Conservation as Cultural Survival
Conservation as Cultural Survival

Proceedings of Seminar Two
in the series
Architectural Transformations in the Islamic World
Held in Istanbul, Turkey
September 26-28, 1978
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His Highness the Aga Khan

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Note on Transliteration Transliteration of proper names follows The Cambridge History of Islam (1970). Turkish diacritical marks have been employed throughout and Turkish spellings preferred, except in the case of common words where the Arabic spelling is the more familiar.
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**Her Highness The Begum Aga Khan**

**His Highness Prince Amyn Khan**

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<td>Mr. Michael Curtis</td>
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<td>Professor Nezih Eldem</td>
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<td>Cunhuriyet Caddesi 20, Istanbul, Turkey. Professor at Academy of Fine Arts, Istanbul. In private practice for fifty years in Turkey. Author of several works on Turkish domestic architecture.</td>
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<td>Mr. Hassan Fathy</td>
<td>Architect</td>
<td>EGYPT</td>
<td>4 Darb el Labbana, Citadel, Cairo, Egypt. Member, Award Steering Committee. Work on indigenous building and Islamic architecture. Publications include Architecture for the Poor, 1973.</td>
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<td>Mr. Ronald Lewcock</td>
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<td>Tutor, Architectural Association,</td>
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<td>National Heritage, Sultanate of</td>
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<td>Responsible for programming</td>
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<td>restoration of Bayt al-Razzaz palace, Cairo.</td>
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<td>Advisor to State Planning Organization</td>
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<td>Senior Editor</td>
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<th>Professor Günil Tankut</th>
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Head of Tourism Investment Group; Assistant General Director of Tourism Department; Formerly Head Architect for State Construction Company; worked in Germany and Switzerland.  

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Coordinator of national conservation projects  

Mr. Shahrum Bin Yub  
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National Museum  
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Director General of the National Museum.  
Recipient of 21st Ramon Magsaysay Award for Government Service, 1978
This volume contains the Proceedings of the second in a series of seminars which will precede the announcement of the first Aga Khan Award for Architecture. The general aim of the seminars is to review aspects of architectural transformations within the Islamic world, highlight specific problems and solutions to them, and develop the bases for criteria for the Award. The aim of the seminar held in the fall of 1978 in Istanbul was to focus on historic environments and to consider strategies which could ensure a future for those environments in the rapidly changing physical and social landscape. The nature of that future would likely vary according to the initiatives and needs of each particular place. The underlying assumption, however, was that these environments may still play an important role in the life of contemporary Islamic societies. Though the role might differ from that of previous periods, historic environments could not just be swept away in the desire to modernize as rapidly as possible. Some of these environments have remained a focus for the more traditional elements of societies. Others provide valuable housing space for migrants. All possess rich reserves of architectural ideas, and townscapes with a distinct flavor and identity. Finally, many could provide valuable lessons for contemporary designers.

The seminar dealt with aspects of preservation and conservation. However, the papers and discussions also considered such related topics as archeological surveys, architectural history and its present uses and the history of urban patterns. While papers were invited to discuss projects and issues from various regions of the Islamic world, the coverage is by no means complete. The location of the seminar in Istanbul resulted in a concentration on a more regional, Turkish perspective, though the range of problems raised in this more narrow context may be found equally in other regions of the Islamic world. The selected bibliography at the end of this introduction may prove useful for the reader who wishes to investigate specific cases in other regions.

Rather than follow the order of the papers strictly as presented, we have grouped them according to their general intent. The first group takes up broader questions of attitude and procedure; the second deals with specific cases, implemented or still in study form; and the third considers the uses of an architectural heritage. There is, of course, considerable overlap between the papers and discussions (some may have been better situated in a separate methodological section); and as many, if not more, questions have been raised as solutions given. Yet several themes emerged which would indicate the directions of further investigation and action.

Restoration, recording and preservation of individual buildings has been an activity in which most governments of the Islamic world have invested. Ministries of Culture or affiliated bodies have sponsored laws which would protect the integrity of these registered buildings. National or municipal codes which classify buildings into types which must be preserved intact, or whose façades alone must be preserved, exist in Turkey, Morocco, Iran and other countries. Nonetheless, in many cases the concept of a street façade is an architectural feature quite alien to the necessities of preserving a courtyard-oriented building. Thus, even the codes of preservation which have existed on the national level may not be suited to the nature of many buildings and their townscape.

Centralized institutions have initiated repair and restoration programmes on varying scales. Some have been carried out by their own personnel, others have called upon outside expertise. While some of these activities have been recorded and published, such as the restoration and research programmes on the Safavid monuments of Isfahan or on the monuments of Istanbul, many interventions remain poorly recorded or published. Clearly, a key building block in whatever wider-reaching programmes of intervention and conservation may be undertaken is parallel recording activity. Large-scale recording efforts have already been initiated through universities and local offices of urban planning; good starts have been made by I.T.U., M.E.T.U. and the State Academy of Fine Arts. With the number of trained students in both these institutions, a concerted programme similar in intent to the urban archeological survey described in this volume is possible.

Preservation efforts have been challenged on the one hand by a shortage of personnel and budgets and, from a completely different direction, by a phenomenon common throughout the Islamic world: the existence of the institution of the vakf and its role in the maintenance of buildings funded by individual vakfs/deeds.

The institution of the vakf (pious foundation) was an important characteristic of Islamic social, economic and religious life. Originally, edifices of a religious and social nature were funded (after they were built) through a religious trust; incomes from agricultural and commercial properties provided support for activities housed in them, as well as for maintenance. Each vakf was administered by an independent group of trustees. Any major institutions, such as a mosque or madrasa, could also receive additional vakfs for specific activities or items. Activities, from support for pilgrims to winter feed for birds, could also be funded independently of buildings. Within the townscape of a traditional Islamic city, most if not all social and religious buildings were under the care of individual vakfs and independent trustees. Moreover, many of the residential and commercial buildings were the income-producing components of foundations. Only the larger private residences or palaces remained outside the system, although they could be converted into trust properties. The upkeep of both the institutions and the income-producing buildings was the obligation of the trustees.

The evolution of the vakf institution to the present day has varied depending on region and country. In some countries it has disappeared completely, with the institutions and whatever enjoined properties were left to them being nationalized and incorporated into other ministries. In others, the administration of the vakfs has been delegated to a separate Ministry of the Vakf, with centralized control over incomes and responsibility for maintenance. In still others, control over individual trusts has remained on the local level.

Whether it now exists in localized form or as part of a centralized administration, this
institution has had and still retains important influence over the nature of maintenance and preservation. As an institution, it has great potential as an agent in preservation and perhaps in conservation. It is still a specifically Islamic form of property maintenance; with some internal restructuring, it could be the mainstay of preservation and conservation efforts. As an example, one can point to the history and activities of the Turkish institution which has had some success in these efforts. A government organization (Vakıflar Genel Müdürlüğü) established as the descendant of old vakıf institutions (and an intermediate nineteenth century Ministry of Awqaf) has been moderately successful in maintaining the monuments/institutions under its aegis, and has expanded its activities into the fields of restoration, reconstruction and adaptive reuse. Particularly successful has been the reuse of madrasa or caravanserai buildings, which had lost their original functions, into dispensaries, hotels, hostels and the like.

On the other end of the spectrum are the important and still active local trustees in, for instance, Yemen, Iran, Pakistan and Bangladesh. The problem here is not so much that an individual building or monument is not cared for, but that the maintenance or repair often destroys much of the original character of the building. Attempts to control this type of activity have resulted in legally transferring the building to the care of the government departments or ministries; centralized control thereby supplants local control, and the care of a building is taken out of the hands of local trustees. While the idea of providing control and expertise was an attractive and quick solution to the often well-intentioned despoliation, the fact that centralized bureaucracies lack funds and personnel to carry out maintenance and restoration has not brought the desired results, has made local groups suspicious of and uncooperative in government interventions and has, in many cases, taken the monuments completely out of circulation even after they are repaired and restored.

The idea of utilizing already existing institutional frameworks may thus prove to be the only practical one, in the long run—provided that these institutions are given the necessary incentives and personnel to carry out scientific recording and restoration. Finally, because vakıfs usually provided for socially beneficial activities, there would seem to be some potential for continuing or re-inserting this practical aspect by encouraging more local activity.

A problem closely connected to the location of the control over historic monuments is the status of monuments which are themselves important religious loci, e.g. Mecca, Medina, Jerusalem, Karbala, Najaf, Mashhad and other smaller shrines. These loci are by no means abandoned; on the contrary, they must withstand the enormous pressures of rising frequention, no doubt a result of improved communication systems. The administrators of the shrines are forced to cope, and indeed they have. Yet at times, the new additions or reconstructions have largely altered or completely obliterated not only the historic and characteristic features of the monuments, but also much of their setting. Such changes may be understood to be the newest phase of the continual rebuilding of the shrines, which has occurred throughout the centuries of their existence. However, the scale of these changes and the speed with which they are often accomplished has allowed little or no recording of the destroyed parts, little consideration for design and layout continuity and little opportunity for preservation.

Reviewing the realm of preservation, we see that auspicious beginnings have been made in many quarters and that institutions exist within Islamic societies which may be re-oriented to expand their traditional realm of activities. Intensive campaigns are needed to sensitize the owners and administrators of many buildings to the inherent value of historical monuments, as unique products of a cultural past which retains both psychological and aesthetic validity.

Preservation activities have been and will continue to be pursued on a variety of scales, but they have largely focused upon monuments or groups of monuments which have received the approval of history. For the most part these are institutional (religious and social) buildings, rarely the more utilitarian and less public commercial and residential structures. Yet within any townscapes of a madina, it is the harmonious arrangement of the two categories with their systems of communication which resulted in a distinct regional and cultural character. Even cosmetic changes in a particular neighbourhood have an impact on the surrounding physical setting, as well as on its population. Any efforts which deal with the setting of a monument must consider all the approaches associated with conservation programmes, be they social or physical, as have been recently articulated.

The status and condition of the older, historic or traditional city quarter (the madina) is a shared aspect of many Islamic towns. All have been subjected to, or are still undergoing, processes of major demographic change. The groups or classes which originally built, inhabited and maintained most of the housing and institutional stock of the madina have moved to new developments built on foreign models. Their properties in the madina have been abandoned completely or, more usually, have been rented to new urban immigrants. The demographic changes have taken place at different times. In Egypt and Turkey the population shift had been going on for some time, beginning in the last decades of the nineteenth century and fairly well completed by the fifties. In countries which were former colonies, the shift from the old "native" quarters to the new towns began with independence, regardless of whether the old towns were preserved by special decrees of separation, as in the case of Morocco, or had been declared slums, as in India (Shahjahanabad—New Delhi). In other countries, the processes of change have just begun.

Abandoned properties do exist in the old towns, as in some of the old quarters of Isfahan or Tripoli, but in most the vacuum was rapidly filled to overflowing with migrants from rural areas and smaller towns. For these newcomers, the old city is the locus of inexpensive or free housing, provides proximity to even sporadic employment and is a new and exciting place to be. With the doubling and tripling of the original population densities, the physical fabric of these environments and their available services has deteriorated rapidly.
Efforts at structuring conservation programmes are therefore faced with several difficulties. The old environments have lost status; at best they have suffered from benevolent neglect on the part of governing elites. Budgets for maintenance of services, for instance, have been very low; hospitals and schools have been located elsewhere in the city. It is unlikely that spontaneous individualized efforts at restoration (and gentrification) by younger members of the elite will come about soon. Nor, perhaps, is this the most desirable strategy for conservation. Creating the social services necessary for the present population in the old quarters, and simultaneously relieving them of the extremely high densities by providing alternative housing and employment sites, may be a more expedient and more practical alternative. Such alternatives, however, can only be implemented with the active participation of a variety of government agencies. But the impetus to organize and implement such an action lies within the realm of political and ideological decisions.

An external factor has emerged as an important argument for restoration of buildings and perhaps for surface conservation of environments: tourism. The revenues obtained through tourism are undeniably important to the economies of many regions and countries. Judicial staging of facilities and utilization of sites within the neighbourhoods surrounding major tourist attractions or in the rural landscape can yield direct economic and other benefits. Mass tourism, however, tends to generate byproducts which may not be desirable or acceptable in such fragile, small-scale environments as the neighbourhoods of the old cities. Tour groups seeking the authentic with their cameras, buses and high-rise hotels all create a life separate from the environment being visited. These in turn become separated from the surrounding neighbourhood by the props generated for the tourists—souvenir shops, demonstrations of crafts, inevitable traffic congestions. Thus, while tourism may be a vehicle for the refurbishing of an environment, its physical and social impact must be carefully weighed, particularly where the tourists are external to the culture and do not share any of its patterns of behaviour.

Visual and aesthetic continuity within an environment is perhaps to be understood as another kind of conservation. It has been achieved in those municipalities where local ordinances have specified particular materials of construction. It can, perhaps, also be achieved through a design dialogue between the architect and the already existing environment.

The Proceedings of the seminar deal in detail with many of the above-mentioned issues. The many different approaches do not invalidate each other. Rather, they can be seen as tactical stages in defining viable strategies for conservation within the Islamic world.

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Opening Remarks

His Highness the Aga Khan

In 1980, the first Aga Khan Award for Architecture will be presented. Prior to that, five seminars are to be held to discuss various criteria and categories for the Award, as well as some of the other mundane aspects of its organization. Though this is the second seminar chronologically, it is the first one to be held in a country of the Islamic world, and I therefore attach particular regard to its participants and importance to its subject matter. I am thus truly happy to welcome His Excellency The President of the Turkish Parliament who, both personally and in his official capacity, has been responsible for playing a major part in the restoration and preservation of Turkey's historic buildings.

The theme of the seminar to which I heartily welcome you all is "Architectural Transformations in the Islamic World." It is appropriate that I should state publicly the reasons why Turkey has been chosen as the site of the first seminar. After the medieval contacts of Islam with the West in the Mediterranean islands and southern Europe, it is Turkey which has probably had the most constant, long-term and consistent contact with the modern West and, clearly, it is a part of the Muslim world which has been exposed to great potential for change in its physical environment. This potential for architectural transformation did not occur in the face of a vacuum, but came into direct contact with one of the great centres of Islamic civilization with a magnificent heritage of aesthetic achievement.

Turkey has always been an internationally recognized centre of exceptional architecture and will remain a treasure-house of great Ottoman monuments. These have served in the past and will continue in the future as sources of inspiration for architects all over the world.

A second reason for choosing Turkey for this seminar is that this is one of the Islamic countries which has the longest and best established traditions of modern architecture and modern architectural schools. This fact is widely recognized, and is witnessed by the large number of buildings designed by Turkish architects in other countries of the Islamic world. Thus, because of her exposure to the modern West and her own architectural traditions, Turkey as a nation and her architects in particular have been substantially and extensively exposed to the problems of transformation and change in all aspects of the built environment, including design, materials, and social and climatic environments. Yet another reason for selecting Turkey as our venue is that, while the country shares the building boom evident in most countries of the Islamic world, commendable efforts are also being made here in the restoration of great monuments and in the conservation and rehabilitation of whole habitats.

I would like to inform you of my purpose in establishing the Aga Khan Award for Architecture, to put this seminar into perspective in relation to the wider problem facing us—that of defining what physical environment future generations of Muslims will have around them in the years ahead. Will it be an environment made of spontaneous and fortuitous building, or will it be one to which all thinking Muslims have made meaningful contributions based on their faith, their background, their customs and their aspirations?

My interest in architecture is practical and aesthetic. The Ismaili community of which I am the Imam is relatively small, but possesses members in a large number of countries both East and West. It is in daily contact with an extremely diverse range of Muslim as well as non-Muslim societies, and is therefore exposed to an unusually broad cross-section of religious, linguistic, social and cultural influences. It is a community united by a common interpretation of Islam, a significant aspect of which is its dynamism. In most countries where Ismailis live they have been active in building for the future schools, medical complexes, housing colonies and other welfare institutions. These institutions are used predominantly by Ismailis, but also by other Muslims and people of disparate races and beliefs. As Imam, I have therefore been directly and intensively concerned with the process of building. The scale of this building has ranged from a nursery school for a small town in northern Tanzania to a 680-bed hospital and medical college now under construction in Karachi. Whenever we conceive of a new building, whether small or large, social or commercial in purpose, the same question recurs: what is the impact that the building should have on the eyes, minds and thoughts of those who will see and use it?

The specific design requirements of nursery schools, hospitals, offices or industrial buildings are better understood today than ever before. Nevertheless, the degree to which modern buildings, constructed by Muslims and primarily for the use of Muslims, should incorporate design disciplines and aesthetic considerations which are specifically Islamic remains unclear. In what way should they, or can they, become intrinsically different from those architectural styles adopted by other societies and other faiths in non-Muslim parts of the world?

I am not speaking here of factors such as climatic conditions, physical environment or the availability of land. Any moderately competent architect would take these limitations into consideration during the design stage of his project. I am looking for something much harder to define. It is an evocation partly of our faith, partly of our culture, partly of our history and partly of our aspirations. Our history is firmly rooted, our culture evolving and our faith strong and permanent; surely these have an impact on our modern lives and sensibilities. Should they not be reflected in a happy and harmonious way in our buildings, in the different environments which make up the cities, towns and villages of modern Islam?

All cultures naturally influence each other to a greater or lesser degree; the strongest are those in which the dominant elements remain dominant and refuse to be overwhelmed by external forces. They become stronger still when they retain the ability to select, to absorb that which invigorates and enriches and to reject that which is inimicable. This is what the Western world did in building upon the stronger Muslim civilization to pull itself out of the Middle Ages. I venture to suggest that this be the process by which Islamic architects and designers develop a physical environment, one which will make of their institutions, their work places, their houses and gardens something which future generations may look upon as a true reflection of the spirit of Islam.
The contemporary Muslim world faces a fundamental and unique challenge in determining its future physical environment. Sudden affluence and rapid demographic growth and urbanization have resulted in an unprecedented rate of building activity. In many Muslim countries, the next two decades will see a radical large-scale transformation of the urban physical fabric. Many of these countries have emerged suddenly from a colonial era, and are searching for identities of their own. Partly because Muslims enjoy such a rich and diverse cultural heritage, and partly because of the dynamics of the Islamic faith, I am confident that this identity will emerge quickly—not simply in economic or political terms, but in the physical environment as well.

