing the conclusion of the seminar, I would like to make some remarks about design processes and those factors that, I am convinced, strongly influence them. 1) The “nature,” meaning those objective physical qualities which can be modified only to a minor degree, e.g., vegetation, topography, water, the pre-existence of a built or unbuilt environment, etc.; 2) the “climate,” or the sky, the sun, light, shadow, heat and cold; 3) the “culture,” or the society in which the architect operates, including economic, historical, political, religious and social aspects of the lives of individuals, a group or society as a whole. Through the interpretation of these three main factors, the architect is able to express his personal concept of the world and of architecture itself. Here I would like to quote Louis Kahn: “Expression is the centre of all the arts and art is the language of God.”

Although in each region of the world the first and second factors, namely, nature and climate, can be assumed to be unchangeable; the third factor, culture, changes over time, as does the weight of its components. Viewing architecture in this perspective, the architect, through his personal feeling, will decide what significance each one of the variants shall get in shaping his work.

Keeping in mind the changeability of culture over time and from place to place, I would like to add the following observation: day by day, the world is moving closer toward overall unity, which is a positive event. No doubt that we citizens of the world greatly benefit from it. No doubt, regional and local cultures will be enriched by their mutual contacts. Only thirty years ago, many Western people seemed to think of the world as ending at the Aegean Sea. However, let us not consider political and economic reasons for that. It’s an old story. Instead, let us look into the interest generated by improved mass media and improved communications and transportation facilities that the younger generation is developing in Islamic countries and cultures. It’s not only for oil or petrodollars.

We may consider this world tendency to be a positive one, although we also have good reasons to be concerned about the loss of diversity. We should be aware of the problem, as diversity is the base of creativity, and creativity is the difference between man and animal. We therefore need our own identity, an important aspect of which is our religious heritage. During this seminar, many different cultures, from Malaysian to Egyptian, have been grouped together under the heading “Islamic culture.” I personally believe that religion is only one of the components of a given culture. Hence, I fear it is possible that we are clouding understanding of that identity we seek.

Let me bring up a very easy example: the
Discussion

term "Western society" often refers to many different countries. However, this does not mean that the Italian way of thinking, behaviour or artistic expression is applicable to all; nor is the German or that of any nationality. Are French expressions the same as American ones just because these two people share Christianity as a major cultural aspect? Indeed not. I would like to stress that there are many other factors which have contributed throughout the centuries to shaping societies and which have often created similarities.

Traditional Islamic and medieval European towns have many of these similarities in their environments. Their organism originated in human scale needs, by human or animal potential speed in movement, hence translated into human scale spaces. Today, not only is human dimension no longer the commanding one, but the very number of human beings is such that romance could be dangerous.

During the past few days most of us have successfully pointed to the magnificent cultural heritage of architecture in the various Islamic countries. However, we should not attempt to define a formal model for evaluating architectural environments or buildings.

Since freedom of thinking and expression are essential conditions for creativity, no set codes can bring about creativity, as evidenced by the European experience with neo-classicism. During the nineteenth century, inspirations based on the Parthenon, Gothic cathedrals, the Renaissance and the Baroque styles led architecture to eclecticism, the worst insult to the past. The results would be the same if this attitude were to be applied to Isfahan’s Friday Mosque or Agra’s Taj Mahal. It would be a sign of weakness and void. Therefore, I agree on the necessity to search for spirit and not for form in Islamic architecture and to consider carefully the changes and what still validly exists without anti-historical sentimentalism. Each architect will find his own answer to this search by filtering each problem through his own culture and beliefs. Finally, I would like to quote Louis Kahn again:

Tradition is really a sense of validity. It is not what you see but what you feel. If you feel the reflection of something, if it is beautifully stated, if it reflects something which you would like to extend the expression of, although you may not know its background and it transcends the knowledge you have about it, you see it and you feel that you must see it. You must see it because it is the kind of thing which you would not see in nature without man. It spells an association of man to man. It spells civilization. It spells the tendency toward the meeting of people and finding out about yourself through someone else.

Hassan

We have had the opportunity to glimpse, however briefly, a few projects presented by participants that illustrate the principle that should guide our considerations for the Award. During the first seminar for the Aga Khan Award for Architecture, the contributions of the participants have alluded to the direction our thinking should take and the criteria to be adopted for the evaluation of the architectural projects.

1) The concept of identity: an architecture that should express our identity, reflect our past heritage and extant in our present realities and projected needs.

2) Integrity: an architecture in which the designs and building materials are true to the lifestyle and economies of the people who are the users. Part of our mission is to have the eyes to recognize those projects exemplifying these qualities and to have the courage to support them however simple and unostentatious.

3) Service: in keeping with the spirit of Islam, His Highness the Aga Khan reflected his concern for building hospitals and schools and public institutions for his people, and Janet Abu-Lughod bade us not forget the message in Islam of service to the community. Expressed in architectural form the madrasa, the maristan, the mosque, the sabil, the kuttab, the rab’ and the wakala are all institutions of service to the community.

When we use in combination the concepts of Islamic identity, integrity and service, our search for valid contemporary architectural forms in keeping with the spirit of Islam becomes easier.