It is an inescapable fact that one always knows when one is in the presence of Islamic civilization. The specific elements which make Islamic cities and buildings both beautiful and functional must be researched and defined, so that we can continue the traditions of our ancestors. We must ask ourselves how we can prevent future architectural development from accelerating the loss of our cultural identity. These are indeed universal problems, but they require solutions within an Islamic context. We are not looking for a façade of Islamic architecture, hiding the new behind a shallow imitation of the old. Nor are we looking for an Islamic city which conforms to an outdated and unrealistic system of organization and human relations. We must acknowledge that the world is changing, but in so doing we must realize that there are still many lessons to be drawn from the past. Whatever design solutions we choose should be conceived in such a manner as to allow evolution and progress to orient us toward the future, rather than retreat into the past for its own sake.

In closing the first seminar I said that any man or woman who professes the Shahada is a Muslim. Yet because we are so numerous, live in so many parts of the world, speak such different languages and are of such different racial and cultural origins, I am profoundly convinced that there is no such thing as one type of Muslim environ-
Opening Remarks

Said Zulficar

Permit me to thank Your Highness for your kind words of welcome and for your splendid hospitality. I transmit to you the warm greetings of the Director General of UNESCO, Mr. Amadou Mahtat M'Bow; he extends his best wishes for a fruitful and successful meeting whose objectives coincide fully with UNESCO's own ideals.

The aim of this seminar is to analyze architectural transformation in the Islamic world. This is a subject that concerns UNESCO, since the continued existence of the Islamic cultural heritage, as represented by the historical monuments and sites constructed by that civilization, is today at stake. It is seriously threatened with disfigurement and destruction due to a variety of both psychological and economic factors. Culturally speaking, the Islamic countries suffer from something of an inferiority complex with regard to Western standards and values; they downgrade, disregard, and in some extreme cases are even ashamed of their own past. Added to this negative attitude are socioeconomic factors such as population pressure, a growing prosperity that encourages land speculation and the exaggerated use of the automobile, which further disrupt the harmonious organization of Islamic cities. New and unimaginative architectural styles and urban patterns have invaded the Islamic countries, without the slightest attention being paid to the specific character, customs and habits of their peoples.

The structures and traditions of many historic cities have been destroyed in the names of progress and modernization, slum clearance, traffic improvement and exploitation of rising land values. The city has been relegated to the status of a fixed-term investment that is required to produce quick returns. Governments, in their quest to modernize through rapid industrialization, have encouraged the intrusion of these new values and have given scant attention to the conservation of the cultural heritage. Yet the necessity of preserving—or in some cases rediscovering—the artistic and cultural heritage should be self-evident, and should indeed be a high governmental priority.

The principal reason for safeguarding the visual image of the past, in the form of monuments and historic quarters, is not only the intrinsic beauty and harmony of what is to be preserved, but above all the identity and personality which these monuments relay. Maintaining a sense of historical continuity is essential, especially at a time when the Islamic countries are striving for cultural identity and survival in the face of standardized values, mass-produced culture and alien influences.

The historic towns, sites and buildings stand out as striking examples of authenticity at a time when new urban development is increasingly impersonal and unimaginative. Their disfigurement or demolition through neglect, ignorance, deliberate indifference, shortsighted policies and vandalism has led to the eradication of whole chapters of national history. We appear to have no confidence left in our values, our history or our culture, and no respect for the heritage of our forefathers. If the cultural capital represented by historic sites is completely mutilated or annihilated, coming generations will be impoverished. We shall be responsible if nothing has been done to prevent this cultural suicide.

Practically speaking, architects and town planners faced with the demands of a rapidly evolving world have paid less and less attention to the problems of conservation. They are therefore largely responsible for the disfigurement of the urban landscape and, indirectly, for the deterioration of the quality of life in the cities. One doubts whether the essentially Western approach employed by most Muslim architects and planners is the most appropriate to the Islamic city structure, and to the existing cultural and social character of its inhabitants. Architects and planners, deploring the break with historical tradition which has arisen from the pursuit of technical functionalism, are reverting more and more to the study of the values of the past in order to apply them when building for the future. It is in this search for architectural relevance, amidst the alienated urban environment of present-day Islamic cities, that the Aga Khan Award will play a preeminent role. This seminar can be considered a significant milestone, reviving interest in the Islamic architectural heritage and offering guidelines for consideration by architects and city planners.

A symposium on the conservation of Islamic Cairo will be held shortly; it aims to arouse interest among official Egyptian circles in their more recent past, the last vestiges of which are rapidly vanishing. Along the same lines, the Division of Cultural Heritage at UNESCO is organizing a meeting to be held next year on problems related to the conservation and restoration of the Islamic architectural heritage. The Award seminar in Istanbul will no doubt contribute in valuable ways to the UNESCO meeting.

Finally, may I once again express UNESCO's deep appreciation to Your Highness for the timely inception of the Award. This noble endeavour to encourage imaginative projects related to the cultural and social environment will contribute greatly to the rehabilitation of the Islamic architectural heritage. For this UNESCO is sincerely grateful, as are, I am sure, all those present here today.
Concepts:  
Provisional Ideologies for Conservation

Conservation of the Historical Environment for Cultural Survival

Doğan Kuban

The Aga Khan Award has been established to encourage the formation of a specifically Islamic architecture as an expression of Islamic civilization. A natural concomitant to this objective is the preservation of the Islamic image in our physical environment. The continuity of our cultural identity throughout the process of modernization can only be guaranteed by this act of preservation.

Industrial Ideology and Preservation

At the initial seminar, it became amply clear that the physiognomies of the cities in Muslim countries are rapidly becoming grotesque imitations of modern Western cities. This trend runs so counter to our aspirations that we must ask ourselves whether it is even possible to resist the hegemony of modern industry and communication and have a true Islamic image in a city and its architecture, as we were able to do in bygone centuries. This question is part of a larger one: will any historic culture, be it Islamic, Indian, Chinese or any other, manage to survive as an entity distinct from the fabric of a uniform modern civilization? Or will they all be consumed by the monopolizing pressure of modern industry and mass communication? Is it conceivable to have Turkish houses or Muslim towns and at the same time to drive imported automobiles on bridges built over the Bosphorus by foreigners, to utilize universal electrical devices, to broadcast and to receive worldwide television programmes and to promote tourism? How can one suppose that the maintenance of cultural symbols can withstand the onslaught of cost-accounting and efficiency standards, and yet be keenly aware of the fact that all nations are being used as arenas for opposing ideologies, that all markets are under the strangling influence of international corporations and that all developing countries are subjected to the arm-twisting of international politics?

So many negative points bring the rationality of a proposal uniting modern industrial ideology with preservation into question. Support, however, is forthcoming in the enduring opposition of another group of universal—I might even say eternal—factors that determine the behaviour of men and societies. They are less often mentioned, though no less relevant, since they are intrinsic to any human situation: language, religious attitude, geographical environment, race and, perhaps most important, the inertia of cultural behaviour. This last, which accounts for a great part of our real cultural differences, has amazing and recorded staying power; it is an eternal embryo of future diversities. Compared to all these, the homogenizing effects of industrial civilization may quite possibly prove to be superficial and temporary.

I cannot predict the future of the postindustrial Muslim man. At the moment, Muslim countries are so busy striving for economic development that the industrial factor in our
everyday lives is greatly emphasized. On the other hand, throughout the modern world today, whether rich or poor, Western or non-Western, all countries are confronting all kinds of social, economic and political evils, often with an encouraging optimism that suggests the ability to support a struggle against prevailing conditions. The battle for the defense of the environment is evidence of this. The fight is not so much one against industry as one against the domination of an ideology that allows industry, never an integrated element in any developed concept of society, to roam at will, a raging creature devouring the society itself. We are aware of its power, but we are also hypnotized by it. That is why the battle for a healthy environment, whether given by nature or wrought by man, often seems to be in vain. The enemy is identified, but is neither comprehended nor confronted head-on. It is the same deficiency in our perception of the human environment that works against preservation and conservation. Our willing but dumb submission only increases the rapaciousness of industry, making a desolate wasteland of human societies. Industry has no organic relationship to human life, which is a process in time; modern urbanization and architectural practice mutilate the past because they are the outcome of a process totally lacking in any real understanding of the time dimension.

This is why conservation is not generally thought of as something organically related to the whole process of change in the human environment, but rather as something frozen, irrelevant to the future and therefore utopian. But conservation is not an impractical attempt by nostalgic minds to see history preserved as an entity apart; it is a logical step in evaluating changes in the whole environment.

Because of the rapid changes taking place in our cities, a large part of the cultural continuity in our surroundings is thought to be tied up with the future of those aspects of the city that have a historical character, such as street patterns, vernacular architecture and traditional building materials. If we were not looking for an Islamic city image—or, more simply put, a city that represented our culture—many of the issues raised here would not have such import. But they are of seminal importance.

Industrial Standards and the Obsolescence of the Physical Environment

When is a building old, and why do we destroy that which is old? Technically speaking, a building can be declared obsolete on a variety of grounds: structural, functional, environmental, economic. People usually assume that buildings are destroyed because they become too difficult to maintain. Technical failures or inadequacies of comfort, however, can almost always be remedied. The unfortunate destruction of our older buildings is more apt to be justified on the basis of cultural and economic obsolescence. Ordinarily, for example, we do not destroy mosques, instead we make them comfortable by adding heating systems. We do not even use the minarets; we install loudspeakers for the greater comfort of the muezzins. We are also able to maintain and even use the old palaces, the old khans, the old madrasas, we simply refunction them. The overriding consideration in the overwhelming majority of cases is economic, and it is argued as follows:

All of the conditions of the obsolescence are remediable by the expenditure of money. This expenditure will not be spent unless it can be adequately compensated by the returns to be obtained from a more effective use of the building in either its current use or some other use. If [the] expected would not be sufficient, then the building is also economically obsolescent. If the potential value of a site for a new building is sufficiently high to justify its redevelopment, this might be called site obsolescence. Arguments like these are obviously based on simple profit. It is typical in the Western world, where "a great part of the preservation activity consists in creating, through the normal process of planning, a healthy climate for old buildings so that their economic life is prolonged." One must realize, however, that a day will come when this conservation can no longer be economically justified. Following this logic, we are forced to conclude that upon the termination of its economical life, the cultural life of a building also draws to a close. Any idea of preservation based on this premise is, then, ultimately meaningless. We can preserve and we want to preserve old buildings only on the grounds of their lasting significance to our culture. Preservation is an act of veneration. We must pay for it just as we pay for travel, entertainment, cultural activities, books, cosmetics, toys, cars and arms. Nevertheless, we need an adequate theoretical rationale and a practical approach, so that our inherited environment is deemed worth preserving by all concerned.

By whom and how are the inadequacies of an aging building to be evaluated? This is now done by an industry-oriented culture and an industry-controlled media. As was noted earlier, the destruction of what is not new is clearly a side effect of the rate of consumption in an industrial society. It is the result of profit making through the plundering of human resources by an ever growing demand for industrialization. This should not be misconstrued as yet another romantic attack on industry. We cannot dismiss industry, but we must analyze carefully what has become simply a conditioned reflex in many industrial societies. Industry assumed formidable power when it became habituated to the profit motive and to unscrupulous interpretations of efficiency. Under the avaricious influence of profit making the behaviour of industry turned aggressive; aggressiveness requires an outlet, and it has made itself felt in all areas of our experience. Nor are its victims only the old and obsolete. Its effects are all-pervasive; its multifarious demands on human beings and the earth's resources are insatiable, limitless. This insatiable greed is not intrinsic to industry per se; it merely represents one particular type of institutionalization of industry.

Industrial society has created a human being conditioned to evaluate everything according to industrial standards—but efficiency as defined by numbers alone can be a grossly inadequate yardstick. More cars and wider roads do not guarantee more orderly traffic. Improved safety rules and more careful
driving are also needed: is it necessarily better, without any other qualifications, to go to work by car rather than on foot? Doesn’t walking reduce the risks of ill health and danger and decrease the consumption of natural resources? Is it not better to shorten the distance between home and work, to live in smaller towns with less air and noise pollution, to create a denser social life, to counteract alienation and to have more safety? These arguments, of course, are all well known, and while I do not intend to bring in a teleological argument, the mechanism of numbers is in itself inhuman.

In order not to be overwhelmed by the impact of the quantitative greatness produced by industrial societies, we must define efficiency in a manner that is consonant with our own conception of a society. We ought not to introduce traffic chaos, if our cities are still tranquil; we ought not to consider a project that entails pollution in a part of the country where the air is still fresh and the water pure; we should abandon town planning theories elaborated in the United States, and housing projects devised for conditions in the industrialized countries.

We have the obligation to counter profit making as the only motive in the development of our cities, if we want to salvage our heritage. And we cannot—we should not—hastily accept standards of any kind for the regulation of our social and urban life. Nor can we complacently determine the viable age of a building, as is done in some Western countries, where a majority of our citizens live in dwellings less comfortable than those destroyed by speculative developers.

Whether this kind of control is feasible is far from certain. But the possibility of an urban planning that would express our cultural identity, be it preservation, renewal, or new development, depends on our ability to decide for ourselves. The world at large will not offer to rescue our culture, except perhaps where extinction would have international repercussions, as in the case of the protection of an endangered species of wildlife in Africa.

The Change of the Physical Environment and the Meaning of Preservation

As our goal I propose that a building should remain inviolate and be preserved as long as its form possesses meaning for us, and as long as its survival can be prolonged by technical means.

Laying down this principle at this point might appear to be premature, but if speculation and misguided industrial symbolism could be put aside, it would be practicable. The persistence of many institutions and many art forms and the perennial use of many artifacts are easily observable. Being thrifty with our building capital also seems to be eminently reasonable. Preservation can never, nor is it intended to, hinder the development of the new; in all Islamic countries population increases and social and institutional development will require more and more new buildings—but only their harmony with the old can possibly create an environment suitable for the continuity of our cultural identity.

In the transformation of our physical environment, what should the ratio of change and continuity be? How can one calculate the optimal proportion between economy, psychological balance and cultural continuity? What is the real contribution of the inherited environment to our image of a city? In our city plans we supposedly direct and control a pattern of change. Does this pattern conform to a ready-made formula for change, or is it an abstract model compounded of our evaluation of the actual trends of development? It is my belief that most of what goes under the name of planning is simply the blind following of trends. Yet what is a trend, if not the expression of social demands sublimated and generalized through the mass media in terms of the dominant ideology?

Preservation and conservation as they are commonly conceived should not find ready defenders among us. A rational approach involves consideration of the man-made environment in its entirety. Its qualifications should provide for the fulfillment of our material, psychological and symbolic needs.

Safranbolu, northwest Turkey
Large house designated for reuse as a small hotel
Photo: D. Kaban

The nature of material standards established through daily experience and propaganda can be debated, but it is evident that any old or newly built shell can be appropriated and adapted to satisfy them. Psychological and symbolic needs are those of practical aesthetics and other values. They can be personal or societal. Some of our preferences may be obscure in origin, such as the concept of life space, the nature of which experimental psychology is only now attempting to decipher. The hidden dimensions of our emotional field in our environment may regulate our demands upon it, although we may be unaware of them.

On the societal level, common aspirations are concerned with social status as well as with the whole world of forms. They are vital for the self-preservation of the individual within a society, and they are important for the sustenance of the society...
itself. The general aesthetic values we hold have taken shape over time; they are cumulative. The so-called tastelessness of the modern environment is a product of its noncumulative character. Although opinions can be perpetrated on an international scale through propaganda, they create only fleeting values that may be temporarily powerful, but are easily replaced. The old is engraved on stone and sometimes difficult to read; the new, although often sparkling and startling, is scratched on thin ice.

At this point the problem of historical continuity and integrity comes into our discussion. In reply to Lynch's questions “How far can we go in subsidizing activities that are likely to survive in preserved surroundings? To what degree [does] contemporary utility, however discreetly provided, rupture the sense of historical integrity?” we can only say that the questions themselves are remarkably misleading. When history is rightly viewed as continuous change, what kind of integrity can we speak of as being disrupted? We cannot excise a certain portion of the historical development and contend that only the old part is integral. On the environmental level, something completed has formal integrity. If left untouched, a building, for instance, can retain its original integrity. Another species of integrity has to be envisioned. What we should look for is not the integrity of the past, which exists only in the abstract and only in contrast to the modern period, but the integrity of aesthetic feeling revealed in a continuum of forms. This alone can provide justification for the preservation of an old street, for it bestows upon the viewer a feeling of continuity and allows us to construct a new house in a row of old houses so long as it does not detract from them. This is the way the old can inform the new.

In urban revival, we wipe out substantial areas of used environment at great psychological and social cost, to be replaced by new settings that lack many desirable features of the old. Having suffered the pangs of uprooting and saddened by the inhuman quality of much of the new urban development, many of us conclude that it is time to stop growth and change, or at least to leave the older areas alone and concentrate growth in empty fringes.

These are the sad remarks of an urban planner who feels impotent in the face of the profit drive. The inhuman quality of new urban areas is the characteristic symptom of an as yet undigested industrialization. The new would not be so destructive if values and inducements of obsolescence were not based on industrial standards alone, and if we sought continuity, rather than constant innovation for innovation's sake. While this position might seem reactionary, I would contend that the dialectic of change in the human environment has always shown a strong element of continuity throughout history.

Relevant here is a further comment made by Lynch, who rightly criticizes the present situation and in the process inadvertently discloses the inadequacies of the current concept of preservation. In Western countries, “under the banner of historical preservation, we have saved many isolated buildings of doubtful significance or present quality, which are out of context with their surroundings and without a means of supporting their meaning to the public.” Let us focus for a moment on these “isolated buildings of doubtful significance.” Who ascertains the significance of a building? Can it be a kind of consensus, or a spokesman for the consensus? Upon what criteria is the evaluation based? What is a “significant” building? Is a new building |pax facto| more significant? For whom? For how long a time?

This line of questioning unfailingly leads us to those buildings of art historical value. Their fine aesthetic quality has been weighed by history; their very survival is proof of an approving consensus. For simple dwellings, however, history has withheld its assent. The focus of historical interest has always been on the expensive and the monumental; the recent attention given to simple dwellings is a noteworthy phenomenon. Since modest dwellings do not offer a wealth of forms or material, Lynch inquires in the manner of an ordinary citizen as to why this or that insignificant building should be preserved. Such buildings would lose the onus of “doubtful significance” if a consciousness of historical continuity carried the intellectual totebag of industrial man. The significance of a building would then be formed by its place in the continuity of its spatial and temporal environment.

Moving to the problem of a building's being out of context with its surroundings, we once again confront the common failure of the imagination of industrial man in devising new uses for buildings that are compatible with their changed surroundings. However, if he were to let go of the profit motive, he would not find it difficult to invent a new, meaningful use for any building. If a building has become incongruous with its surroundings, it is because change has occurred suddenly, without taking it into consideration and with the subconscious intent of eventually doing away with it. If this were not the case, a formal and functional harmony would have been established from the beginning. Drastic change is a contemporary phenomenon, but so is purposeful preservation.

While it is true that many decisions for preservation have been taken without considering the means for maintenance, this is the inevitable consequence of current priorities. The pursesstrings of speculators can hardly be expected to loosen for an allocation of funds to be wasted on the maintenance of old buildings. Furthermore, many preservation schemes are undertaken that are meaningless to a public conditioned to respond eagerly to the stimulus of the new because they are told it is better. Undeniably the new can often look attractive to the owner of the old, but is a new experience with an old building any less appealing for many millions of people? It has been shown in recent years that through a well-organized campaign, such as the European Heritage Year, the attitude of the public can become favourably disposed toward preservation proposals. During the past few years, projects for both renewal of the old and interjection of new buildings into an old environment have proven successful for a variety of design purposes. “A world that can be modified progressively” is a powerful leavening ingredient in our discussions, and it might also prove useful for the psychological balance of society.
Town Planning and Approaches to Preservation and Conservation

There is no reasonable chance for our traditional architecture and townscape to survive modern changes and building activity if we do not consider the totality of the relationship between man and society, plus nature and the man-made environment, in terms of space organization, existential time and location in time. An assessment of the reciprocal relationship between the individual and his environment must be based on the perception of this environment as shaped by a specific culture and by nature. Unfortunately, in modern theories of city planning or architecture, nothing comes to mind that gives due importance to the individual as a cultural entity, a unit of irreducible originality, except the sharp criticism that brings their absence into stark relief. What diversity can be observed when five Turks and five Englishmen devise a social and physical theory of town planning?

None. Their theoretical approach to preservation is essentially the same. But plans for the conservation of Ghent, Carcassonne, Isfahan or Safranbolu cannot be approached with uniform and one-dimensional theories. Preservation promises to be a hopeless chapter in town planning practice, if the current trends in modern city development—inflated land values, high-rise buildings, cars, and a general fascination with the new—continue to govern our decisions. Modern attitudes toward physical ambience should be reconsidered. We have to reject the impoverished standards of minimums, maximums and even optimums that derive from over-simplified data and the interests of efficiency. The actual physiognomy of modern Muslim cities is painfully inefficient, not to mention irrelevant to present theory and practice.

Until we can arrive at a comprehensive theory of the physical environment that encompasses both past and future, both small and large dimensions, and in which the individual—the real user—takes his proper place, with everything else defined in relation to him, we should prefer the humane quality conferred by empirical methods. Until a certain cultural and economic stabilization in our countries is achieved, numbers alone cannot constitute the mainstay of a theory of town planning. Conservation as the use and reuse of the existing environment is the field most appropriate for such an approach, because the quantity to be dealt with and the quality sought are already there at our disposal. We would then only have to deal with the changing aspects of quantity.

In the West, where the modern theory of conservation took shape, the problem of historical continuity between the preindustrial and industrial city did not arise. History did not have to be denied or rejected before it could become modern. But in the Muslim and other non-Western countries, modernism was bought at the expense of the historical, a handy axiom was that the more conservative people are, the more of the historical environment they will destroy, because only through this sacrificial rite can they prove themselves worthy initiates into the modern world. Certainly there are deeper reasons for their behaviour, though it is a point worth remembering. That is why the Western approach to preservation in toto is unacceptable. We have to evaluate our environment as a function of our people, as the raison d'être of our history and as a provision for historical continuity. While too great an emphasis on preserving the old can bring on charges of chauvinism, my observations thus far have made clear, I hope, that conservation involves much more than just preservation.

Faulty conclusions in the problems or theory of conservation have their source in the premise that conservation is merely another, albeit more complex, planning problem that can be handled using the methodology of urban design. But conservation is not just another type of planning, nor can it be classified as non-planning, although that is closer to its nature. If I were to give it a name, it might be "reverse planning." It must capture within it the dialectical nature of the changing environ-
ment; it must embody the struggle of the old and the new.

A planning process that incorporates the past as something living is not planning in the usual sense. If a house is kept intact, it has no need for a new plan; it is simply preserved. It is in this sense that, theoretically, total preservation is total non-planning. But since we cannot expect to preserve everything, we must have some way of reaching decisions, and this is what I call reverse planning. Radical change to achieve a better environment is the goal of conservation planning. Our starting point in conservation is what exists, and our goal is to change it as little as possible. Our decisions merge with previous decisions, and that is why we cannot use normal town planning criteria. While this should not be taken to mean that conservation is unrelated to other aspects of environmental studies, we obviously lack a theory broad enough to cover decisions about the physical environment that encompass its past, present and future simultaneously. Forward-looking methodology is not enough. When a town planner is asked to preserve a historical core, he customarily allocates an area for parking space equal to the newly built quarter, as if there were no qualitative difference—the rationale being, of course, that people cannot live without a car, although in reality nine out of ten people in the world do not even own one. When plans are oriented toward our technological future, they reflect these speculations about the size of future car ownership. Let us hope they will never be realized.

**Future Conservation of the Historical Environment**

Conservation is essentially a cultural decision. Yet conservation specialists work hard to show that in practice it is also economically viable. Sometimes it is, but culture and economy do not necessarily share common aspirations. If the industrially-minded man proves that conservation is not economical, what kind of economy is he talking about? On the level of personal profit it might be uneconomical, but it could still be economical in terms of the economy of the country. Conservation must be viewed first and foremost on a national scale. Tearing down usable buildings is waste, to be sure, but finding proper ways to impede such waste is another matter. In socialist countries, it can be declared a general cultural policy and easily put into effect. In capitalist countries, private owners must be persuaded or paid.

Here again we should not look to Western practice for guidance. In York, for example, the acquisition, improvement, resale, lease or anything else that improves the historical setting is not undertaken unless a profitable return is likely. If we proceed in the same way our cities will be doomed to destruction. York is in a good state of preservation and well maintained—it can afford the luxury of waiting. But if we cannot substantiate that conservation is economical in actual circumstances, we must demonstrate its desirability in other ways. We should also not overlook the economical assets of old housing stock, in view of the housing shortage in Muslim countries and the space needed for growing city populations. What further justifications are there for preservation and conservation? If the old quarters are preserved with all their formal characteristics, except for the addition of modern facilities, they will immediately become more attractive: cars will not run through the streets, filling them with noise and noxious gases; houses will be surrounded by greenery; the environment will be favourable for social intercourse and safer for children.

There are clearly no grounds for expecting the private sector to involve itself in conservation, except in special cases of public support or tourism. Public money will be essential, at least at the beginning, since direct financial profit is of no immediate relevance to the public authorities or the government. On the other hand, when we realize that the amount of public money allocated for these purposes is bound to be

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*Safarnbolu, northwest Turkey
Planned reuse of large house as small hotel interior renovations

Photo: D. Kaban*
limited, large-scale conservation becomes impossible without the community's direct involvement. At this point we have to resolve the dilemma of cultural demands bound by financial constraints. If the preservation depends on self-image, it cannot be called into being by laws, the support of the public is necessary. And while supportive public opinion can be generated, it cannot be sustained for long if it does not reflect some real demand.

Art historical, archeological and aesthetic interests are not commonly found in the majority. People may show interest in old buildings because they have some connection with historical events. But for large-scale preservation we have to devise a new methodology to educate the public. If they cannot be made to regard their history as part of their life, earnest efforts by an intelligentsia to save the historic environment will end in disappointment. The issues we are discussing are, then, ultimately ideological. The desire for a specifically Islamic character in our environment is no different in function from the modern ideology of industry, and promulgating it is simply another aspect of the struggle against the blind imperialism of industry. For some of us, losing this battle would mean losing any hope for a reasonably humane environment in a foreseeable future.

Conservation is not the ultimate stage in our expectations for our surroundings. It is the beginning. Since it is organically connected with the creation of the new, it is also a lasting aspect of environmental change. We can regard it as the physical basis of a cultural identity: to get stability through change, we employ the past. Conservation offers motives for imagining new functions, and embellishes the monotony of everyday life. It will not only reconstruct history, but will retrieve for us its intrinsic aesthetic quality. What we preserve are not simply the relics of some class in some old society, but objects that are expressions of human effort. That a dichotomy exists between old and new is an assumption based on false premises, only their harmony can lead to better living conditions in our environment.

Safranbolu, northwest Turkey
Reuse of large house as small hotel ground plan
Photo: D Kuban

Some Practical Aspects of Preservation

Preservation of the traditional building stock is no longer concentrated in the great centres such as Istanbul, Izmir, Ankara and other rapidly industrializing cities—although Istanbul still has a sizable stock of old dwellings—but in smaller cities, towns, even large villages. The traditional houses are, in most cases, two-story buildings with small courtyards or gardens. The restoration and reuse of these houses for the most part involves structural soundness, and setting functional improvements appropriate for modern living into the existing volume and floor area. This last usually presents no problem, because the floor space is almost always sufficient for modern accommodations. The structural decisions are determined by the goal of the preservation. If we agree to separate the exterior of the building, as public property and as the part that contributes historical continuity to the environment, from the interior, as private and flexible property, the structure can be radically transformed. It must be confessed, however, that the process can be rather expensive. It is occasionally undertaken, but structural intervention on a large scale should be kept to a minimum.

The distribution of the usable floor surface, redistribution of the functional organization of the house, physical comfort and safety are the concrete problems that most often need to be solved. Structural intervention is decided according to requirements in each particular case. At present the building market is short of materials for the maintenance or repair of old houses, such as prefabricated elements to replace old floors, lightweight floor revetments especially designed for the purpose and prefabricated modern equipment for service facilities. These are indeed relatively severe problems, but they can be remedied in the long run. On the other hand, the inconvenience of the
old house plans has proved amenable to solution. Though design has been the least discussed aspect of preservation, for those involved it has proved to be a most exciting one.

A study of the old houses of Alanya, made by Şener of the Technical University of Istanbul, demonstrated that the organization and dimensions of these houses were sufficient for modern housing requirements. All modern standards could be met within the existing shell, without even changing the extant distribution of space. The usable space is in fact larger than the required standards of social housing. Another example is a large house from Safranbolu in northwest Turkey, which will be used as a small hotel. A third is from Gaziantep, where three different uses for the same house have been proposed: a maternity hospital, a small library and a student hostel. In refurnishing old houses, finding a satisfactory use is of crucial importance. In Turkey, obsolescence of houses and obsolescence of the environment go hand in hand. The percentage of owners who would like to build a new home on the site of the old one is never large. Until the idea of total environment takes root, the old building stock will have to house students, the elderly, and newcomers to the cities, or serve as social halls, maternity clinics, libraries, exposition halls, small hotels and the like. In smaller towns, houses with gardens would be perfect for families moving in from rural areas. I am aware that uprooting the original population will elicit protest. But our cities are not like Bologna, where there is a stable population. In many recently developed cities the old quarters are inhabited by newcomers, but keeping the old social stratum in place is certainly of great importance wherever it can be done.

Conservation units should be kept as small as possible—a quarter, or better yet a street—since more flexibility can be obtained with smaller units. Obviously the size of the unit will be dictated by the characteristics of the site. A continuous landscape such as that presented by the Bosphorus is of a different nature, and other factors become, operationally, very important. In the plans for conservation, an operational unit, whatever its size, should not exceed an aesthetically or functionally continuous site. In practice, in town centres this can well be a street. The nodal points between units should not only unify but also distinguish. The spatial dimensions of the nodal points should be included in the unit under consideration. A nodal point will thus belong to two or more units and function as an element of transition and continuity in the city landscape.

Up to this point only the exterior aspect along the streets of the town has been considered, but the façade of the town that is hidden from the street, in the hilly or uneven topography that is so characteristic of Turkish settlements, can often give equal formal importance to the rear façade. The plan for a conservation area should indicate the link with the communication network, the preserved buildings, the operational units and that third dimension of the preserved buildings, their façades and volumes. What remains to be done falls in the province of architecture.

Reference Notes

1 A Study in Conservation, York (London, 1968), p. 239

2 Ibid


4 For a short introduction and bibliography to the psychology of environment, see Terence Lee, Psychology and the Environment (London, 1976)


6 Ibid, p. 37

7 Ibid
The Experience of the Past: Archeology and History in Conservation and Development

Martin Biddle

The search for identity, for a sense of where we belong in a changing world, appears today to be both a personal and a general quest. It is reflected, at least in the West, in an intense and apparently growing interest in the past, not only of the world at large but also of the particular community in which we happen to live. The reasons may go far beyond any purely intellectual quest to a yearning for stability through a sense of belonging and a knowledge of where we have come from; and behind this may lie deep-seated worries about where we—as a race, as a nation, as individuals—may be going. This was never more sharply demonstrated than in the phenomenal success of Alex Haley's *Roots*, and in the subsequent television dramatization of that quintessential saga of the American black. The sense of belonging, the need to identify with a particular place, is a fundamental aspect of the quality of life, whether one is the inhabitant of a simple village or a citizen of an urban metropolis. It is indeed the inability to belong, the failure to identify the character of a place and to recognize it as specifically and essentially one's own, that gives rise to rootlessness and to the host of personal worries and social unrest which this inspires.

I am speaking today as a historian and archeologist, professionally concerned with change and the explanation of change in the development of cities. My specific interest has been the emerging towns of Europe in the early Middle Ages. In this capacity my colleagues and I have had to face the problem of destruction of the evidence necessary for the reconstruction and re-creation of the past by the needs of modern life—whether through agriculture, forestry, the extraction of minerals, or through the needs of industry, housing, road-building or urban redevelopment. These particular problems and my own particular Western cultural background inevitably colour my thinking, but I suspect that the general issues may have a wider relevance; it is in that hope that I explore them here.

No archeologist working today in the built environment can fail to be struck time and again by the inappropriateness of much that is taking place around him—by the failure to observe the human scale, by the failure to use appropriate and still available traditional resources, by a failure to use and reuse existing building stock; in a word, by a failure to respect the experience of human living which is embodied in the fabric of every existing place. This is no argument for changeless repetition, but rather for an awareness in both planning and construction of the experience of the past, and a willingness to explore the lessons which it may hold for the future. As an archeologist, I have no wish to turn cities into museums, to inhibit and deny change. For one professionally immersed in change that would be an insane contradiction. Rather, I seek to insist on the understanding and use of historical and archeological evidence as a tool for the future, and as a means of coming to grips with the physical presence of the past as a source of inspiration and understanding.

The character which gives each place its own identity is fragile, and today it can be swept away almost overnight. This character resides in townscape and streetscape, in the pattern and in the variety of areas within a place, as well as in its individual structures. The physical presence of the past is certainly only one of the elements to be understood and used in the creation of the new, but it is ignored, misunderstood, or perverted at our peril.

If we are to use the physical remains of the past as a fund of experience for the future, it is essential that we understand precisely what they have to tell us. The study of the development of towns and villages—especially those still occupied today, which are the centre of our concern here—is still in its infancy. This is true whether our approach is documentary, topographical, architectural or archeological. Town "histories" are full of traditional stories, too many of which are uncritically accepted. Too many town plans have been subjected to art historical commentary without precise basis in the facts of the origin, development and date of their streets; the many buildings and groups of buildings have been discussed without detailed structural criticism of their often complex development. In all too many towns, the archeological evidence for their development is swept away unrecorded or inadequately examined, although this may be the primary and often the only evidence for the history, plan and character of the place before the stage represented by what we see today.

The resources at our disposal for the precise understanding of the development of places are very rich. First and foremost in every case is the built environment itself, the end product of all the changes through which the community has passed. The town itself, as the greatest and grandest of artifacts, is our prime resource, whether we mean the above-ground structures, the patterns formed on the surface by defenses, approach roads, streets and buildings, or the buried archive below the surface. This trinity might be described as archeology above, on and below the ground. To these physical resources for the reconstruction of the past must be added the written and pictorial records—maps, plans and views—which exist in differing quantity, quality and character, and from various dates in different places. There are many problems involved in the correlation of written, pictorial and archeological sources, and highly complex chronological relationships between them, but the results to be obtained by using these and other sources in combination is not to be denied. This can be seen, wherever it has been attempted, in the powerful and precise scrutiny which such thorough correlation permits, and the richness of the perceptions which it produces.

The problem before us is how to handle these resources in such a way as to make them intelligible and readily available in the planning process. This problem is complicated by the irony that the archeological and structural evidence for the history of the town is now being destroyed virtually unrecorded, and at an increasing pace, in the very moment when its value as evidence has been perceived.

I would like to explore some of the ways in which the evidence for making informed judgments on the nature and significance of the historic environment can be obtained and demonstrated. First, we may consider the construction and presentation of historic town plans, of the kind now being prepared
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plans are undertaken by special working groups or committees and two fascicles have now been published for towns in Finland, twenty in West Germany and twelve in the United Kingdom.

The example of Cambridge, from the second volume published by the Historic Towns Trust, is representative of the British contribution. To conform with the agreed international standard, the maps are published at a scale of 1:5000 and are prepared to a common base date of ca 1800, chosen so as to include most if not all towns just before the onset of the Industrial Revolution. In the case of the United Kingdom, the multi-coloured 1:5000 base map is also reproduced at a scale of 1:2500 in order to allow instant comparison with the 1:2500 series of the British Ordnance Survey, used for most current planning purposes. This scale has now also been adopted by the other countries contributing fascicles to the series.

The common scales and dates of these historic town maps were designed to allow comparisons to be made from town to town and from country to country, something which was not previously possible. The sources used are early maps, plans, views, archeological and written evidence, and the place itself. Since few towns happen to possess plans of the required date of ca 1800, and since even fewer if any of these are to modern standards of accuracy, the procedure followed is based on the first edition of the scientifically surveyed Ordnance Survey plan, usually of about 1870. This plan is revised backwards by the deletion of features later than 1800 and by the insertion from other sources, carefully checked, of buildings and other elements existing in 1800, but removed or altered prior to the first edition of the Ordnance Survey. Although time-consuming, this method has been shown to work on many occasions, and the result is a corpus of plans of towns as they were ca 1800 with scientific standards of accuracy. In the planning process, these plans allow immediate appreciation to be made of the state of affairs ca 1800 in relation to every individual site or structure. They present the pre-modern form of the town and allow the impact of all subsequent or intended changes on the historic pattern to be seen at a glance. They are vital new research tools for comparative studies, but also because they show for ca 1800 the end product of all the changes which had taken place until then, unblurred by the relatively great and sometimes immense changes of the nineteenth century. As working tools in both everyday planning and long-term research, the value of these historic town plans can scarcely be over-estimated. They are in the process of completion for some twenty or thirty towns in Britain and for many more on the European continent.