In some of the projects presented to us, we recognize the integrity, the search for identity and the service in architectural forms, materials used and their relevance to the social needs of the clients. It was evident that these projects were worthy of our consideration for the Award, and each category should be considered separately for the Award. Projects fall into the following categories:

1) Award for the project created by and implemented by the individual architect or planner: for example, the work of Hassan Fathy who designed the whole village of Gourna for and with the people. He was inspired by Islamic and vernacular traditions and, in turn, has inspired architects all over the world.

2) Award for projects created and implemented by a creative research team. An example of this has been presented by Farokh Afshar and his team from the Centre for Indigenous Development Studies. In an action–research programme they built with the people a number of institutions including a public bath and a school.

3) Award for a good governmental project that is locally initiated, designed and implemented. An example of this may be the Ibn Khaldun City near Tunis presented briefly by Professor Stambouli.

4) Award for vernacular architecture. Villages and buildings which result from the efforts of an entire community and are the expression of a particular culture. This brings to mind the villages and cities of Yemen as shown to us by Alain Bertaud. When we give awards, thereby prestige, for such architecture, we reinforce popular
self-expression and encourage architects and government to look at their roots and local traditions for inspiration. Such awareness should be created if we are to stop the process of the cultural obliteration of our architectural traditions in rural development programs, such as happened in Nubia in the 1960s.

Robeson

I want to thank you for letting me sit in for the last three days. I can take back from this conference substantially more than I came with, and it is the first time I have been able to say this about a conference in a long time. I would like to read to you, if you will, a set of prescriptions that I gave to myself some years back and have given to my students, because I think they complement so many of the value issues that you are talking today. I think they illustrate the commonality of ideas, the linship of ideas between your world and mine.

In general, build within and not against the existing cultural and natural context unless there is a profoundly perceived reason for violating this setting. This means reinforcing the found orders and systems more often than not and observing the social contract that exists between most buildings in any architecturally satisfying community. Articulate and enhance social ceremony and local traditions. Abide by the manners of the place and time. Use the implied architectural conventions. Do not intend to invent new vocabularies for their own sake. Languages take a long time to develop; you throw them away at great risk. Suspect variety for its own sake. Value consistency and modify repetition.

Don't think that your primary concern is always to reform a client in some fundamental way or necessarily to extend his frame of reference or to show him a "new world." There are plenty of occasions when he really doesn't need any of this and the attempt to evangelize is only narrow self-gratification, excess baggage for the flight at hand. Parenthetically, all efforts in life are not helpfully informed by the same sense of urgency and private passion. Indeed, the ability to overload relatively modest programmes is all too prevalent. There is a good bit to be said for the unselshconsious, natural and repetitious response rather than the original and frazzled idiosyncratic one. It is neither possible nor desirable to have to think things through each time. No one has the time nor indeed the capacity nor resources to do so. Thinking, following Whitehead, is not unlike a cavalry charge in war. It requires fresh troops, great courage and strength. It must come at precisely the right moment and is always undertaken at great risks and cost. An analogy is that high civilizations are precisely those which maximize the number of tasks performed by rote, high design being no exception. Good architecture is generally that in which there are the fewest number of variables or elements which can be said to be original or new. It is a proper balancing or sorting and reusing of known elements and techniques which most often produces buildings of merit and long life. Mediate between appropriate monumentality and necessary human scales without taking polemical sides. Both have and will always be necessary.

Study history, love it critically, appreciate its contextual implications. You cannot escape the past and its dynamic anymore than you can tomorrow. On the other hand, you cannot steal from history, it is like stealing from yourself. Use historical models critically as building blocks if you will. You are part of a continuum and your major task as thinker/doctor is to sort information about the past, distinguish patterns and unscramble those new orders which better describe the surrounding reality. Using Bateson's analogy, you must distinguish what information has to go on what maps. Recognize, understand, respect and use the real constraints of money, time, local building and development practice and prevailing habitant law. These are all positive values and should all be recognized as such. Try to wrest from the possible and the limited some extra concessions of grace rather than always to win sweeping victories. Extract from the relentless pressure of diminishing resources and waning manners, some limited enhancement. This is basically what the artist/architect is hired to do, not to transform society. Transcending the realities of the constraints must always be considered as a benefit.

Well, let me conclude with two more statements. This particularly applies to the Award, because I, like John Turner, have spent much of my life working on tools and some of it working on products, and the two are very different. Remember that, although architectural and planning practice may well be processes which themselves often undermine and always alter their final product, they can never be a surrogate for that product as some would wish. And the ultimate client is quite ignorant of the designer's process or his intentions. The intended public lives with the results, the physical world in which it has neither a legitimate need nor interest in authorship and only a hope of appreciation in us and that exhilaration of perception sometimes called joy. Your client is not yourself nor is the final product. Unfortunately, the criteria for judging the one is not the same for judging the other. Do not be confused or misled by architectural awards. Building should not, indeed, cannot be evaluated nor given prizes in any real sense for at least five years. The opening is a promise, nothing more. Try to learn from what you do after you have done it, how the building is used and how it is valued by those who use it, not by whether it provided immediate fuel for your ego. Finally, try to acquire grace, a sense of intellectual balance and human perspective as a man who just happens to practice architecture. What you are as a person is important to what you do as an architect, even though in the strictest analytic sense you cannot prove this, nor will it make you a good designer. This was a basic premise by the humanist ideal and is, I suspect, still fundamental to a healthy architecture today. It is also, as I have learned over the last three years, and
especially again over the last three days, a central tenet of Islam.

Afshar

The seminar theme suggested a difficult task: defining the “Spirit of Islam” in a way relevant to architectural and planning activities. The task was somewhat simplified since Islam is not confined to esoteric matters, but presents itself as a practical way of life touching on all matters both spiritual and temporal. In this sense, the use of the term “Spirit of Islam” could be misleading; hence the choice of another title, “Toward Appropriate Architecture for Muslim Countries.”

An underlying issue in the conference was a question concerning the extent to which the world is shaped by people’s material conditions or their belief systems. Some emphasized the former, others the latter. The central attempt of these comments is to explore the resolution of the two by identifying some principles in Islam and relating them to a practical action for today.

We are faced today with an increasing amount of inappropriate, often imposed architecture that undermines indigenous building potentials, causing dependence on expensive imported methods; does not meet basic shelter needs of the majority; and is alien to the local environment and culture. It must be recognized that these problems are shared by Third World countries in general and are to some extent expressed globally. Since these comments concern themselves with Muslim countries, we must ask what bearing Islamic culture has on defining and achieving appropriate types of architecture in these countries. In a preliminary exploration of this question, the paper raises three issues: What is Islamic architecture? What Islamic principles have architectural and planning implications? And third, what might be subject areas for further investigation?

Islamic architecture, as it is commonly identified, developed for the most part from pre-Islamic traditions. Some of its best expressions are a result of a creative interaction between indigenous building traditions and the new methods that Islam brought with its spread. Thus, arches, vaults and domes, commonly associated with Islam, originated long before Islam and developed in a wide variety of ways in response to local conditions in different areas.²

The superficial imitation of such forms today is no answer. It does not face any of the problems mentioned. Too often it is a rather tastelessly executed surface-dressing, distorting the problem rather than broaching it. Thus a reinforced concrete arched façade on a housing scheme contributes mostly to making the houses more expensive, and therefore, less accessible to those who need them.

The idea that certain forms are Islamic and others less so is a moot point. Even so obviously Islamic a building as a mosque has very different expressions in Nigeria, Oman and Iran. The success of these buildings in terms of their spiritual or functional effectiveness is not necessarily dependent upon a common external form. Their success depends more on the allowing for the functions prescribed for them in Islam than on the principles and processes underlying their construction.

The functions vary for each type of building. Thus the mosque will usually have a courtyard pool or other place to perform ablutions, a large hall in which the congregation can stand undifferentiated and an articulated wall section (mihrab) that indicates the direction of Mecca, which is the orientation of the mosque and of the congregation.

The following principles give us some suggestions on the types of processes and products that would be appropriate in architecture and planning in Muslim countries. These principles are neither exclusive nor exclusive to Islam. Nor is the link between Islam and the activities mentioned below made to suggest that the initiation and validity of the latter depends on its connection with Islam. What is interesting here is that policies and projects that independently make good practical sense are also supported in the principles of Islam.

1) The principle of equality is fundamental to Islam. It is expressed, for example, in the emphasis on all standing shoulder to shoulder in a mosque regardless of status. Thus, an architecture that mitigates against the polarization of rich and poor would be in spirit. A housing scheme which was an expensive development requiring heavy subsidy and built in limited quantities for a few low-income people would challenge the principle. The housing scheme would have to demonstrate a system of acquiring land and finances for construction that would make it a viable method for the majority.²

2) “Next to prayer, learning was regarded as most sacred” in Islam.³ A project that is a learning experience during the process of its realization would reflect this very important principle in its use. Combining the principle with the concept of equality would suggest an educational policy aimed at alleviating the needs of the majorities through the participation of those identifying the major problems as well as those engaged in finding solutions to these problems and in making the results accessible to all.³

3) The idea that every element is an autonomous part within a larger whole and is also a microcosm of it, is reflected in the belief in Islam that every person is his own priest, a household head is the caliph of the family and the family is a society within the society.³ This principle is expressed in many traditional Islamic cities in which neighbourhoods (mahalla) form autonomous communities containing a cohesive social structure as well as physical services pertaining to the neighbourhood without over-dependence on the city centre. The same principle can be developed on a national level, suggesting a decentralized policy of self-reliant, regional groupings united at the national centre without overburdening it. “The idea of ecological equilibrium is one of the cornerstones of the traditional sciences of
Nature, including Islam. This ecological equilibrium is achieved by the realization of the potentials of local human and material resources in a way that is harmonious with man and nature. Many traditional buildings and settlements express this principle. Modern projects to be true to the same principle need to be developed from a thorough understanding of these indigenous buildings and settlements and fully use local resources.