The two basic plans in the British series at 1:5000 and 1:2500 are complemented in each case by a situation map of 1:250,000 and by a set of monochrome subsidiary maps at 1:5000, overprinted with selected themes. In the case of Cambridge, these are "The Site," showing surface geology, relief and the Roman background; "Medieval Street Names"; "Medieval Hostels," of significance as the earliest undergraduate halls of residence, and "Parishes ca 1800" to show boundaries. These subsidiary maps can be varied in content from town to town as need arises. This, then, is one way by which information about the historic environment is being codified as a basis for everyday use and ongoing research.

I would like to turn now to the actual and potential contribution of archeology to the comprehension of the historic town, and here I will take two examples, Winchester and again Cambridge. In Winchester, over the decade from 1961 to 1971, a major programme of research was undertaken based on three primary principles. The first concern of the city itself, the urban phenomenon from its origins to the present day. We were not concerned with the Roman city or the medieval city, with the relative or absolute neglect of other periods, but rather with the urban experience through time. Second, we were determined to use all available evidence, whether from archeology, written sources, topography or the natural sciences; combined studies were considered essential. Third, although this was a principle which emerged with experience, our archeological excavations had to be commensurate in

Redevelopment in historic towns and research in progress. All towns: England, Wales and Scotland.

Histograms show the incidence of redevelopment in historic towns expressed as a proportion of the total towns (dotted) and the total historic towns (solid outline). Black = towns already developed, cross-hatching = towns severely threatened, hatching = towns less severely threatened.

Pie diagrams show archeological and architectural work in progress expressed as a proportion of threatened towns. Black = A-level work in progress, hatching = B, C or D work in progress, blank = no work being done.

A-level work: permanent arrangements for research and publication actually in progress.
B-level: some work in progress, ad hoc arrangements for publication.
C-level: some work done since 1945, no continuation.
D-level: some work done before 1945, no continuation.

From: The Erosion of History, Fig 6 (© Council for British Archeology, 1972).
scale with and otherwise appropriate to the questions being posed. Inadequately-sized excavations are often worse than useless, tying up financial and human resources without answering anything significant, but only raising new—and at this scale unanswerable—questions. Over the decade of excavation at Winchester, working ten to twelve weeks each summer with approximately 150 students and a technical staff of 50, a cathedral, two parish churches, three chapels, an episcopal palace, part of the royal castle, twelve houses and many other structures were unearthed, to mention only the work carried out on medieval problems. In addition, a pre-Roman defended enclosure of eighteen hectares was traced, the Roman defenses dated, the Roman and medieval street plans identified and dated, and much else. The results are now being published in a series of eleven volumes by the Oxford University Press.

Winchester is, as an archeological and historical project, unique, but other cities in the United Kingdom and elsewhere in northern Europe are awedly following suit. Some of our work at Winchester was undertaken on sites that will never be destroyed, but much of it was done on sites which have now wholly vanished under offices, multi-story car-parks and roads. That work could never be done again, but it was done just in time to ensure that we now know more about the development of Winchester than any other English city. Archeological procedures are essentially the same all over the world, and what was done in Winchester could be done in Cairo, Baghdad, Damascus or Istanbul—the latter a city whose urban origins and development, as opposed to knowledge of its individual buildings, mostly churches and mosques, is perhaps least well understood of any of the world’s great capitals.

Before turning further to the problem of the destruction of sites, I would like to return to Cambridge. Archeological evidence rests not only in buildings and excavations, but also in museum storerooms. Cambridge provides just one example of how historical information can be extracted from loose, chance finds, provided that the place they were found is recorded. Working with large quantities of late Anglo-Saxon or early Norman pottery found in the 1800s, and plotting the places where it was found together with all the other geographically locatable historical facts, I was able to show not only the extent and location of Cambridge ca 1100, but was also able to produce a tentative model of the town’s development from Roman to medieval times. Material of this kind is available in many places and can also be collected systematically from every hole in the ground made for water pipes, electric cables and so on, until basic distribution maps can be built up. It is clear that they can illuminate major episodes in settlement history, in a way otherwise possible only by years of expensive and probably unfeasible excavation.

The destruction of buried evidence of the past must indeed be turned to good account where possible. However, the rate of this destruction is now so rapid, and its extent so total, that we face world-wide a virtually insoluble problem: shall we ever be able to recover more than a few fragments, a sample wholly inadequate for any firmly-based reconstruction of the past? As I have tried to suggest, this inadequacy is not just a loss to scholarship; it is a diminishing of man’s potential knowledge of himself. In the particular focus of this seminar, it represents a weakening of our ability to comprehend the past as a source for the future.

Allow me to take the example of London. By the early seventies, two facts were clear about the archeology of that city: we knew very little about it, and its remains were being destroyed by modern construction at an unprecedented pace. One person, with an operating budget of £100, represented the total official response to the problem, although voluntary groups were doing their best in an impossible situation. The inevitable crisis came in 1972 over the Thames-side site of Baynard’s Castle. Following a major public outcry and questions in Parliament, “RESCUE: the Trust for British Archeology” decided to prepare a detailed study of the London situation. RESCUE was a national organization, campaigning for central and local government action to secure the survival, or at least the investigation and recording, of archeological remains. In collaboration with Daphne Hudson, a town planner, and with the assistance of one of my former students, Carolyn Heighway (now Director of Excavations in Gloucester), I designed and wrote The Future of London’s Past, subtitled “A Survey of the Archeological Implications of Planning and Development in the Nation’s Capital,” which was published by RESCUE in the summer of 1973.

Our intention was to produce a factual, graphic and above all quantified statement, which not only surveyed the present situation but which could be directly used in the making of planning decisions in the future. The format and presentation of The Future of London’s Past was designed to appeal at first sight to professional town planners, architects, engineers and developers, and to speak to them in terms they would readily appreciate.

The text detailed the growth and present state of archeological knowledge about the city, described the degree to which archeological deposits still survived, estimated the extent and rate of future destruction, assessed the position in terms of the major archeological problems as currently defined and proposed solutions in terms of objectives, organization, costs and the law. Appendices included a detailed schedule of sites to be developed in the city in the next five years (1973-1978) and an extensive bibliography.

But it was the illustrations which were the real innovation. In addition to an aerial photograph and nine text figures, there were eight maps at the scale of 1:5000, seven of which were transparent overlays (five of them multi-coloured); the eighth was a base map reduced to 1:5000 from the 1:2500 sheets of the Ordnance Survey. The seven transparent overlays showed “Roman London,” “Anglo-Saxon London,” “Medieval London,” “Modern London: depth of basements,” “London: depth of archeological deposits,” “London: age of buildings, listed buildings, public and private open spaces,” and “London: the extent of future destruction.” By combining these maps in different permutations, it is possible to discover in a few moments the potential importance, in archeological terms, of any...
given spot in the Roman, Anglo-Saxon, or Medieval periods, to estimate the extent to which the evidence survives there or has already been removed by the digging of basements, to ascertain the approximate thickness of the archeological deposits below present-day pavement level in the area, to see to what extent the area is threatened by specific immediate construction or long-term development plans, or is protected in some degree by law (e.g., by lying below a listed building or within a Conservation Area).

This is a tool of constant use to the town planner, the architect, or the developer who must work within a legal framework designed to protect archeological sites. There was no legal protection of this kind in the United Kingdom in 1973, when The Future of London’s Past was written and published. Only as recently as April 1979 has an act to give some protection to archeological deposits within defined “areas of archeological importance” finally been passed by the House of Commons, on the last day of business before Parliament was dissolved for the recent general elections. But even before the passage of legislation, the format of The Future of London’s Past had proved of great practical value in tackling the problems of London’s archeology on a goodwill basis. The need was indeed urgent:

Within about ten years the archeological deposits along the waterfront will have been destroyed. Within fifteen years, or twenty at the most, the other areas of the city still undeveloped since 1945 will have been renewed. By the end of the 1980s the archeology of the city will survive only in a few isolated pockets: below some open spaces, below a few churches, beneath some buildings in the conservation areas. The surviving areas of archeological deposits will be entirely insufficient to preserve an adequate picture of the city’s origin and development (The Future of London’s Past, paragraph 8.3).

The challenge was met by the Guildhall Museum, now the Museum of London, which in 1973 created a Department of Urban Archeology under the direction of Mr Brian Hobley. The Department is supported financially by the City of London, the Museum and especially by the Department of the Environment, using central government funds. Annual expenditure now exceeds £200,000.

But the successful outcome in London is not my subject here. I want only to suggest that the concept behind The Future of London’s Past and the format of its maps, chosen to present the true position in as clear and usable a fashion as possible, provide a simple and effective paradigm by which the archeological problems of any currently-occupied settlement can be assessed in the light of development trends, and the appropriate management policies furthered. No matter how large, how complex, how long occupied, there is no city whose archeological needs could not be assessed and reduced to ordered priorities by the use of this paradigm The Future of Delhi’s Past would be as appropriate a management tool as The Future of Cairo’s Past, ... of Peking’s Past, ... of Rome’s Past, ... of Istanbul’s Past.

We need to keep in mind the central concept that our objective is not archeological knowledge alone, but rather the use of the physical remains of the past as a source of experience and inspiration for the future and as a fitting, stabilizing—one might even say consoling or at least comforting—presence around us in our daily lives in each community.

If the London example allows one to see and express archeological needs in a planning framework and, conversely, to study and even to modify planning objectives in an archeological frame of reference, it does so nonetheless within the context of a single town. Shortly before the London survey was conceived, I had brought to fruition a project planned in the late 1960s to investigate the rate and nature of the destruction of archeological evidence in British towns as a...
whole. This was a study of a national problem on a national scale designed, like the later London survey, to present a quantified picture in terms which would address themselves to town planners in both central and local government, and to others responsible for the management of the built and to-be-built environment.

The Erosion of History: Archeology and Planning in Towns, published in 1972, was produced by the Urban Research Committee of the Council for British Archeology and compiled and edited by Carolyn Healy. As its title page indicated, it was “A study of historic towns affected by modern development in England, Wales and Scotland.” The Erosion of History surveyed 906 historic towns in those countries, established criteria for their definition (a considerable initial problem) and quantified the extent to which each was likely to be affected by development in the next ten years (1972–1982). The national picture it revealed was, in terms of the survival of archeology and the architectural landscape, unexpectedly serious. “Of those historic towns which remain for study, the archeological value of one-fifth will most probably have been entirely destroyed in the next twenty years; another two-fifths will be redeveloped in lesser ways. . . . If nothing is done, most of these towns will be fundamentally changed without a record of their past being made” (paragraph 18).

Out of 906 historic towns, there remain only 834 which can still be investigated. Of these, over half are threatened by some sort of development. 159 will be lost to archeology in twenty years if not before, including the most important towns of all historical periods. The archeology of another 352 towns will in the next ten years be slowly, although not completely, eroded. The total of threatened towns is 511, excluding those already developed. The archeology of only twenty-one, and the architecture of only eleven, of these towns is being adequately studied (5.57).

The Erosion of History examined the historic towns not only in terms of impending development, but also within the framework of their present administrative status, and in

### A The sample

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>Wales</th>
<th>Scotland</th>
<th>Totals</th>
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<tr>
<td>Total towns</td>
<td>1,177</td>
<td>133</td>
<td>201</td>
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<tr>
<td>Number considered “historic”</td>
<td>781</td>
<td>79</td>
<td>133</td>
<td>993</td>
</tr>
<tr>
<td>Number ‘or which no information available’</td>
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<td>2</td>
<td>6</td>
<td>87</td>
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<tr>
<td>Total sample</td>
<td>702</td>
<td>77</td>
<td>127</td>
<td>906</td>
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</table>

### B Analysis of the sample in terms of development

<table>
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<th>Scotland</th>
<th>Totals</th>
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<td>6</td>
<td>1</td>
<td>72</td>
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<td>XXX</td>
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<td>265</td>
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<td>352</td>
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<tr>
<td>Threatened</td>
<td>457</td>
<td>50</td>
<td>76</td>
<td>583</td>
</tr>
<tr>
<td>No development</td>
<td>245</td>
<td>27</td>
<td>51</td>
<td>323</td>
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<tr>
<td>Totals</td>
<td>702</td>
<td>77</td>
<td>127</td>
<td>906</td>
</tr>
</tbody>
</table>

### C Archeological and architectural work in progress in threatened towns (B represents B, C or D work)

| Archeo Work | Archit Work | Archeo Work | Archit Work | Archeo Work | Archit Work | Archeo Work | Archit Work | Archeo Work | Archit Work | Totals |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|-------|
| A           | B           | A           | B           | A           | B           | A           | B           | A           | B         | A B    |
| XXXX        | —           | 27          | —           | 33          | —           | 1           | —           | 1           | —          | 31     |
| XXX         | 16          | 56          | 69          | 1           | 2           | 8           | 1           | 4           | 3         | 10     |
| XX          | 1           | 87          | —           | 2           | 9           | 1           | 26          | —           | 13         | 19     |
| Totals      | 17          | 170         | 9           | 210         | 3           | 14          | 1           | 37          | 1           | 18     |

### D Summary

<table>
<thead>
<tr>
<th>Historic towns threatened</th>
<th>England</th>
<th>Wales</th>
<th>Scotland</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>A archeological work in</td>
<td>457</td>
<td>50</td>
<td>76</td>
<td>583</td>
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<tr>
<td>A architectural work in</td>
<td>17</td>
<td>3</td>
<td>1</td>
<td>21</td>
</tr>
</tbody>
</table>

Incidence of redevelopment in historic towns compared with the archeological and architectural research in progress. All towns, England, Wales and Scotland

XXX = town to be considerably redeveloped, any surviving archeological levels are of the greatest importance

XX = towns facing development of historic centre, archeological record of fundamental importance

A-level work, permanent arrangements for research and publication actually in progress
B-level = some work in progress, ad hoc arrangements for publication
C-level = some work done since 1945, no continuing arrangements
D-level = some work done before 1945, no continuing arrangements

From The Erosion of History, Table 6 (c Council for British Archeology, 1972)
the context of the amount and quality of the architectural and archeological research and recording which had already been undertaken in each place. The simple tests, which yielded a nationwide quantification of the problem, should be applicable *mutatis mutandis* to the urban basis of any country. A country which wants to ensure that the essence of its urban structure is preserved in an appropriate historical, architectural and archeological context could, with these tests, be provided with an indication of the scale and range of problems to be faced.

An important section of *The Erosion of History* discussed “The present position of archeology in urban planning” (Section 4), particularly in relation to the protection of archeological sites and to the activity of the archeologist on location. The existing legislation regarding ancient monuments “is not an effective protection for the buried remains of the urban past” (4.1). *Erosion* concluded that the following new articles of legislation are required: that “the archeological potential of any proposed development should be considered when planning permission is granted” (7.3); archeologically-accredited persons “should be given access to building sites with archeological deposits and objects” (7.5); and finally, “there should be provision in law to secure time for excavation if required” (7.6). But these requirements for statutory consideration, access and time for excavation can only be effective within the context of a general legislative framework for the protection of archeological sites. *Erosion* suggested that “statutory protection” should be given to “key archeological sites specified in [an] archeological survey.”

These recommendations were framed in 1972. Seven years later, in January 1979, the long-awaited Ancient Monuments and Archeological Areas Bill was introduced into the House of Lords. It passed into law in April 1979 by general consensus among political parties, and the United Kingdom had at last obtained its first specifically archeological legislation. The basic provision of the new Act allows for the definition of areas of archeological importance; within these areas various controls will operate, most notably the requirement that four and a half months be allowed, if needed, for archeological excavation.

If the word “archeological” has been used often in this discussion, it should be stressed that it is used in the sense of archeology “above, on and below the ground” which I defined earlier in this discussion. There can be no distinction, or should be no distinction, between architecture and archeology, at least in investigation, recording and analysis.

The procedures of the United Kingdom in facing questions of archeology and history in conservation and development may be of wider interest they show how one country has faced the problems of understanding and conserving the experience of the past, and more particularly has come to grips with the size and nature of the problems involved. If development should take place within traditional frameworks, at least in historic places, it seems clear that the essential elements of those frameworks must be defined with scholarly accuracy. The frameworks themselves will otherwise represent only popular misconceptions, and development will present an ever-coarsening and frankly misleading reflection of the experience of the past.

We need to understand with precision the different types of town and unit plans, the various forms of buildings and elevations, the changing use of structures and areas if we are to build anew within the guidelines of traditional needs and solutions. This is, for me, the essence of conservation. I offer these attitudes and results from the West in the hope that they may be of interest and use to the Islamic world, which is currently facing the challenge which the modern world presents to the survival of the historic environment. Indeed, I believe that this standard proposition should be paraphrased. It is the challenge which the experience of the past reflected in the built environment brings to the modern world which is the true challenge. Conceding the distinctive character of the Islamic world, the general problems of historic conservation are nonetheless comparable to those in the West, and the sources of information about the past as methods of study and analysis are essentially quite similar. One may hope, as one acknowledges the loss of so much of the historic experience of the built world in the West, that the Islamic world will choose an alternate direction.

References


Biödli, Martin “Archeology and the History of British Towns,” *Antiquity* 42 (1968), 109-16


I was asked to survey the changes that have occurred over time in the organization of urban life in what now comprises modern Turkey, and I shall treat this subject in rather broad historical perspective. From the sixteenth century to the present day, five different periods and five corresponding transformations can be distinguished in the urban settlement patterns of Anatolia. They are: (1) the classical Ottoman period of the sixteenth century; (2) the period in the seventeenth and eighteenth centuries, when central control weakened while the control of the ayvan, a group of community notables, increased; (3) the period in the nineteenth century when the system came under the influence of Western imperialism and was semi-colonized; (4) the period between the national War of Independence and the Second World War, when the integration of the domestic market was achieved; and finally, (5) the period of rapid urbanization that followed the Second World War. We shall devote most of the discussion to the first and third periods and deal with the others only in passing. This far-reaching perspective will make the main determinants of urban life more comprehensible.