4) “Islam as a religion is a way of unity and totality. Its fundamental dogma is called al-tawhid, that is to say, unity or the action of uniting.” Although this concept implies a single source and a unifying principle outlining the whole, it is not necessarily restrictive. In art this is illustrated in tile work by the use of a basic matrix used to create an infinite variety of designs which are harmoniously composed. Similarly, in architecture, myriad building types have resulted from an equally varied vault and dome technology. All share a common structural principle and form. The concept of unity can serve to synthesize the points so far mentioned. In this context it can imply a resolution of the contradictions of past, present and future, rich and poor, rural and urban, professional craftsman—builder and user, process and product. Thus, for example, this concept would support a policy that would encourage a close, cooperative working relationship between professional architects and engineers, craftsmen and traditional builders and end users, arguing that this would produce far more creative and appropriate resolutions to architectural and planning needs than the present system of politicians and professionals prescribing for everyone else.

What, if any, constants can be identified as “Islamic” in the built environment, and what are the variables that result from local conditions in the different Muslim countries? This question suggests two major subjects requiring investigation:

1) A thorough study of Islamic texts to identify what attitudes and guiding principles these texts have for the built environment. In addition to possible constants arising from such studies, local Islamic texts and local interpretations to Islamic law regarding building and planning in different countries should be studied. These should be assessed in view of the contemporary situation.

2) A thorough study of the indigenous built environment should be carried out in each of the Muslim countries. Indigenous building materials and skills should be assessed to determine their potential for meeting contemporary needs.

Altogether, these studies and any pilot projects they suggest would give us a better understanding of how to define and achieve appropriate types of architecture and planning in Muslim countries.

Reference Notes


2 Choga Zambil, vaulted 1200 B C


5 S. H. Nasr, Islamic Science (World of Islam, Festival Publishing Co., Ltd.), p 227

6 S. H. Nasr, An Introduction to Islamic Cosmological Doctrines (Belknap, 1964)
Concluding Remarks

His Highness the Aga Khan

Partings are sad, and all the more so when they separate people with a common bond and a united interest. In this particular case, however, I think we can say au revoir, or "till we meet again," rather than goodbye. I say this because I believe our commitment to the problem of architecture for Muslims is such that our paths must cross again.

This seminar has been a source of great happiness to me personally in that it has confirmed that we all believe a better, more appropriate and more sympathetic environment can be created for those hundreds of millions of men and women throughout the world who believe in Islam. It has confirmed the desire to invigorate a Muslim will for an Islamic environment.

I said in my opening remarks on Thursday that it was not our intention to create a school of architecture or thought. I think this has been amply demonstrated by the free and open nature of the discussions we have had in the last three days. You were not making speeches to each other. You were discussing issues. Neither the Steering Committee nor any of the participants has claimed to know the total answer. There is no political party line. Some of you may even leave here with less certainty about future developments than when you came. Even so, a major achievement has occurred. A dialogue has been established among you all, a dialogue which transcends national boundaries and through which runs a common thread. That is, you show a will to tackle the problem, to respond to a challenge or opportunity. I hope you will now consider yourselves as a permanent resource. If so, I would ask you to continue this dialogue when you leave here both among yourselves and your colleagues in your own country.

I have been pleased to observe that the mood of the seminar has been so enlightened. I do realize there are many others elsewhere who are not yet prepared to face up to the problem we have identified. They either see it as too big for them, or they do not see it at all. Please tell them about this seminar and your own personal assessment of it. Start a dialogue with them, too, so that they can know what has been discussed. It is equally important that we can understand their problems also. Then, come back to us, and let us know your thinking so that our Steering Committee can be guided by the experiences of all of those who are discussing and tackling the issues.

It was extremely important, indeed fundamental, for the members of the Steering Committee to benefit from the thoughts, the experiences and the wisdom of men and women such as yourselves. The dialogue should prove invaluable in identifying the major issues, the essential problems which Muslims around the world are facing in creating a suitable new environment for themselves. From this, we can determine the types of activity which the Aga Khan Award should encourage and recognize.

I am under no illusions that the problem will be solved when the first award is made in 1980. Far from it. I think that only then shall we begin to understand its full magnitude. It is a continuous problem, and this requires all of us to make a continuous commitment to address it.

Any man or woman who professes the Shahada is a Muslim. We are numerous. We live in so many parts of the world. We speak such different languages. We are of such different racial and cultural origin. All this profoundly convinces me that there is no such thing as one type of Muslim environment or one type of Muslim building. Each part of the Islamic world must create its own solution. We are enjoined to help the needy, the sick, the poor of whatever color or origin. I think, therefore, we must assist in the challenging, but fundamentally important task of demanding from our architects, national decision makers, our planners and our landscape architects an environment in which we can live, work and practice the precepts of our faith harmoniously and to the fullest.
His Highness the Aga Khan welcomed the seminar participants and expressed his concern with the future of architecture and its environments in the Islamic world. After noting current negative influences upon these architectures, he proposed the Award and its concomitant programmes as potential catalysts for improved design solutions.

In the initial presentation of Session I, Seyyed Hossein Nasr expounded further on the crisis of urbanization in the Islamic world, attributing the problem largely to an inherent conflict between traditional tenets and accumulated foreign influences. An elite corps of Western-trained architects has been building not for the masses, but for an elite clientele. The fundamental themes of unity and of the pervasiveness of religion have succumbed to a blind emulation of the West; “typically Islamic” surface embellishments often belie a non–Muslim conceptual framework. Modern builders are removed from the inner sensitivity and respect for nature which characterized older works Nasr perceived the sole solution to be a revival of the mystical and creative aspects of Islam, not a narrow adherence to the prescriptions of the *Shari’a*.

From a more secular viewpoint, Doğan Kuban questioned Nasr’s theocentric opinions, pointing out the universality of the urban crisis. In addition to these spiritual and intellectual woes which Nasr holds responsible, one cannot ignore social, political and economic considerations in assessing the problems of modern architecture. Kuban does not see a direct, immutable relationship between Islamic doctrine and the Islamic built environment; despite common Koranic bases, regional variants and local interpretations have always existed.

In the discussion following, Charles Correa noted that monumental Islamic architecture always had religious and metaphysical bases, and voiced the feasibility of a modern Islamic consciousness which retains a spiritual base. Nader Ardalan stressed the necessary aspect of regionalism in architecture and sees Nasr’s universal and Kuban’s particular view as coexistent, not incompatible. Mohammed Zubair has sought a new and appropriate model for large projects in Saudi Arabia, the bases of which are still undefined. Jacques Berque returned to the original discussants, observing that Nasr’s theoretical model is that of a non–Islamic school which he himself finds untenable for future Islamic societies. Berque promoted the generation of models that, though based on the past, do not romanticize it.

Hassan Fathy saw a decline in architectural quality coincident with political and industrial changes and the adoption of Western influences; nevertheless, architecture in some Islamic areas is still vital and functional. Correa reminded the seminar participants that if much–maligned modern architecture is ugly, they are partly responsible. Nasrin Faghih reiterated Correa’s earlier interest in the combination of rational building processes with internal spirituality. Labelle Prussin reminded all of the extensive reaches of Islam and of the different traditions which exist in the peripheral regions, including sub–Saharan Africa and southeast Asia.

Nasr defended his original view and claimed not to idealize an irrelevant Islamic past. He commented on the questions of secularism, transience and elitism in contemporary Islamic societies, and foresaw an inevitable purging of Western influences. Kuban did not concur. Not only has Islam always been elitist, but his country has confronted Nasr’s issues and found them untenable.

In Session II, Berque dealt with the problem of Islamic identity, and claimed that future architectural developments depend upon the perception of past identity. Clarification of which elements are characteristically Islamic and which are temporal or regional variations is important. Muslim architectural identity is not dependent upon “typical” surface embellishments, for any of these may be altered or omitted entirely. It is instead the rational arrangement of these elements which establishes identity.

Berque proposed the city of Fez as a possible identity–model for Islamic urbanism, then reexamined and readjusted his model at length. The original city’s radiating plan might be better served by a multifocal ellipse. The utopic urban ideal has concrete characteristics: it is responsive to the surrounding space, balances areas of order and movement, utilizes light and shade as an organizational principle and treats the neighbourhood as a module. It is multidimensional, with four main aspects: religious, commercial, production and military sectors. Like the countryside of which it is an extension, it is without strict enclosure. Berque concluded that the identity of the future should be based upon, but not imitative of the past.

Then followed a discussion of traditional architectures and their applicability for the genesis of a modern Islamic architecture. Fazlur Khan stated that Western technology and forms must not be emulated without regional, climatic and cultural modifications. Traditional Islamic building types include the mosque and palace or fort, characterized by simplicity and a sensation of unity and peacefulness. The building, an intermediary between earth and sky, is defined by its overall qualities—it’s centrality, conceptual symmetry, mediation of verticality and division into public, semi–private and private spaces—rather than by precise quantitative standards or measures. An Islamic town plan is denoted by its organic growth pattern, ungeometric land divisions and continued emphasis on privacy.

Zahir–ud Deen Khwaja believed that the characteristics of Islamic architecture may be deduced despite any regional differences. These characteristics include a boldness of approach to engineering and architectural challenges and the use of geometric forms and axial planning. The integration with landscape and creative use of water, the handling of scale and decorative potential of structural forms are also characteristic. Khwaja sees three possible approaches to architecture: a revival of old forms, a total break with tradition or an “enlightened renascence.” The last is to be preferred, with modern methods...
utilized. The old, proven principles merit retention whereas the outer forms and symbols cannot be copied without first questioning their contemporary authenticity.

Robertson applied this synthesis of old and new in his discussion of Shahestan Pahlavi, Tehran's proposed city centre. He expressed a commitment to design excellence and a respect for economic and political factors, and acknowledged the vital interrelationship between planning, design and project implementation.

Shahestan Pahlavi itself is a multi-use complex designed to serve as a national focus, a model community and a transportation centre. The challenge, as also affirmed by Khan and Khwaja, is "to acknowledge desirable historical precedents while accommodating modern scale and usage." The elements of successful design and realization include careful organization, clarity of design principles and support and commitment to quality and completion by city leaders. The limited architectural vocabulary planned for Shahestan Pahlavi is to simplify building processes, create harmony and be a reminder of the Iranian architectural heritage.

Oleg Grabar commented on the characteristic Islamic rapport between forms and their abstract meanings, citing people as the catalyst by which forms are changed and charged with meaning. Such individual forms and their patterning may alter with time and location. The session ended, therefore, with the question of the applicability of semiotics to the understanding of an Islamic city.