Settlement systems, as a rule, involve a hierarchy. Significantly different characteristics are found among cities located at the highest and the rural village at the lowest levels of the hierarchy; varying combinations of these differences are found in the levels in between. The most logical approach to our subject would be to study the changes observed on each level of this hierarchy, but such a study would take us too far afield. Instead, we shall focus our discussion on the largest cities, both because data are more readily available for them and because, owing to their size, urban characteristics relevant to a particular period and the characteristics of their institutions are more apparent. Differences are not so obvious in smaller settlements, and the significant changes in each period become correspondingly more difficult to discern.

Who controlled the economy and how, and the social stratification in the cities resulting from that power structure, will be indicated for each period studied. The influence of the social structure on urban spatial organization will be considered in terms of the settlement pattern and the demographic processes it creates, and the changes it induces in the structure and the forms of cities. We shall see how communities within cities are organized to meet common needs, and the main characteristics of urban government and its leadership; we shall also review major features for each period of urban planning, an activity that is not so much a determinant of how cities are formed as it is itself determined by the social system.

**Urban Form and Government in the Sixteenth Century**

Production and transportation technologies in the Ottoman Empire in the sixteenth century were limited by available energy sources, which in agricultural production, the primary source of surplus, was restricted almost entirely to the ox-drawn plough.¹ Land transportation and communication were by zaravan and messenger. Sea transport was beginning to shift from oar to sail—from galley to galleon—making long-distance trade possible. Peddlers were being replaced by sedentary merchants.² To increase the surplus which was controlled by the central powers of the empire, and to secure a regular flow, the amount of land and labour under imperial control had to be increased and the arrangement of land-labour relations made more rational. The Ottoman Empire achieved this through two institutions: gaza, or military conquest; and timar, or fiels, whose revenues were handed over in return for military service. Through them the imperial administration was able to realize continuous growth, keep order in the empire and maintain maximum surplus production for export between east and west (there were no north-south international trade routes within its boundaries).³

Stability in the division of labour in this rather static production system depended upon a rigid class structure, but the Ottoman Empire was both religiously and ethnically too heterogeneous to maintain a strict social order. A special type of social organization, the millet, evolved to resolve the conflicts among these multifarious groups. Millets were formed along both communal and religious lines,⁴ for the Muslims, the Greek Orthodox, the Armenians and the Jews, and each of them developed its own social class differentiations. Ranked according to their relative proximity to the sultan or their prestige in

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Roman roads in Turkey, 2nd-3rd centuries AD
After F A O., Turkey Country Report (Rome, 1959)
the society, these classes were the military, the ulema (learned ones), the merchants and craftsmen, and the peasants or ra’aya. Since the Ottoman Empire included important trade routes within its borders, the population also included many foreigners, especially Venetians and Genoese, in addition to its tebaa or subjects.

Preindustrial societies made no abrupt advances in transportation or production technologies. Anatolia’s population and rate of urbanization consequently tended to be rather stable. Its population in the sixteenth century was somewhere between eight and eleven million. Various studies have shown, however, that there were significant increases in population between 1520 and 1580; considering the technological constraints of the period, it is unclear whether these should be explained by the pax Ottomana or simply as part of a more general population increase manifested in all Mediterranean countries at that time.

The Ottoman cities developed their spatial organization during this period of population growth (population increases often spur changes in urban structure). While the urban population in Anatolia remained at about eight or nine percent of the total, important changes can be seen when the cities are ranked according to size. In 1500 the population of Istanbul was 400,000; by 1570 it had reached 700,000, a number representing 40 percent of the total urban population of the empire and a classic example of a single-city-dominated urban system. The ratio of the population of Istanbul to the secondary cities had increased from 7 in 1520 to 10 in 1580. This distribution suggests an empire that was growing and whose trade was government controlled. It also attests to the superior geographic position of Istanbul as a seaport, which enabled it to control the surplus product.

The amount of the surplus produced for export under the Ottoman land–tenure system and its total control by the central government kept the second-ranked cities, the provincial capitals, at a population level of around 50,000 inhabitants each. The third-level centres, or Sanjak capitals, were settlements of around 10,000. The small villages occupied the lowest level in the settlement hierarchy. The population growth in the rural areas in the sixteenth century was reflected in the increase in the number of villages; it also encouraged their formation in unoccupied lands previously regarded as unsuitable for both health and security reasons.

The larger centres were clustered along the rivers of central Anatolia which formed the caravan routes and provided a water supply as well. A few port cities, in addition to Istanbul, grew up at points where the caravan routes reached the coast.

Like any city, the Ottoman city was a place where the surplus product was controlled by the requirements of the prevailing mode of production and where non-agricultural goods and services were supplied to the ruling classes and, to a more limited degree, the rural areas. Cities also displayed a good deal of agricultural activity, however; some recent studies of Ottoman cities show that agricultural taxes represented a considerable share of the revenues collected from them. Still other functions were determined by Anatolia’s caravan routes. Caravans were trade, rather than simply transport, organizations. They did not move with a fixed load between two points, but traded goods as they went along, buying and selling at every point along the route. Without this intermediate trade the cost of transportation by camel would have been prohibitive.

Caravan trade led to specialization of production in the cities along the caravan routes, as the Anatolian cities began producing goods not only for their own populations but for specialized long-distance trade as well.

Like other preindustrial societies, the Ottoman Empire had certain institutions designed to control the size of the urban population and prevent the peasants from leaving the land. But despite these measures, there was still a surplus of people in the urban areas who could not be employed or otherwise assimilated into the city structure.

Before the sixteenth century the Ottoman city was divided into two parts, that inside the castle and that outside the castle, long a common type in the Middle East. Inside the castle walls the area was also divided into two sections: the inner–castle area where the administrators lived and administrative functions were carried out, and an outer area where artisans pursued their activities and the upper-echelon city residents lived. Outside the castle walls, in the part called takhi-al-qala (the section below

Ottoman Roads

the fortress walls) non-stationary trading activities and the market were located. There, caravanserais accommodating travelers, settlements of agricultural workers, the tekke (a chapter of the Dervish order) and a zaviye (a Dervish hospice) were located.

All this changed in the sixteenth century, when the bedesten (covered market) took the place of the temporary-trade area outside the castle walls. This new town section was developed in a comprehensive manner through imaret, that is, complexes of public buildings and institutions, mosques, public baths, inns and the like, supported by a vakf (religious foundation). The bedestens, particularly of the large cities, offered security for merchandise and a depository for wealth with their stone domes and iron gates. Thus they also acquired a new prestige as a dwelling place, usurping the role of the inner—castle area, and this produced a change in urban form. Craftsmen concentrated around this central bazaar. The streets near the bedesten began to specialize in one particular production, trade or service, and new residential neighbourhoods began to evolve.

One factor encouraging these new developments was social stability. As order in the empire was maintained, the castle lost its raison d'être and settlement beyond the castle walls became possible for the growing urban population. But still more fundamental were the changes taking place in trade, particularly the shift from travelling to resident merchants. Their importance in sea trade encouraged the development of the Turkish port—city centres located near the new sailing ship harbours. The obsolete galley harbours were closed and turned into commercial areas.

Manufacturing and commercial activities in an Ottoman city were kept quite separate from the residential districts, except in the case of the administrative class. Aside from a few locations like Bab-i Meşhat and Ağâ Kapısı in Istanbul, the administrators did not have separate offices, but carried on their administrative duties out of their own mansions—which explains the absence of administrative quarters in the town centres.

The most important mosque was usually also located in the centre, as were the inns where the unattached men who formed part of the labour force of the city lived. These hostels were generally built as part of the imaret system of the centre. The residential areas around the centre were organized into neighbourhoods, known as mahalles, according to religious or ethnic group rather than class. There were Muslim, Greek, Armenian and Jewish quarters. With rare exceptions, most of them in Istanbul, foreigners were generally too few to form separate mahalles. The location of the various mahalles also followed a standard pattern, for example, the neighbourhoods around the castle were mostly Muslim; foreigners lived together near the centre, and the Gypsies on the outskirts. Since the mahalles were not differentiated according to social class, rich and poor lived side by side, though differences were readily observable in the quality of their houses and were reflected in the terminology used to describe them: sıfli (single—storey), ulvi (two—storey), and mıkkellef (large, spacious).

As the city grew new mahalles were formed around an already established nucleus, which included a mosque, masjid and tekke; these complexes were erected by the vakf organization. The imaret complex was found not only in town centres but in mahalle centres as well. If the city was large, markets might also be built in the mahalle.

Ottoman cities were generally crowded. The inner roads of the cities were shaded, a narrow cul-de-sac leading up to each house. The houses themselves had a closed—in character and were, for the most part, of timber construction. Movement was almost entirely on foot. Only members of the military class were allowed to ride inside the cities—a restriction that served also to limit a city's size, because it was believed that the presence of animals increased the likelihood of epidemics. In addition, the food supply, already difficult enough to maintain for the human population, would have posed almost insurmountable problems if livestock had to be fed as well. Istanbul could only become as large as it did owing to its harbours and waterways, which provided both transportation for its inhabitants and a large and steady supply of food.

The particular character of the Ottoman city cannot be attributed entirely to the problems of intramural transportation, however, or to the castle walls that prevented its expansion into the surrounding countryside. The land in the city was either mulk (privately) owned or vakf/owned; in the countryside it was miri (state) owned, which halted expansion and led the city to continually divide its land into even smaller plots, inducing both overcrowding and the typical cul-de-sac pattern mentioned earlier. There were no public green areas, though there were small gardens or other greenery in the inner courts of individual houses, and open areas in the courtyard of the mosques and around the neighbourhood fountains in the built—up parts of the city. In its outskirts and sometimes even within its boundaries, fruits and vegetables that could not be transported over long distances were cultivated for the population. The town carefully guarded these green areas set aside for food.

The policies of the Ottomans also led occasionally to urban changes. For example, after the imperial government imposed internal customs duties on caravans entering the town, the inns and caravanserais to accommodate them were built outside its walls. The trader could then bring in only those wares intended for sale in the particular town and avoid payment on the rest. Similarly, some tekkes were located nearer the areas of agricultural production. As a result, the peripheries of the Ottoman cities were quite thickly settled, providing a nucleus for future urban expansion.

Ordinary city dwellers had no institutionalized role in the city's governance; their participation, where it existed at all, was minimal. Although the imperial government was centralized, the responsibility for urban services and public works was not assumed by the state, as it had been in the Sasanian tradition. Instead, administrative functions were performed through the vakfs, which were founded and autonomously governed by the people. Most of them were set up by members of the military class who controlled the surplus product. They were the means of keeping family control over the savings accumulated in the Ottoman system,
as well as a way of providing services for the cities. In 1546, there were 2,517 vakfs in Istanbul, not counting those controlled by the imperial family. By 1600, 1,600 more had been added. Certain requirements had to be fulfilled if this system, left to the control of private individuals, was to carry out public functions. In such a system, a section of the population accumulates a significant amount of surplus, and limited alternatives must be available for disposing of it.

The running of the Ottoman city was determined by a city administration that was compatible with a centrally organized empire. Every local government is at least in some respects based on representation, but the controlling classes of the central government also wanted to have a say in its running. In the Ottoman Empire, a solution was found in the kadi, or administrative judge, who had a well-defined position with respect both to the vakfs and the central government. In addition, each section of the town had a representative called the kethiada, selected by its residents, as did each guild. The guilds also had an avarz sandigi (communal coffers), some of whose funds were allocated for the maintenance of the area. Each mahalle had a similar organization. The head of the community organization was the imam (religious leader), subordinate to him were the kahya (superintendents) selected by the mahalle residents. The mahalle also had its avarz sandigi for neighbourhood maintenance.

Above the kethiadas in rank was the sehir kethiadesi, the city representative, whose job it was to reconcile the demands of the central government with the interests of the city’s residents. One of his functions was to determine the amount of taxes to be collected from each resident.

The representatives of the central government and members of the military class such as the Beylerbeyi or Sancakbeyi also lived in the cities; they were the administrators in charge of the surplus product. Their interests were often in conflict with those of the inhabitants, and the kadi’s function was to reconcile them. A member of the ulema class, he held his post in each city for a maximum of one year to avoid the possibility of his growing to favour any one group. The kadi was not only a judge enforcing religious law; he had a variety of financial, administrative and municipal responsibilities as well. He oversaw the craftsmen and the merchants, enforced the rules and regulations of the guilds, regulated the food supply, fixed commodity prices, enforced building regulations, controlled the vakf boards, maintained the urban infrastructure and kept order. To carry out these tasks he employed both the military class and local organizations. His position as intermediary and role as conciliator in many cases led him to follow secular rather than religious norms of conduct.

The kadi cooperated with the subaşı (commander), a member of the military class who, together with his axe (guard), was responsible for keeping order in the city as well as maintaining the roads and waterworks in good repair. The kadi’s assistant, the muhtesib, or superintendent, controlled the merchants, collected the bac-i bazar (market dues) and fixed commodity prices. His chief assistant for the supervision of building in the city was the mimarbaşı (chief engineer or architect) or the mimar (engineer or architect). The mimar was a member of the military class and not a trained guild member, but along with joining military expeditions, he repaired roads, built waterways and Kâlîye (building complex for the sultan) and usually became a trained technician in the process. He also controlled and supervised all construction activity, both rural and urban, including that of the masonry guilds. He set workmen’s wages and standards for the quality and cost of construction materials. With his assistant or foreman, the mimarbaşı inspected the city on horseback, seeing to it that any additions to houses were within the prescribed limits, that buildings did not encroach upon the streets, that no construction was undertaken near the castle walls, and that tanneries and kilns, which presented a fire hazard, were located well away from residential areas.

The şehremini was yet another official. This office already existed in the Byzantine period, when its function was to maintain city roads, waterworks and state buildings. In the Ottoman Empire these responsibilities had been absorbed by other offices, and its function was limited to that of caretaker for the sultan’s buildings. Though the mimarbaşı was still theoretically subordinate to him, the şehremini, caught between the authority of the kadi and the expertise of the mimarbaşı, had no opportunity to develop.

This mode of administration, based on the inaret and the kadi, left little room for citizen initiative; what little there was occurred at the mahalle level. Public solidarity was achieved through policies developed and advocated in the tekke and the guilds, and was probably more coherent at the subdistrict than at the city level. Although there is no firm evidence, it seems safe to assume that the Ottoman city had a strong sense of community within the mahalles, based partly on religious allegiance.

There are some indications that a large urban consciousness was not lacking. The continuous conflict between the city administrators of the military class and the city dwellers probably had encouraged the rise of such a consciousness. When the demands of the central authority seemed impossible to meet, the kahya called the city council, including the müfti (Muslim legal advisor), together, and they often decided against the desires of the central government and were able to bring their case to the sheik al-Islam. In later periods, when the avans began to gain in importance, they made good use of these conflicts. Finally, the existence of a city or commercial centre around a complex of public buildings could only contribute to the development of an urban consciousness.

Urban Form and Government in the Nineteenth Century

To study the changes in the Ottoman cities during the nineteenth century, one has to consider the changes in the economic structure of the empire and the millet, and the
class differentiations that they induced in the society. The industrial revolution, the development of capitalism in Europe and its expansion into the Ottoman Empire, combined with the internal upheavals in the empire itself, resulted in significant structural changes in the organization of trade. There were no significant improvements in the basic production technologies.

The growing demands of western Europe for food and raw materials led the agricultural production of the empire to be increasingly export-oriented, as it sought to satisfy foreign markets rather than meet the requirements of its own population. The European-manufactured products which it received in return for exported raw materials began to compete with the traditional crafts of the empire, narrowing the scope of its domestic markets still further. In its later stages, European capitalism turned the Ottoman empire more and more into a semi-colony by exporting its products and investing in its domestic enterprises. Capitalist market mechanisms replaced the traditional feudal institutions as the controllers of the economy. When this happened, property ownership and wealth superseded caste as the determinant of social stratification. The traditional society could neither adapt itself to the new economics nor the needs of the new classes gaining in power, nor withstand the pressure of an imperial administration trying to strengthen an empire disintegrating in the face of the growing nationalist movements of its subject peoples.

New institutional structures were finally set in place by the reformist (islahat) movements of the Tanzimat period. The Western concepts of individual rights and the new land code introduced by the Tanzimat brought the production relations of the society into harmony with its development. Tanzimat's efforts to increase the control of the central authority in public and military administration and in communications were aimed at preventing, or at least postponing, the empire's disintegration. These new organizations accelerated the changes that were already apparent in the society, and led to modifications of the millet and class systems.

The result was not the immediate disappearance of the traditional social structure within each millet, but the formation of a new one that existed alongside it. When the administrators of the central government, all members of the military class, lost their position of control over the economy to the ayans, they gradually became salaried civil servants of the sultan. This fulfilled the requirements for a large and well-trained bureaucracy to serve the centralized administration initiated by the Tanzimat, and in turn led to the development of an educational system, in addition to the traditional madrasas, to train the new bureaucrats. In both the civilian and the military bureaucracy the new administration produced an effective petite bourgeoisie.

The ulama, traditionally the second level in the class system, lost power in all the millets of the empire. In the Muslim section, the newly established central administration took over: the resources of the ulama and absorbed them into the vakifs under its own control. Many of their functions were handed over to the new bureaucracy, leaving the ulama to decline as a class. They joined forces with the other traditional groups that had found no place in the new society. In the non-Muslim millets the rising merchant class reorganized the church, thus diminishing its authority and limiting the control of the ruhban, or religious leaders.

The artisans also lost out to the merchants. Surely the most significant transformation in traditional Ottoman class structure took place within the merchant group, primarily because Western colonial control was established through this group and forced it into rapid change. Trade in the nineteenth century bore little resemblance to trade in the sixteenth. The concentration upon agricultural raw materials for foreign markets, rather than on manufactured goods for the domestic one, increased foreign trade but simultaneously discouraged the development of industrial production and internal markets. This led to the impoverishment of the artisan class and the decline of the ionca (guild) system.

Nor did the commercial sector grow uniformly among all national groups. Trade was in the hands of primarily English, French and Dutch capital. These Western powers controlled Mediterranean trade, but they still depended on local agents to collect the raw materials from rural areas for export and to distribute the industrial products of Europe back to the hinterland. These middlemen were chosen only from certain millets (the majority were Greeks or Armenians), and a protégé status was created to protect them with foreign capital. Muslim merchants were for the most part restricted to trading outposts within the Muslim settlements.

The rising non-Muslim trade bourgeoisie sought to control the administration, to influence the church and to encourage nationalistic movements by trying, in effect, to transform the millets into separate nations. The development of trade in the non-Muslim millets also speeded up the development of the bureaucracy. Although generally speaking the Western-dominated economy discouraged manufacturing, there was some limited development of industry (mainly in the preliminary processing of raw materials for export) which gave rise to an Ottoman working class.

The development of international trade and its dependent industries, and an agriculture open to international commerce increased the need for capital. On the highest level this resulted in the establishment of a group of banks and foreign investment firms which were cooperative and not competing organizations. Below them and under their control were the local finance companies, such as the Galata bankers, which grew up among the non-Muslim groups. Lowest in the hierarchy were the money lenders, who were found among all national groups and who cannot easily be distinguished from the traders.

The re'aye had come to own their own land by the nineteenth century, but the countryside underwent no significant changes until the foreigners appeared and, along with the Muslim egraf (landed gentry), collected enormous land holdings. This situation led to the appearance of seasonal farm labour, a group made up primarily of landless peasants. They had their counterpart in the growing population of the cities, in the large
number of urban underemployed engaged in
marginal activities.\textsuperscript{46}

Foreign merchants and capitalists generally
maintained close relations with the new
non-Muslim merchant bourgeoisie. The
latter were open to Western ways and
Western culture and sought to introduce
them into the empire. The attitude was
somewhat different among the small bureau-
crats and traders, whose opportunities for
expansion were more limited, and even for the 
\textit{esraf} of the Muslim population. While
their livelihood also depended on capital-
istic development in the country and they
favoured both modernization and Western
ways, they resented the fact that the
country's economy was in the hands of
non-Muslims and foreigners.

Those groups who had entirely lost their
status and functions as a result of the advent
of capitalism were even more hostile to the
new society and its way of life. The changes
could not come rapidly enough to allow
them to reap the benefits of the new system,
so they defended the advantages of the old.
The ulama, artisans, and the marginal urban
sector formed this anti-Western alliance.

The economic structure, the class structure
that reflected it and the pattern of alliance
that resulted from it all influenced patterns
of settlement. The period of unrest in
Anatolia in the seventeenth and eighteenth
centuries had resulted in a shrinking of both
rural and urban population, though we do
not know the magnitude of this decrease. In
the nineteenth century, however, the popula-
tion began to grow again until it reached the
level of 11.5 million. There were several
reasons for this increase. They include the
relative success of the state in maintaining
internal order, improvement in health condi-
tions in the cities and immigration from
lands outside Anatolia that were falling
away from the empire. These migrations
causd the Muslim millets in the population
to grow much faster than the others.

The opening of the country to external
markets and the appearance of a well-devel-
oped transportation system led to an
increase in the rate of urbanization. The
ratio of urban to rural population in
Anatolia reached 25 percent, far above the
9 percent level of the sixteenth century.\textsuperscript{47} In
addition to the general growth of the cities,
certain areas showed a particularly marked
increase. The inland cities of the sixteenth
century lost out to the coast. The old port
cities flourished, and new ones grew up. The
population moved into the coastal areas,\textsuperscript{48}
changing the ranking of the cities and
bringing their populations closer to a
log-normal distribution. The population of
Istanbul, which had dropped to 350,000 at
the beginning of the century, had reached 1
million by the end of it—but that million
still only represented 27 percent of the total
urban population of Anatolia, in contrast to
the 40 percent of the urban population that
Istanbul’s 300,000 represented in the six-
teenth century.

The second largest city in Anatolia was now
not Bursa, but Izmir. At five, the ratio of
the first-rank city to the second-rank city
was far below the ratio of ten in the six-
teenth century.\textsuperscript{49} Istanbul’s slip from its
primary position is explained by the trading
system in use. Each of the significant port
cities of the empire and its hinterland was
controlled entirely by one Western power;
it’s rivals were not permitted to do business
in lands under its control. Within these
spheres of influence each port city was
connected to its hinterland by a railroad
constructed with foreign capital, which
brought raw material to the port for
shipment abroad. The result was that these areas
were often in close contact with the
controlling Western power than they were
with one another or with the Ottoman
government. Because of the limited avail-
ability of foreign capital, the system was not
entirely self-sufficient and relied to some
tent on more traditional methods.
Caravans, for example, continued to func-
tion as a supplement to the railroads.

The port cities were similarly organized to
ensure control of trade by the foreign power.
The agricultural products of the interior
were brought up to fill the requirements of
the controlling country, collected by finan-
cial and trading companies in the port city,
warehouse, processed using cheap local
labour and then shipped out to the home-
land.\textsuperscript{50} The distribution of the rural settlements also
changed. Villages in the lowlands, already
limited in number in the sixteenth century,
had become even rarer after the large-scale
migrations (\textit{bit"uy"uk kağıgın}) of the seven-
teenth and eighteenth centuries sent their
inhabitants to the highlands. But the low-
lands were ideally suited for growing crops
for export,\textsuperscript{51} and Ottoman administrators,
anxious to reestablish control over their own
territories, regarded the settlement of
Turkish migrants in them as a means of
doing so. They encouraged both nomads
and immigrants from elsewhere in the
crumbling empire to settle in Konya, Adana
and other coastal plains, despite the fact that
the area was unhealthy and the mortality
rate high. This did not discourage successive
waves of immigration, however, and the
plains villages rapidly increased both in
number and size.\textsuperscript{52}

How were all these changes reflected in the
cities themselves? Throughout the seven-
teenth and eighteenth centuries the structure
of the city essentially retained its sixteenth
century form, the only significant difference
being the abandonment of the inner-castle
area as the military class lost its importance
and the power of the \textit{ayams} increased. The
mansions of the \textit{ayams} were located near the
city centre. But the nineteenth century
brought many more changes. The port cities
were now connected by railroad to their own
interior and by steamship to the rest of the
world. Communication was no longer with
\textit{menzil} and \textit{ulak} messengers controlled by
the military but by a postal system open to
all and particularly useful to the growing
number of traders. These new channels of
communication required new railroad sta-
tions, quays and post offices. The old
caravanserais were differentiated into
warehouses and hotels.\textsuperscript{53} The banks that
grew up to serve foreign capital were
concentrated in one particular section of
the city alongside a new type of structure, the
office building, made possible by new
methods of commerce that freed the
merchant from having to be near the goods
he was trading. The merchant had instead
come a negotiator and a coordinator, and
location near a bank rather than a market-
place best suited his manner of business. The
bazaar was no longer the most prestigious business centre in the city; it had been replaced by this new banking and commercial district.\textsuperscript{54}

The affairs of state were no longer conducted from the mansions of the military leaders, but were carried out by the new bureaucracy of the Tanzimat in public buildings of the central city. The centre also soon attracted luxury shops, theatres, cafés and other recreational facilities to serve these new groups. However, the new institutions of the nineteenth century did not entirely replace the traditional ones. Instead, the old and new coexisted. In the city centres the new commercial buildings stretched from the old centre along the streets to the areas where the foreigners and national groups who controlled foreign trade lived. This pattern can still clearly be discerned in the Galata and Pera sections of Istanbul and the Punta of İzmir. At the same time the central city’s old functions did not entirely disappear. The inns and boarding houses for workers remained, although some were torn down or abandoned.\textsuperscript{55} A transitional zone often grew between the areas devoted to old and new functions. The direkler arası (entertainment area) built in the nineteenth century in the old city of Istanbul was formerly one of these transition areas.\textsuperscript{56}

Changes were also apparent in the residential districts. Ethnic neighbourhoods were still the rule, but they no longer included all classes of a given group. The rich were beginning to move to the suburbs that were opening up to settlement as transportation improved.\textsuperscript{57} Distinctions of national background could be found in the suburban quarters as well, but the lines were not as rigidly drawn as they were in the city. The terminology also changed, reflecting the new suburban style of living: a house could be a konak (mansion), or a köşk (villa), or a yali (seaside villa). Among the Muslims, a konak was still a mansion located in the old neighbourhood of the city, but it was now usually occupied only in winter; for them as well, a villa for summer living was maintained in the suburbs. The sultan was probably the last member of the military class to abandon city living, when he left the Topkapı Palace for a palace on the Bosporus.

In the meantime, immigrants arriving from the outlying regions of the empire were also settling around the cities, building settlements in a gridiron pattern that differed greatly from the pattern of the old neighbour-hoods. In spite of restrictive measures, people continued to abandon the country-side and move to the towns, settling around the cities in a fashion rather similar to the squatters of today. The narrow streets and cul-de-sacs began to disappear as the city spread out, thanks to foreign-operated steamships and streetcars and to the introduction of the horse-drawn carriage. Even the sultan went to his prayers in a carriage rather than on horseback. The rich and prominent all owned carriages, and these required wider streets. In some cities the outer castle walls were torn down to allow the city to spread out more easily into the surrounding flat lands. This expansion was made possible by new technologies that provided ways to drain the marshes, as well as transportation to the reclaimed land.\textsuperscript{58}

The green areas in the city that had been used to grow produce for the urban population could now be turned into residential districts. Municipal parks for the use of all residents were created out of the old ceme-teries that were incorporated into the city as it expanded.\textsuperscript{59} Other recreational areas were established around the city for the use of the urban population. The few factories that were built were also located in the outskirts near a source of public transportation.\textsuperscript{60} In contrast to the manufacturing activities of the sixteenth century town, which were almost entirely restricted to the city centre. In the nineteenth century only small crafts remained there.

City government also changed. The re-formers assumed control of the vakıfs in 1826. Western notions of individual rights introduced by the Tanzimat allowed people to pass their accumulated wealth on to their families, and made the vakıf inadequate for providing the necessary urban services. The reforms of the Tanzimat also left the kadi without a function, as both the mahalles and the guilds were absorbed into the Tanzimat system. When administrators became sal-
In 1831, the office of mimarbaşı was abolished and replaced by the ebniye-i hassa, or director of construction. After the Tanzimat movement, the office was attached to the Ministry of Commerce and Public Works and, until 1861 when these responsibilities were assumed by the municipality, was responsible for all construction and municipal building activities for the government. Toward the end of the century, city maps, which until then had been supplied by foreign military and civil engineers, were drawn up for the first time by Turkish officers and engineers. On them we can see some primitive efforts at urban planning, including the opening of new roads and widening of existing ones. The first planning codes were also promulgated—the building regulations (ebniye) of 1848, the regulations for building and roads (turluk ve ebniye) of 1864, and the building code of 1882. These codes included measures such as compulsory mapping of fire sites, authority to expropriate land for widening streets, permit requirements for construction and rules relating to street width and building height. Public approval was also required for the settlement of large parcels of undeveloped land, and land use regulations were laid down, such as that determining the amount of land that had to be left to the municipality for public facilities. Fees were also established for the use of city facilities. All these measures were introduced both to control the changes in the city and to regulate its expansion.

Responses to Change

The changes that occurred in the Ottoman cities between the sixteenth and the nineteenth century were changes typical of cities in a traditional society when it is exposed to the influences of Western capitalism. These influences were more far-reaching in the large port cities than in the interior, although some reflections of them eventually filtered to these as well. Each group in the new social structure had its own attitude toward these changes. The commercial class of non-Muslim peoples was fully integrated into the foreign-dominated commercial life and wholeheartedly welcomed both Western capital and Western ways. The small bureaucrats, the Muslim businessmen and the eşref, a group to which the municipal authorities were eventually added, were not entirely opposed to capitalism and Westernization, but frowned upon changes wrought in traditions and the foreign influence in the country. A third group, comprising the ulema, the craftsmen and the urban poor who had been squeezed out by Westernization and had nothing to gain from the new commercialism, rejected any change and sought a return to the past.

Eventually, the second and third groups would join together to drive out the first and establish a strictly Turkish bureaucracy and culture. When they emerged victorious, Istanbul, a port city symbolic of Western influence, was abandoned for the interior city of Ankara. The railroad, which had served only to connect the hinterland of each area to its own port city, was rebuilt to become a network that would draw the internal markets of the nation together. Industries were set up in the small Anatolian cities along the new railroad lines. Cultural centres, halk vezerleri, were established throughout the country to spread the new urban culture of the national bourgeoisie, and new laws relating to municipal buildings and roads were passed to create cities more in harmony with Turkish cultural norms. The preparation of town plans was made compulsory. All these efforts were at least partly effective, and their influence was felt up to the end of the Second World War. After the war, however, the national bourgeoisie became more open to the outside, and foreign influences and ideas could again enter the system, although this time they were not limited to changes in transportation and trade, but included production technology as well. The changes that followed were more rapid than those of the nineteenth century, though they still resulted in a dual social structure, part traditional and part modern, and were in other respects similar to those seen in the nineteenth century. Having taken an anti-imperialist stand and having gained national independence, Turkey is now back on the road to capitalism and is reviving the once-rejected spatial organization of the past. But this revival is not unmarked by the independence the country has since gained.
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Comments

Porter

Evidence of the problems involved in architectural transformation can be adduced from the experience of many of us in this room. What we consider the emerging contemporary architecture in the Islamic world has perhaps received too casual an analysis. The many shortcomings of this modern architecture have here been alluded to or talked about, including the ignoring of many traditional attitudes: toward the use of light, the relation of climate to buildings, the traditional uses of materials, the tradition of creating space in urban precincts, the intimate relationship to the paths of movement that much of Islamic architecture seems to have accomplished, and especially the use of traditional forms and elements. Of course, there are many others; these are merely symptoms of a larger concern.

The problems that underlie successful architectural transformation are viewed by some as primarily economic, particularly evident in the abuses to cities created by land speculation—for instance, the actions of large private or public corporations that destroy the environment—and which measures taken in the economic sphere will presumably solve. Others see the constraints as based upon societal pressures, in which redistribution of wealth is the sole alternative. Still others see them in terms of the way organizations work, and consider radical political reform the prerequisite for achieving a more satisfactory environment.

Others see problems emanating from social structure, in terms of the haves and the have-nots; they think that distinctions of an economic and social nature must be broken down in order to increase valid use of the environment. Some see change as part of an environmental critique, in which the innate value of the natural environment is paramount and the architectural environment, so often abusive to its users, is subordinate. For them, solutions through corrective action that would prevent depletion of resources and improve environmental conditions are required; any improvements in the environment that might be accomplished through architecture are secondary.

Problems may alternately be seen in terms of administration; the people defining the problems are the wrong people, or at least are insufficiently skilled. Ineptitude in administrative quarters is, of course, directly related to weaknesses in education. Others view the administrative system as inherently corrupting; those who manage society inevitably find themselves in situations where they must make choices that are disadvantageous to others. The solution to that problem is often found in a system of checks and balances that will work to the benefit of larger groups. Others see problems in terms of ideologies and motivations in society, and their solution is somewhat vague. Perhaps through education, more likely through inspiration, a transformation of ideologies that encourages people to choose their direction is certain to occur.

There is still an enormous variety of opinion about what the immediate mechanisms are that govern the relationship between these influences on the environment, and the form which the environment actually takes. These mechanisms include regulations and incentives, zoning or deed restrictions, environmental impact reviews and landmark legislation. All of these are familiar tools of government intervention in controlling development. Incentives to the public and private sectors to build differently are another means of changing the present system. Another one is to create and support intelligent and properly motivated clients. Other catalysts for environmental change are the great public and private builders. The evolution of environmental decision-making on the local level may be the answer which brings about lasting and improving environmental changes.

The Award can reinforce any of these strategies. It can recognize policies that bear fruit in a particular work. It can recognize special energies deservedly. In the course of this seminar it is important to begin, or in many cases to continue, thinking of the criteria that should govern this Award, so that we will be able to apply maximum leverage to the forces that improve the environment. The Award can and should be used strategically. It is your thinking that is going to help us understand the basic problems and mediating influences that really bring about effective environmental change, so that we can put the emphasis in just the right place.

Kuban

Most of our difficulties stem from the word "preservation," but it is the only word we have so we must use it. When I say "preservation," I do not mean "to preserve." I might better say that I am talking about the modern control of changes in the human environment. This covers mostly the potential for change and only partly actual preservation; if this is accepted, then everything is clarified. What is actually involved here is ideological argument. Ideology grows out of every human situation and controls people's behaviour and thinking; it is controlled by a dominant group with some political and economic assets.

When we say we have to control our environment and keep its identity separate from that of the West, in order to conserve our own culture, this is a desire. There is a motivation behind it; we want it. Why? We are thinking according to a certain ideology. If I say I must preserve this, I am speaking according to a personal ideology of what I wish to preserve. What is meant by conservation is the continuity of the human environment. If we accept this, then the solution to many problems is made simpler. I can then have a new building inside an old row of houses. If some part of the public or an elite corps want to save a town or part of a town, they create a public opinion favourable to that conservation and collect money to finance it; public opinion is thereby forced into acquiescence. If they cannot, time will destroy it. It is that simple. So you have to turn this wish into public consensus. If you simply assume that industry and industrial ideology is so dominant that everything must change, that everyone wants only new buildings, and
thinks the new ones are better, then you will not change anything. One good example of a positive venture is the preserved habitats of Safranbolu, where a full ninety percent of the residents are villagers who opted to live there.

Conservation does not deny the possibility of change; it does not necessarily even hinder it. But the process of change must be slowed from its present rate; it cannot continue to be the object of blind aspiration which has too often been the case. I am aware of too broad a criticism of the industrialization which is characteristic of modern life. Industrialization should be differentiated from industrial ideology; it is only the latter to which one may realistically and reasonably object. There are many ways to further the harmonious coexistence of old and new. An old building can take on a new function, be successfully revitalized if the human goals of conservation are kept consistently in mind. People cannot be forced to inhabit buildings which are no more than desiccated monuments.

Porter

I think it might be helpful to distinguish between an ideological and a political issue. What you have just described reflects an attitude which says that the results of local initiatives become the form of the future environment. Clearly, that is not an ideological position. Each group that wins, each position that ends up victorious in a local situation, obviously has an accompanying ideology. But if one took an ideological position toward preservation, it would imply taking a number of actions to bring about a certain objective, and not just relying on the local legal process. I know that is not what Professor Kuban meant to say, but it seems quite clearly implied in what he was just arguing.

Onsy

I have nothing to do with architecture; I am a banker. I have listened to this morning's presentations and I find the concrete aspects of the discussion relevant even to a layman like myself. To describe buildings in terms of wood or stone, old or modern, leads to the realization that when we talk about buildings we are talking about men. Men work and live and die in buildings, but architecture does not die, it endures.

If I can say that I have been creative with my life, or what grounds can I say so? As a banker, if I am to finance something it does not have to be creative; it must be useful. One can go to a wax museum in Paris or London where they try to reconstitute something or somebody so we can look at them, and these figures tell us something. This man has done so and so. The same is true of buildings. They represent something, possibly reflect a different life, a different way of thinking. It is this evocation of another time which is useful and potentially very rewarding.