Fathy's commentary was largely metaphorical, and touched upon issues which had arisen previously. He observed that once an individual has built a house and a community has constructed a city, the products shape their producers. As for a definition of Islamic spirit, this is specifically allied to a place and a culture. From his own experience at Gourna, Fathy considers underlying spirit a crucial element in architectural authenticity.

Ardalan averred that the Islamic creative imagination is unique. He urged the dynamic use of all possible tools and solutions, not only Arabic sources, for the derivation of a new architectural vocabulary. Commenting on Shahestan Pahlavi, he warned against the danger of adhering to a master plan concept in cities which are undergoing rapid changes. Ardalan sees a need for research into regional variations, which possess individual identities as well as being part of a larger Islamic world.

Fathy summarized the session by restating the importance of the human element in architecture. Town planning cannot be reduced either to engineering or to economic or political factors; human scale and aesthetic questions must not be ignored. "Modern" must be defined, perhaps as something more than merely "contemporary." On the relationship of architecture to society, Fathy argued that diversions from the norm must be undertaken cautiously or they will not be successful at all.

Janet Abu-Lughod dealt in Session III with the related contemporary problems of preserving the architectural heritage while providing much-needed low-income housing, a dual task which she avers is not incompatible. To restore historic old-city areas at the expense of their populations is not beneficial, but neither is the random clearing of old structures which makes room for new but unaffordable edifices, and relocates the former residents far from their place of livelihood. While a variety of restoration policies is possible, the greatest goal should be to preserve the dynamism of an area, since many original Islamic spatial and social organizations have retained their viability. Abu-Lughod's proposal is that revitalization of old city centres be undertaken largely by its residents, who have the necessary skills and motivation. She perceives a common Islamic city type, modified by regional variations.

Nawal Hassan agreed with Abu-Lughod's supposition that traditional housing forms still meet modern needs, and illustrated this with a specific example of an old multi-purpose building (mub') in Cairo.

John Turner expanded Abu-Lughod's paper by proposing increased self-help in low-income housing areas. He is clearly of the school which stresses the generation of tools for action, rather than aiming toward completed jobs. Yasmin Lari related that her housing schemes avoid typical Islamic embellishments and are more concerned with the needs of the poor as related to their living patterns and climate.

Grabar expressed a concern with contemporary and traditional modes of decision-making, and noted the importance of law and attendant institutions in resolving social patterns. Kuban disagreed with two of Abu-Lughod's contentions, that Islamic architecture is readily recognizable and that low-income persons are attached to their old-city homes. He pointed to a confusing variety of styles in his native Turkey, and to the disruptive factor of large-scale urban immigration. He also noted the potential value of tourism as a development source.

Nasr returned to the question of forms and their meanings, and deduced some unifying principles to account for the similarity of Islamic urban centres. Deniz Kandiyoti looked again at the urban administrative hierarchy and the influence of the West in Turkey, excessive borrowing has resulted in both architectural and social disharmonies. Faghii promoted a policy of conservation of important single buildings as the attainable minimum; a total preservation policy cannot possibly be effected.

Abouzeid Rageh supported Kuban's opinions; there are many outsiders in old-city areas, and self-help may have negative effects because some formal planning mechanisms is vital. He warned against romanticizing the issue, as did Mehdi Kowsar, who stated that conservation is not in the interests of economic and political power. The concern for all levels of decision making was likewise expressed by Zubair. He does not wish to see a total preservation policy, considering it economically unwise. Government policy and simple profit motivation encourage the building of new structures, not the preservation of old ones. At this point, Abu-
Lughod interjected that she had not expressed support for a policy of total urban conservation. She had urged that old buildings be withdrawn from the economic–political arena to ensure their preservation. Jaquelin Robertson stated that these historic edifices affect city planning and cannot be withdrawn. He warned against the radical alteration of established systems, and noted further that too-rapid change is detrimental to development. Said Mousalli concurred, with particular reference to the deterioration of Mecca.

Fazlur Khan generalized that urban problems are not specific to Islam nor to isolated locales. On the philosophy of city planning, he remarked that current segregation of economic classes is both alien to the spirit of Islam and self-destuctive. Fredj Stambouli stressed creativity, research and self-initiative as vehicles for old-city rehabilitation. Farokh Afshar warned against a misguided approach to problems in the form of an urban bias, proposing more attention to the development of small towns and rural centres.

Hasan Khan referred again to laws and law-making and to the significance of artistic and architectural forms. Correa repeated that a city’s inhabitants are a crucial force in development. Several issues and priorities brought forward by the seminar, including low-cost housing and conservation, appear to be relevant to the Aga Khan Award. Ardalan summarized the sessions thus far as first philosophical, then concretely social–political–economic in nature. These approaches are complementary, not contradictory.

Session IV consisted of a series of brief presentations of examples of traditional and modern architectural solutions. Alain Bertaud offered a slide presentation on the building tradition in Yemen that has preserved most of its characteristics unchanged, and differed from the better-known Islamic styles of embellishment. Despite a variety of topographical features, climate types, building materials and economic levels in Yemen, comparable architectural standards are maintained throughout the country.