We should preserve in order to relish history as something vital. Think of a house—a place to live, whether a palace or a very modest domicile. I can recreate it in my mind, and create something new. Only after really looking at something can we hope to do something more. So, there is ample rationale to preserve. To preserve what? If I am a user of a place which has been preserved, I would like to go there and know exactly what has been done. How the original users lived is very important. We must compare, because only by comparing can we perhaps derive something new. We should caution our future architects not to move too quickly. First see how people lived in another time, and maybe you will not be so eager to erect so many skyscrapers.

I think everyone present today would like to have lived half his life in his parents' house and half independently. As soon as security was to be found somewhere else we left our parents' homes, but from time to time we want to go back there. It is a matter of comfort, of security. We should initiate preservation efforts by looking at other things, and then create from our roots and our new experiences. We need this synthesis; this is preservation.

Williams

For part of the day I felt a bit uncertain about the drift of the discussion, but there seem to be two tendencies in evidence. One is to distinguish specifically Islamic qualities so we may see how they can be related to new development and new building in the Islamic tradition. Another is to consider the slightly different subject of conservation of existing areas which are not just Islamic, but represent the culture of that particular people. The non-Muslims among us can probably contribute more to this second topic.

Professor Kuban summarized several points that add up to aspects of the what and why of conservation. One is that the old environment reveals its use in its origin, and gives clues for the present and the future. The other is that within the Islamic tradition Islam emphasizes unity, and in a way conservation represents a unity of the past and the present for the future. I can also see conservation as a kind of holding policy. The technology that has been referred to is one that is very destructive to the human scale and human environment, and it may well be that in this era of industrialization we are actually in a very gross and primitive period.

We have been moving through levels of technology that one hopes will become more intimate, more human, in the future. It is very important that this present stage of technology not be allowed to destroy environments that can give us clues in the future. Another point mentioned this morning is the sense of continuity of human experience. If everything changes in our lives, we become totally disoriented. We have no past, so we cannot learn from it for the future, and we become psychologically unbalanced. Finally, a conservation area should not be looked at merely in terms of its historic significance; it should be linked with the encouragement and protection of all kinds of urban living environments that possess a human scale.

One of the qualities of these conservation areas we are looking at is that they do have a very human scale to which we can respond. That is somewhat separate from the
more formal qualities of the large mosques in classic tradition, but it is not so much the large mosques that we are worried about. They stand by themselves as their own reason for conservation. It is more the total urban fabric of living that is being threatened. I would like to see us moving toward defining worthwhile things to do and to look into the ways of doing them.

I wish Mr. Tekeli had gone on a bit in his description of the Ottoman period, up to the present administration of Turkey, to continue the lessons that seemed to be coming out of his discussion. A lot of the centralizing influences he mentions seem to be what is making it very difficult to actually do anything effective in conserving and encouraging proper use of these places. I think the situation probably will have quite a lot to tell us about the relationships between levels of government which have been derived from the past. This may be one reason why the old cities are constantly the objects of changing viewpoints and ideologies which do not allow them to remain as they are, expanding if necessary into their perimeters.

My final thought is that whatever the ideology is, it effects changes in human society in fundamental ways. But we cannot wait for long-term changes if we are to take action under the present conditions, concerned as we are about historic and traditional areas. We must see what can be done in the present circumstances, what influences can be brought to bear on policymakers and on the private market; what alliances can be formed with people who are living in these areas so that they may be involved in maintaining a satisfactory human environment. I would be very happy to hear further discussion on these problems.

**Correa**

In response to the suggested evolutionary model, we all know that life changes, it evolves, and nothing can be kept as it was. If we accept this fact, why do we acknowledge a need for conservation? Because we need the past to give meaning to the present and the future. It is a subjective evaluation, and I cannot understand this business of objective criteria. For heaven's sake, the past that speaks to you, you keep; the past that does not speak, you throw away. If all the horrible throwaways that have ruined Boston could be thrown away tomorrow, we would all celebrate. But a hundred years from now, when Americans have really learned to love their cars, they will judge that we threw out the best part of Boston. This is like the people who tore down old city walls. When they razed them it was because they were no longer needed for defense; they would have been mad to keep them. But now we can only wonder why they did it. I accept the fact, therefore, that my judgment is totally subjective, made on the basis of what I can use of the past.

It would be very useful for the Award if we could begin to identify what we as individuals, as Turks or Indians or Indonesians, can use of our past. We would then come to the real question, which is how to get our subjective selection of what is worthy of preservation preserved. I agree that this is an ideological question, but I think we have to go much further into it because the example given by Prof. Kuban is, if I may say so, a cop-out. He mentioned a village, Safranbolu, in which no one wants to live; indeed, people were actively leaving it. We have to discuss the issue of subjectivity in the context of cities in all parts of the world, where the dominant forces in society impose tremendous pressure for change. Only by discussing those areas will the real issues and the real choices emerge.

**Fathy**

I am answering the remark about change in Boston. Change is either for the better or for the worse. Many of the constants of the past that we ought to have respected have been altered. We have what we counterimposed, but have nothing of what has been changed or abolished completely. We must discriminate and study and not just talk about change in the abstract. The sort of change which is taking place in Egypt is all for the worse, because we are not analyzing the extant traditional architecture scientifically enough. We have been changing for the worse, whereas in Boston changes might be for the better. Let us just say that we have to recognize and discriminate between changes for the better and for the worse, and direct change toward the better.

**Porter**

I feel quite strongly that we are not here to develop an ideology around preservation. It seems to me what we are trying to do is to identify valid provisional ideologies out there in the Islamic world, that have somehow found their way into the architectural and social forms of the present. How do we do this? What factors do we consider? A group as international as this one cannot believe for a moment that we will leave this meeting with some ideology that can then be exported wholesale to the dominant majorities in all parts of the Islamic world.

Regardless of how close we think we are to whatever cultures with which we may identify, we are part of an international intelligentsia, and we have to recognize that fact. We are organized around certain ideas and traditions of education, and that we communicate effectively at all puts us in a category different from that of most people with whom we are trying to establish contact. I urge that we view ourselves as clever detectives, sensitive to what we discover in the world around us and able to use these opportunities for discovery to heighten our perceptions, rather than to heighten our convictions or our norms.

**Onsy**

I have some observations on the exposition of Professor Biddle. He mentioned that he was assisted by many students during the Winchester excavations, as many as 150 on a given day. This presents interesting and important financial ramifications, does it not? Using students is another way of funding a project. If you have a choice...
between hired labour and students, which are apt to produce more? The first are more experienced; the second have a greater feeling of doing something worthwhile. You would aver that the student solution is the most productive. I would then like to emphasize the importance of intellectual as opposed to materialistic funding. We should use our funding capabilities to encourage people who are researching information for others. It is a matter of mobilization of resources, and I am sure that each one of those student workers added something to the central reserves of information. This bank then becomes a resource to be drawn upon, and we should keep this in mind in our plans for the future.

Biddle

It is important to utilize students in excavations—it is the only way to transmit to the next generation a sense of how to do this sort of work. The necessary talents must be acquired on the ground, on the map, or on the drawing board. But you cannot expect to get even this relatively inexperienced labour force for nothing. To train people properly you have to have the proper resources, and archaeology today is enormously expensive. We want to mechanize the removal of earth from the excavation; we must have the proper back-up in the drawing-office survey, and so forth. There is certainly a professional level at which traditional training takes place. But along with the great benefit of training—Mr. Onsy’s “intellectual funding”—there is still great cost.

Tekeli

In discussing these preservation problems, we are clearly developing an ideology. But these ideologies are provisional; we must ask which is most in keeping with the dominant ideology, since surely we cannot develop a radical ideology for society. The first criterion we have to develop is how we can sell our provisional ideology to the dominant groups. We will first have to determine who the dominant groups are in the countries of the Third World. What are the characteristics of these dominant groups, and can we expect any positive rapport between them and our conservation ideology? The bourgeoisie in the West reacted unfavourably to the whole conservation idea; what differences in the social structure of the underdeveloped countries might make it more possible to sell conservation ideas to them? If we do not have a clear idea of these factors we can still develop a consistent framework for our conservation ideas, but we will be unable to sell them or implement them, except perhaps for a very short period or in specific instances. We have to ask these questions for all societies.

Porter

One deals with questions of methodology when one considers which questions to ask first. If one wished to examine the characteristics of the bourgeoisie in all Islamic societies, in many countries where we know them to exist and which have dominant Islamic populations, one would set himself quite a research task. We have chosen a different approach, which is certainly subject to criticism. This is to try to identify examples of environmental change which suggest that a powerful provisional ideology has indeed been sold to a dominant group. We are turning the question around. Prof. Tekeli’s comments are relevant because they suggest the range of questions which ought to be asked once one has identified an instance of environmental change which looks rather promising. But one can also turn these issues into a set of criteria to be satisfied before one comes to the conclusion that a project has been successful.

Onsy

I think that we can distinguish six steps necessary for effective planning, and these also signal the important problems in conservation. The six steps are: determining the object or goal of the effort (what), its rationale or justification (why), the location (where), the optimal time for the venture (when), the methodology of the efforts (ways) and an indication of responsibility for the action (who). These six “W’s” of preservation planning should be carefully deliberated before any action is taken.
Confrontations: Conservation Problems, Places and Projects

Fez: Toward the Rehabilitation of a Great City

Stefano Bianca

Historical Antecedents and the Current Situation

The city of Fez is regarded as one of the great traditional capital cities of the Arab world. Linked by its founder, Mulay Idrissi, to the Umayyad dynasty and to the family of the Prophet, heir to the culture of Andalusia and to the architecture of Granada, Fez left its mark on the cultural life of the Maghreb for centuries. It won renown as a centre of spiritual life through the widespread influence of its old and venerated Qarawiyin mosque–university. It was an important economic centre as well, located at the crossroads of the major north–south and east–west trade routes, the former joining the Sahara and black Africa to the Mediterranean, the latter forming the pilgrimage route across the Maghreb from the Atlantic coast to the Red Sea.

Long untouched by European influence, the city slowly began to open up to industrial civilization at the end of the nineteenth century. Some of its more prominent merchants established ties with Europe, particularly with England and its textile industry, and accumulated great fortunes. Several sumptuous palaces were built from the proceeds of this trade around the beginning of the twentieth century: their dimensions and decor betrayed a clear foreign influence. Their location on the outskirts of the city heralded the movement away from its centre, a movement that was to become even more pronounced later on.

Nevertheless, thanks to their prominent situation and to the magnificence of their gardens, these palaces number among the important features of the urban landscape of Fez.

With the coming of the Protectorate, Fez found itself confronted by the modern world. While Lyauty was aware of the intrinsic value of the medina, and did much not only to preserve isolated monuments but also to keep the whole structure intact, the establishment of a new city by the French colonials in itself produced a fatal split. The mere presence of a foreign power with habits so at odds with local custom led to a cultural rupture, the full impact of which is still obvious today.

While preserving the traditional aspect of the old city, the Protectorate robbed it of many of its functions, most significantly its political preeminence. The new authority pushed aside the old elite that had ruled over the country and moved the political centre from Fez to the seacoast, where two new cities burgeoned. Rabat became the capital, while Casablanca assumed the role of economic centre.

Curiously—one might even say significantly—indipendence from France in 1956 encouraged these tendencies. The departure of the foreign power brought no reaffirma-
tion of traditional values such as those embodied in the city of Fez. Instead, the immediate reaction was to appropriate the instruments of the previous power. The first generation of Moroccan civil servants had
been educated in France and fit easily into the mould of the preexisting structures. Rare were those who had the initiative to call the system into question. This was true for almost every sphere of activity, whether in the administration, in education, or in the economy. Consequently, although the descendants of the old elite of Fez regained their dominant position, they did so by emigrating to Rabat or to Casablanca and by adopting Western ways. Their native Fez, once the capital, was now only one regional centre among others, and even for that role it had a strong rival in the city of Meknès.

At the same time, Fez began to feel the pressure of rural immigration. The attraction of the city over the country, to say nothing of the desert, is a time-honoured phenomenon. In the fourteenth century Ibn Khaldun can be found observing that conquering tribes had a revitalizing function when they overran a town. But now both the motives and the magnitude of these population movements changed; no longer did some spiritual force or will to renew determine the move, but simply the hope for—or often the illusion of—an easier life.

This two-way movement— Exodus of the elite and influx of peasants—provoked profound changes in the social structure of the madina. The population inside the walls increased from approximately 100,000 inhabitants in 1920 to nearly 220,000 in recent years in an area of approximately 280 hectares (700 acres), leading to a population density that exceeds 1,000 inhabitants per hectare in certain quarters. Social segregation now threatens to turn the madina into a quarter for the poor and destitute, because living in the new areas of the city has become a symbol of success. Buildings are deteriorating as the old dwellings are sold or turned into roominghouses for immigrants unable to maintain them, further jeopardizing the architectural patrimony of the city.

Open green spaces inside the walls—gardens and orchards—are now being sold for building lots in a speculative and more or less underhanded way. Existing public facilities are not maintained because the municipality prefers to spend its revenues in the new areas of the city. Craftsmen are disappearing for lack of a sufficiently wealthy and discriminating clientele. Unemployment is very high, although how high is difficult to calculate with precision because of the informal business activities that play such a large role in the economic life of the madina.

Fez admittedly shares these problems with a number of other old capital cities of the Arab world, but the madina of Fez constitutes a rather special case because of its extraordinary site, the demographic preponderance of the old city over the new and the almost total survival of its ancient urban fabric. Its Maghrebi architecture stands out, with its entirely inward-focused buildings and its tightly woven urban texture, as well as by the fragile nature of the materials used for the decoration of its monuments.

Situated in a small valley surrounded by hills and mountains, the madina is separated by a few kilometres from the newer quarter built on the plain and a nearby hill. It would be difficult to account for the choice of this strategically vulnerable basin were it not for one clearly determining factor—the water supply and irrigation possibilities offered by the site. The Oued Fez, flowing from the plain of Sâa and fed by numerous streams throughout the year, is in a sense the heart of the city. Before it finally empties into the "conch" of the madina, it divides into six main branches which guarantee water for the city and irrigation for the orchards. As the urban nucleus began to expand, this hydraulic system grew more and more complex and came to include countless underground branches which fed a large number of distributors located at the corners of the narrow streets. These distributors directed the water flow into the courtyards of houses, where it gushed out of fountains before passing on to the kitchen and the bath through interior ducts. The original system for domestic uses and for irrigating gardens is coupled today with another system for drinking water. The few houses not supplied by the oued have their own wells. According to the detailed description of Fez made by Leo the African in the sixteenth century, there were six hundred

*Photo: S Bianca*
wells within the walls. This aspect of Fez as a city built on its water supply is further emphasized by hundreds of fountains, and by the mills and small workshops situated where the slopes level off so they can use the water from the oued as a source of energy. This ingenious system, upon which the vitality of the city has rested for centuries, also provides an outlet for waste. At a number of well determined points, the branches of the oued run off waste into the Oued Bukhrrab. This second river runs through the city at the bottom of the basin and separates it into two banks. One goes by the name of the Qayrawān Bank; the other is the Andalusian Bank, after the immigrants who sought refuge there in the tenth century. Because the number of inhabitants has almost tripled since 1900, and because the composition of the waste has changed, pollution of the oued has since become a major problem. A partial remedy was found by introducing a system of drains independent of the original network and by two main sewer collection points alongside the Oued Bukhrrab. This operation, however, has required the covering over of the southern part of the river, and it is clear that any further attempt at sanitation that follows purely technological criteria (for example, by covering over the branches of the oued) would further endanger an urban landscape of exceptional quality.

Fez now comprises a system of three more or less isolated urban entities, of which the old city—including the madina itself and Fez Djedid, the old residential area founded by the Merinids—with its 220,000 inhabitants is by far the most important, at least in numbers. The new city, Dar Debibagh, founded by the French, has only 70,000 inhabitants, and they are spread out over an area two or three times the size of the madina. About the same number live in the “nouvelle ville marocaine,” Ain Kadus, designed by Ecochard in the early 1950s according to the principles of the Charter of Athens and situated on a hill above the new city. In addition, approximately 45,000 people are now living as squatters on the outskirts of the city, in semi-rural douars (tent cities) and villages constructed in the quarries surrounding Fez. Although the often quite solid construction of these buildings does not allow us to talk about bidonvilles in the true sense of the word, we must recognize nevertheless that the lack of a water supply and infrastructure often makes life there unhealthy.

The new city, which Lyautey had wanted to keep separate from the madina—partly out of respect for the cultural patrimony, partly because of the limitations of the site—was built several kilometres away from the old one. This separation (which did not occur in Algiers, Tunis, Rabat or Cairo) contributed to the preservation of the madina, but it also resulted in a polarization that favoured the new city to the detriment of the madina. Located on the plain, the new city has a greater potential for expansion and, in addition, is equipped with an infrastructure, facilities and residential quarters set up by the French. These assets—enhanced by that certain prestige that is often attached to modern quarters—have encouraged the development of the new city, although they have also led to unchecked and often clearly speculative growth, with little coherence.

In the meantime, very little effort has been made to equip the old city with modern facilities or to adapt the facilities it has to its special structural needs. A few elementary and secondary schools have been built inside the walls, using up what were once open green spaces. Not only do they add to the crowding of the madina, but they are in no way integrated into their surroundings. Worst of all, many traditional facilities which originally had very important functions in the social order and which had created a certain climate of humanity, were neglected, abandoned, or transferred to the new city. They include the old religious university of the Qayrawāyyin Mosque as well as a number of public services and
government-sponsored activities, such as the new crafts centre.

The old city, despite its much larger population, is thus neglected in favour of the new, and the few investments that have been made there are too haphazard and out of harmony with the specific structure of the madina to reinforce it. As is so often the case, newly felt needs in the areas of health and education were confused with the architectural wrapping from the West that came with them. As a result, instead of rehabilitating existing structures or inventing forms that fill new needs and still respect the scale and typology of the existing fabric, alien forms have been introduced into the madina. There is little hope that the old city will be allowed to develop according to its own internal laws. The madina has ended up on the losing side in its confrontation with modern urban and cultural models that resulted from the separation of the old city and the new.