Grezi Sultan saw Islamic values in light of their interpretation by those in power, the few making decisions for the majority. He cited examples of a too-rigourous and misunderstood application of the Shari’ah in Kuwait, housing schemes were deemed “un-Islamic” when they violated tradition and “too Western” when they utilized modern technology. In showing a housing development in Tunisia, Stambouli showed the desire for intimacy, privacy and variety despite space constraints. Ironically, low-income residents preferred to attempt a show of middle-class values with constant imitative renovations. Prussin remarked on the continuity of forms in time and space, and the combination via expansion of indigenous with Islamic forms.

Afshar stressed a need to integrate educational and practical objectives in construction, and listed a number of premises which support this. Two projects undertaken by the Development Workshop, a research and development group, implement these premises. One is a hāmmām construction project in the Selseleh region of Iran, which hearkens to traditional bath plans and traditional technology while involving local community participation. The second project convened village builders at a workshop in indigenous building methods held in Yazd. It involved in-depth experimentation with building methods and design principles, and developed an educational methodology based on actual problem-solving.

In his commentary, Nasr promoted a suitable relationship between architecture and surrounding environment, and perceived certain theological rationales for architectural solutions. Grabar then warned against generalizing regionally specific features as models for other times and places, while Ardalan claimed that vernacular architecture is not an isolated solution but has pan-Islamic elements.

Session V consisted of brief concluding remarks by a number of seminar participants. Beque perceived a lively variety and contradiction in the preceding dialogues, and proposed future focal points for discussion. Grabar reviewed the seminar’s objectives, which were to bring up issues relating to Award criteria and identify topics for further seminars. Comprehensively but concisely, he extracted twelve discussion points which he considered most important and most in need of investigation. Among these are the relationship of Islamic solutions to universal problems and the question of prescriptive codes in Islam versus local traditions. Rageh returned to the Islamic principles of unity and simplicity and the importance of both individual and group spirit. According to him, certain monumental and famous mosques are not in the spirit of Islam because they ignore the individual. Mr. Fathy disagreed, stating that such monumentality in praise of God serves to induce humility in man. Kuban stated that the Islamic priority and spirit is best expressed in non-monumental dwellings. The spiritual continuity of the past, not imitation, should be the aim of preservation. Kuban does not view a major project like Shahenestan Pahlavi as a model for Islamic architecture—its very scope, and the time required to complete such a project, makes for premature obsolescence.

Turner returned to the issue of conservation, reiterating a need for convivial rather than industrial tools. He raised an important query about the Award itself: will it premiate completed projects as award-worthy ends in themselves, or projects which represent reusable development tools? Kandiyoti stated that individuals represent the interface between traditional value codes, like the Koran, and changeable material culture. Beliefs may be modified, as exemplified by a list of proscribed religious sins which are currently rationalized. These changed beliefs result in altered behavioural patterns which must be reflected in the built environment.

Stambouli assessed the failures of recent modernization—since the formulae of modernism have not worked, old traditions have been reverted to passively. The solution for the future is an aggressive, not a retrogressive, stance. All new tools must be incorporated if a viable Islamic identity is to be acquired.

Faghfih asserted that creative and rational
architectural solutions merit Award consideration. Architecture is an important social component which must be relevant to the people and their history, and good architecture must be in harmony with the major works of the world. Kowsar allowed for the role of the architect in weighing the variables which influence design processes. These include nature, climate and mutable cultural factors. In designing modern architecture the spirit of the past deserves consideration, but not the actual forms or design codes, although the architectural heritage is noteworthy indeed.

Hassan identified the key seminar concepts in terms of architectural identity (the past heritage plus present and future needs), integrity (suitability of materials and cost-effectiveness) and serviceable building types. Robertson offered some basic prescriptions for building and tenets of good architecture. Among these were the injunction to build within and not against the existing cultural and natural context, and to respect user reaction as a valuable criterion. Afshar returned to the principles of Islam of relevance to architecture and planning: equality, learning, the microcosmic relationship of parts to the whole and overall unity. He discussed the practical application of these principles, the optimal synthesis of belief systems and extant material conditions.

His Highness the Aga Khan acknowledged that more questions were raised during the seminar than were answered. Further dialogue among persons and disciplines with this common goal is needed in order to establish definitions of good architecture. Urging the participants to spread the word of the Award, His Highness brought Seminar I to a formal close.

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<tr>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>adḥān</td>
<td>call to prayer</td>
</tr>
<tr>
<td>akhlaq</td>
<td>character, morals</td>
</tr>
<tr>
<td>'amara</td>
<td>to thrive; to be or become inhabited; to build, rebuild</td>
</tr>
<tr>
<td>'ammar</td>
<td>crowd</td>
</tr>
<tr>
<td>ašl</td>
<td>roots, foundations, principles</td>
</tr>
<tr>
<td>bādghir</td>
<td>wind tower</td>
</tr>
<tr>
<td>bātīn</td>
<td>the hidden, internal</td>
</tr>
<tr>
<td>bayt</td>
<td>dwelling</td>
</tr>
<tr>
<td>b.t.n/ḥatana</td>
<td>concealed, to hide</td>
</tr>
<tr>
<td>bw‘/bawa</td>
<td>provide accommodations for, settle</td>
</tr>
<tr>
<td>dālāl</td>
<td>public crier, broker, middleman</td>
</tr>
<tr>
<td>dār</td>
<td>house</td>
</tr>
<tr>
<td>dār al-Islam</td>
<td>Islamic lands; lands to which Islam as a religion has spread</td>
</tr>
<tr>
<td>dhikr</td>
<td>recollection or mentioning the name of God</td>
</tr>
<tr>
<td>faḍā‘īl</td>
<td>advantage, merit, virtue, moral or qualitative excellence</td>
</tr>
<tr>
<td>fiqh</td>
<td>jurisprudence in Islam</td>
</tr>
<tr>
<td>funduq</td>
<td>warehouse, inn</td>
</tr>
<tr>
<td>ghāyba</td>
<td>the unseen, the supernatural</td>
</tr>
<tr>
<td>hāmmām</td>
<td>a bath</td>
</tr>
<tr>
<td>handasa</td>
<td>engineering, architecture, geometry, surveying</td>
</tr>
<tr>
<td>hāq al ḥār</td>
<td>neighbour’s right</td>
</tr>
<tr>
<td>barām</td>
<td>whatever is forbidden; harem</td>
</tr>
<tr>
<td>hikma</td>
<td>wisdom</td>
</tr>
<tr>
<td>ḫādādat</td>
<td>acts of devotion, religious observance</td>
</tr>
<tr>
<td>ijmā‘</td>
<td>in Islamic law; consensus of the authorities on a legal question</td>
</tr>
<tr>
<td>ijtihād</td>
<td>in Islamic law; independent judgment on a legal or theological question</td>
</tr>
<tr>
<td>'ilm</td>
<td>knowledge</td>
</tr>
<tr>
<td>'iwān/iwān/eyvan</td>
<td>forecourt; three-sided rooms on court</td>
</tr>
<tr>
<td>jātāl</td>
<td>majesty, of God</td>
</tr>
<tr>
<td>jamā‘a</td>
<td>assembly, community</td>
</tr>
<tr>
<td>jāmi</td>
<td>mosque</td>
</tr>
<tr>
<td>khallāqa</td>
<td>creator, maker (could be used in reference to an originating imagination)</td>
</tr>
<tr>
<td>khān</td>
<td>hotel, caravanserai, inn</td>
</tr>
<tr>
<td>kharāba</td>
<td>ruin</td>
</tr>
<tr>
<td>khawās</td>
<td>leading personalities, people of distinction</td>
</tr>
<tr>
<td>khūḥa‘</td>
<td>primitive tent</td>
</tr>
</tbody>
</table>
khāfah
dissimilarity

khishū'
humility, submission

khūtha
the Friday sermon by the preacher (khātib) at the congregational mid-day prayer

küche
a narrow street, passageway

kuttāb
elementary Koranic school

l.b.s./labbasa
to dress; to make obscure, to deceive

ma'na
sense, meaning, significance

ma'navi
relating to the sense or impact (of a word or expression); ideal, spiritual, abstract, mental

m.d.n./madana
to found cities, to urbanize

mahalla
a quarter, district

mahrījan
festival

makhlūq
created, creature

māristān
a hospital or infirmary; in modern usage refers especially to a lunatic asylum

mihrāb
a recess in the wall of a mosque to indicate the qibla, the direction of Mecca

mi'mar
builder, architect, mason

minbār
the pulpit in mosque from which khutba is delivered

mi'raj
nocturnal ascent; the midnight journey to the seventh heavens (made by Muḥammad on the 27th of Rajab, from Jerusalem)

mārah
internal space

mu'amalāt
social intercourse, social life, conduct, business, transaction

muhandis
old usage, geometrical; now architect, engineer, technician

muḥtasib
traditional Muslim administrative official with duties including those of checking on weights, measures, fair prices, cleaning streets, inspection of bazaars

munafiqin
dissemblers and hypocrites

nahḍa
rising, awakening (especially national), renaissance

nās
man, mankind

qaḍi
judge

qal'a
citadel

qariya
small town, village

qaysariya
the caesarea, specialized market

qibla
the direction of prayer, i.e., toward Mecca

ra'ā'
mob, rabble

rab'
a range of district lodgings over shops or storehouses separate from them, but generally having one common entrance and staircase (in Egypt)

rabād
suburb

sābāt
roofed lane or street; arcade

sabil
public fountain

sarādīb
multiple-storied basements, subterranean vaults; cisterns

sara'i
warehouse

s.k.n./sakana
to inhabit

sunna
the orthodox Islamic tradition

tajdīd
origination, renewal, rejuvenation

ṭālib
student

taq
arch or vault

tawḥid
belief in the Unity of God (in mysticism, mergence in the unity of the universe)

'uẓma
Islamic community

'umrān
inhabitedness, civilization, building

'uswa
example, model, pattern

wakāla
an inn, caravanserai, enclosure for commercial purposes

waqf/habas
land or property held in Muslim religious trust

wiḥa'i
revealing, giving an impression of God

wijdān
of the soul, manifesting the intensity of existence; existence