This is not to say that the madina is lacking in vitality; it remains by far the most important commercial centre of the urban complex. But its physical skeleton has fallen into an almost fatal state of neglect that elicits only despair and perplexity on the part of administrators and technicians. The problem for which a solution is needed is not simply the preservation of a small historical centre with a few markets and monuments, but rather the rehabilitation of an entire urban organism which shelters the majority of the population. The rehabilitation of the madina will require not only large-scale financial investment and technical expertise but, even more decisively, cooperation and commitment on the part of all levels of the population.

If these observations are valid for the madina in general, they are even more so when we come to the specific question of living conditions. The fate of the madina will depend greatly on how the existing legacy of buildings is maintained, to what extent they will be renovated and adapted to the social and economic conditions of the inhabitants, rather than replaced by European-style constructions that can hardly satisfy the population's real needs. In the long run, this means finding forms of habitat that correspond to the characteristic texture and typology of the madina and at the same time offer solutions to current problems.

In addition to its landscape and its relationship to the new city, old Fez is distinguished from numerous other Eastern capitals by the totally preserved state of its urban fabric. Its Andalssian art and architecture, coupled with the traditions of the master craftsmen from the Saharan regions, constitute a kind of model of Muslim urbanism. The structuring principles of the Muslim city are rigorously maintained—the separation between public and private domain, the interaction of public space and the volumetric articulation of space. Houses are grouped in residential units, such as the derb and the haouma, which are clearly detached from the main pedestrian arteries leading from the gate to the central mosque. The large sâgs (markets) rely on these arteries for their vitality; positioned slightly behind them is a series of funduqs (warehouses) and specialized markets. Despite this pronounced functional differentiation, the city forms an extremely coherent volumetric unity owing to the morphological affinities of its architectural elements. The structures used for habitation do not differ markedly from the other buildings; what sets them apart is the way they are linked to the network of traffic.

The almost total inward focus of the buildings makes it easy to join them together, and the resulting combinations form articulate units on several levels. Continuity is thus seen in the texture of the whole area rather than in the contours of individual buildings. Monuments, such as mosques and madrasas, hardly stand out as isolated buildings; rather, they dissolve into an architectural mass which forms a kind of vast collective dwelling. As a result, the monuments cannot be dissociated from their urban context. This feature is characteristic of many Islamic cities, but it is in Fez that the principle finds its most significant realization. The entire fabric, and not the individual monuments—beautiful as they might be—must be the object of preservation.

The texture of the madina of Fez shows little trace of the deliberate planning that is observed in imperial cities and residences founded by a ruling power. Its layout bears no resemblance to the geometric city plan of Isfahan under the Safavids, for example. This is not to say that geometry is absent, but it is confined to each individual spatial entity, especially interior courtyards and their decor; the contours reflect the terrain, the pedestrian flow, or simple chance. The fact that the configuration of the fabric is not at all chaotic, despite the absence of an imposed plan, is attributable to the implicit forces of the social order and to the Islamic tradition that functioned to bring spontaneous expression into harmony with the whole. The unity that emerges from particular variations on certain collective forms is obvious—one has only to look at an aerial photograph to see it. The fabric appears as a crystallization of the internal laws that regulate society, transposed into architectural patterns. This evocative, signifying, even symbolic force is one of the greatest qualities of the urban fabric of Fez. Because of it, Fez can be regarded as a "model" Muslim city.

Aside from these qualitative values, Fez is also distinguished by the scale of its traditional fabric. Neither Damascus, nor Cairo, nor Isfahan, nor Tunis was able to preserve such a sense of unification and completeness over such a large area. Cairo, for example, suffered relatively early from the efforts to open up access into the old city. The nineteenth-century directives of the Khedive Ismail, a contemporary and admirer of Baron Haussmann, spared no expense in efforts to make the city "presentable" to the Europeans invited for the festivities marking the opening of the Suez Canal. More recently other cities, including Isfahan, Damascus and Smyrna have been disfigured by large axes that penetrate into the heart of the city, cutting through their internal circuits. The motives behind these intrusions are always the same: to "clean up" the madina; to eliminate those elements of its compact structure which create obstacles to the burgeoning of a modern city; to facilitate control by a new administration which is often out of touch with social reality and which tends to paralyze the mechanisms of tradition.
Similar attempts have not been lacking in Fez. In the 1950s, Michel Ecochard, who was later to be put in charge of planning the modernization of Damascus, proposed a plan to cover the Oued Bukharrab and to build a paved road on it that would cut across the madina. According to his plan, another wide access road was to branch off, cutting through the centre of the left bank to connect the Bukharrab to the gate of Ain Azlittane. Only by lucky chance did this project not materialize. Lack of money and technical difficulties delayed it, and provided an opportunity to reconsider the consequences and benefit from the disastrous experiences of cities elsewhere.

The oued was finally partially covered around 1968, but only in its southern part; the connecting bridges that connect the two banks. The linear centre that cuts across the madina from east to west (from Bab Ftoh to Bab Bujeleub), and which is in essence linked to the pedestrian flow, was not affected. However, the dimensions of the oued were enlarged on both sides, especially where the cover ended, and a parking area was made by demolishing a number of houses. The problem is thus one of a partial breach, where the transportation system of the new city intrudes upon the madina. Nothing has been done as yet to mitigate the brutal clash between two urban systems and their respective scales, nor to exploit the potential this “opening up” might have for the madina if it were well planned.

Just as the fabric of Fez has remained intact compared with that of many other Muslim cities, so have the craft-related structures. In fact, the two are reciprocally connected, because traditional master craftsmen depend upon a certain kind of environment, the physical skeleton of which results from the presence. Even though the craft trades still furnish the great majority of jobs in the madina, in several areas production methods are now in the process of changing. The traditional craft trades in the strict sense have no problem of lessened demand (on the contrary, the strong export demand for certain handcrafted articles cannot even be met); rather, their problems are those of maintaining traditional standards of quality. On the other hand, a new kind of artisan has emerged; his techniques are more mechanized, and he is inclined toward the manufacture of products designed to satisfy new, more “modern” needs. The result is the disjunction of the ancient corporate structures, which forces the artisans to turn more and more to machine-made products for wholesalers and bazaar owners who have ready capital. It is already clear that some crafts are declining; others have managed to survive by catering to the demands of a more discriminating clientele and to the requirements of restoration projects. Still others are turning to partially mechanized mass-production methods. Most of the traditional brass and leather craftsmen whose workshops are in a period of full expansion have taken the latter course. Their biggest problem is that their workshops are often in unhealthy or unsound locations—ruins, basements, or former stables—or in spaces that morphologically ought to be used for housing.

The Establishment of a Master Plan

The importance of the architectural legacy of Fez has not escaped the attention of the
Moroccan authorities, nor has it lacked international concern. In 1972 UNESCO placed at the disposal of the government an expert charged with making a preliminary evaluation of the legacy to be preserved. Even during this survey, the need to enlarge the project became apparent. While taking inventory of the cultural patrimony, it became more and more obvious that the problem of Fez was not simply one of restoring a few individual monuments, but of rehabilitating the entire madina and protecting its structure. The problems arising from the old city's overpopulation, from the changes in society and from competition with the new city could find no valid solution except within the context of a more comprehensive plan.

A master plan was decided upon which would take the entire complex into consideration, while giving particular attention to the old city and its specific character. To draw it up, a multidisciplinary team was appointed, which included technicians put at the disposal of the project by the Ministry of Urban Planning and a group of international experts recruited by UNESCO and UNOTC.

Many problems arose from the constitution and coordination of a team of fifteen technicians meeting ad hoc and representing diverse motives and points of view. In addition, the composition of the team corresponded little to the initial plan. From the beginning several architects and urban planners were included, some with specialized knowledge of Muslim cities. But other important disciplines were hardly represented at all, and lacking altogether were economists, sociologists and legal experts. Although provision had been made for their participation, either their recruitment or their joining a permanent team proved impossible. The only experienced economist to participate at all did not join the project until four months before its end. As a result, some of the analyses and proposals concerning institutional means for preserving the architectural legacy were not sufficiently precise. Another handicap that was to hamper the team's appointed task was the lack of skilled supporting personnel, especially draftsmen, upon whom the national and international technical experts could rely.

Despite the lack of homogeneity and other unfavourable circumstances, the team managed to elaborate directives for the development of the whole town between February 1976 and February 1978. This document was submitted to the authorities in May 1978 and, once approved, will provide guidelines for all decisions having to do with the development of the city. Although these directives will not have legal force, they will serve as a basis for the subsequent elaboration of planning schemes and, at that level, can be challenged by a third party.

After the studies were completed, the technicians from the Fez Regional Delegation of the Ministry of Urban Planning took charge of implementing the Master Plan, especially the schemes for expanding the various quarters. Within this department, an office was set up to deal more exclusively with the madina. To refine the existing analyses, to broaden knowledge about its fabric and to design projects for its rehabilitation.

This office will be turned in the near future into a workshop for the preservation of the madina attached directly to the Ministry of the Interior; this gives an indication of the weight and importance being given to the madina, not only as an integral part of Fez, but as a part of the national patrimony. Establishing the workshop will allow more direct action and more efficient coordination of the interventions into the various sectors, and facilitate the development of the international campaign that UNESCO has proposed to launch for the benefit of Fez's preservation. This programme is still at the planning stage; its realization awaits the establishment and the recommendations of the workshop.
The Principal Options of the Master Plan

Among the most important decisions to be made are those concerning the position of the madina within the city. It was proposed that the development of the new city toward the southwest be stopped, so as to avoid exacerbating any further the marginal position of the old city relative to the newer quarter. To accomplish this, a new area extending toward the east, downstream from the madina, was planned. This area of about 200 hectares (500 acres) is thought to be sufficient to accommodate the continual rural migration which until now has had to be absorbed entirely by the madina. It is hoped that the expanded housing capacity will also help to alleviate the density of population in the old city. This is particularly important because any attempt at rehabilitating the madina will have little chance for success if things remain as they are. The success of the whole set of measures designed for the reconstruction of the madina depends on regaining some demographic balance.

The location of the new eastern quarter was chosen to constitute a sort of continuation of the madina, without at the same time affecting the surrounding landscape. The slopes of the natural amphitheatre that complete the crystalline structure of the madina will remain unenumerated. Only in a small valley, perpendicular to the slopes and acting as a prolongation of the cover over the Bukhrareb, will the Plan place a number of collective facilities which because of their size cannot be integrated into the fabric of the madina itself.

Both the topography and the historical development of Fez have created a city with a number of centres and subcentres. Basic activities, particularly the markets, follow the line from east to west which has always been the city's axis of growth (consider the establishment in succession of Fez el-Bali, Fez Djedid and the new city). Direct correlation with the constant and crowded pedestrian flow is to be found all along the axis. One of the principal objectives of the Master Plan is thus to draw the various parts of the city closer together with a more efficient system of public transportation, and in this way to lessen the effects of spatial, and as a result also social, segregation. The application of this principle must take into account the structural differences between the urban entities. It is easy to make public transportation axes coincide with pedestrian axes in the new city, which was conceived with automobiles in mind, it is not so easy in the madina, where the need is to preserve the exclusiveness of the pedestrian system, whose internal corridors are such an essential element of its morphology.
The plan is to restrict motor-vehicle traffic, especially public transportation servicing the medina, to its periphery, allowing only a few routes to penetrate into the interior up to boundaries formed by structures of historical significance. These several access routes will balance out among themselves and, through a well-regulated and punctual distribution of the masses, will soften the impact made by motor-vehicle traffic upon the delicate fabric of the medina. Each will end in a cul-de-sac, with a built-in loading and unloading point that will facilitate the transference of the pedestrian flow and transport merchandise from one system to the other. In a way the system draws its inspiration from the form and function of the old gates of the medina. Each of the loading and unloading points will have to be equipped with one or more fundugs which will serve as areas for the unloading and subsequent distribution of merchandise. Transport within the medina will continue to be by donkey, since this is the only system compatible with the traditional network.

The problem of the accessibility of the medina brings us back to the question of the cover over the Oued Bukhrebe. What to do with this opening and how to reconcile the breach between the north-south axis (axis of potential development) and the east-west axis (traditional structuring axis) have been two of the major concerns of the Master Plan. The envisaged solution fits into the general concept we have just outlined: the plan to continue the cover has been shelved so as not to endanger the linear centre which crosses through and joins the two banks from east to west. Easy access from south and north will be used to gain optimal services for the traditional centre by planning the installation of the loading-unloading points, by giving priority to public transportation and by moving back the access area allotted to private vehicles.

The space gained from the rearrangement of the R'cif square, where the transportation lines end, will be used for a lateral extension of the centre. The constraints in this area are less severe than in the traditional fabric around the Qarawayyin Mosque. It will be possible here to install facilities and businesses supplies the centre that need not be truly compatible with the traditional morphology. So that it will not compete with the traditional centre, this extension has been purposely restricted to complementary functions; its thrust southward has been strictly limited, avoiding the danger of development that could be detrimental to the east-west axis. The object of this operation is to support the continuity of the traditional axis.

As far as commercial activities are concerned, the medina has never lost its function as principal centre for the whole city—even people living in the new city often go there to shop. Modern articles are indeed to be found there, and at cheaper prices. Merchants and bazaar owners often violate the traditional order of the sügs by occupying the most prestigious and frequented spots in the centre, turning the old houses there into storerooms or workshops. Meanwhile, large numbers of old, easily accessible fundugs are abandoned and left to fall into ruin, owing largely to the decline of the traditional corporations and trade guilds and to the changes that have come about in the crafts.

To solve these problems, a total reorganization of commercial activity and of the trade
Gate or in the quarter's new eastern extension. This would make it possible at one and the same time to remove production from the madina, to reestablish the balance between the built environment and its contents and to preserve the distinction between residential quarters and central public space so important for the functioning of a Muslim city. Such a move would also have the advantage of making the eastern extension a more or less autonomous quarter; job-producing enterprises could form an integral part of the area from the very beginning, and prevent the development of a satellite or dormitory city overly dependent upon the madina.

The Master Plan for the rehabilitation of the architectural legacy of the madina satisfies two closely related requirements. It preserves a historical and architectural patrimony of great value, and it maintains buildings which, if abandoned, would confront the government with insurmountable problems: to construct new dwellings for a population of 200,000 on top of the current deficit would be beyond the technical and financial capacities of the government. Moreover, one wonders whether the results would be an improvement over what the madina already provides even in its current state of deterioration, and whether the uprooting of its former inhabitants would not cause all sorts of other problems whose nature cannot even be anticipated.

One has to improve living standards within the existing texture by introducing a minimum of comfort and hygiene, by turning some structures into multi-family dwellings associations has been proposed, with the special aim of maintaining the most characteristic—but also economically the weakest—trades in their traditional place near the two great sanctuaries. A careful rehabilitation of the old network of funduqs is envisaged that will allow the relocation of trades, and satisfy the brass and leather craftsmen's need for more space. The endangered crafts will particularly benefit from this reorganization; now scattered and disorganized, they run the risk of disappearing completely.

The progressive mechanization of a few branches of production and the need for more space generated by the manufacturing workshops have also not been ignored. Because they are incompatible with the traditional morphology, however, their transfer out of the historical area is necessary. The best solution appears to be to relocate them, either near the Bab Fitouh

**KEY:**
- Traditional artisans
- Copper factories
- Improper
- Clothing
- Food
- Snack bar
- Jewelers
- Houseware–hardware

**Madina of Fez, central bazaar network**

*Source: Master Plan of the City of Fez, 1978*
and, where necessary, by replacing those buildings or blocks which have fallen into ruin with new structures designed according to traditional principles of spatial arrangement. This task is enormous, when one considers the size of the madina; it will certainly not be finished overnight, nor will it be resolved by government action alone. Its success will ultimately depend largely upon the involvement of everyone concerned. The most important thing, then, is to encourage initiative, cooperation and a sense of responsibility among owners and residents, and put them into a position where they assume the responsibility of improving their habitat themselves. The goal will be to improve the standard of living in the madina (infrastructures, collective facilities, public transportation, public investments and cultural activities). To achieve it we must develop models which, once worked out, can be repeated over again.

**KEY:**
- Unoccupied house
- House in good condition
- House to be rehabilitated: partial renovation
- House to be rehabilitated: major renovation
- House of "monumental" interest

*Madina of Fez: pilot rehabilitation project*
*Source: Master Plan of the City of Fez, 1978*

The technical aspects of these pilot operations seem relatively easy to resolve. Standards of acceptability for dwellings can be instituted that follow traditional techniques of upkeep, and show respect for the traditional setting while introducing modern features. Solutions to institutional, economic and legal problems will probably be more difficult to find, and they are hardly touched upon in the Master Plan. The financial mechanisms (tax exemption, long-term credit, bonuses), the legal aspects (insurance, building standards, easements) and propositions concerning collective management (cooperatives, common property) still remain to be defined in conjunction with the authorities. It is hoped that this effort will culminate in a pilot project, supported if necessary by an international agency such as the World Bank.

Although most of the mosques of Fez are relatively well maintained thanks to the support of the Habus (vakf), the same cannot be said for adjunct facilities such as ablution rooms, baths, Koran schools (m’sid) and madrasas. These latter, especially those dating from the Merinid period, number among the principal monuments, but they lost their function when the university moved to the new city, and this has limited the attraction and influence of the old main centre surrounding the Qayrawaniyin mosque-university. One of the central ideas of the Master Plan is to restore the traditional facilities that were linked to the mosques in the past and provide them with appropriate functions and annexed buildings.

As is the case with most Muslim cities, Fez has always been affected by the symbiotic
relationship between the mosque and the marketplace, the mosque and the baths, and the mosque and the schools. It is this overlapping of different aspects of public life that gives the centre its strength and that now needs to be revived through the use of primary schools, health centres and community centres for youth and for women. These functions correspond to new needs, and can easily be integrated into the urban fabric. They will reaffirm the existing centres and sub-centres which have always contributed to the makeup of the city and to articulating social life in the quarters. Integration implies either that they will make use of existing space (for example, a youth centre in what was once a palace), or that ruins will give way to new construction (primary schools, in particular) that draws its inspiration from the scale and typology of the madina, to avoid rupturing the urban fabric.

Some large-scale facilities such as secondary schools, lycées and hospitals cannot be integrated easily into the fabric of the madina because of their size. Since their relationship to the daily life of the quarter is only partial, and since they will benefit from being accessible by motor vehicle, it was decided to place them either on the periphery or completely outside the madina. Here, as elsewhere, the object was not simply to satisfy needs—important as they may be—but to weigh those needs against the overall picture, and find a reasonable solution that would take into account all the problems faced by the old city. It will make each individual solution (for example, deciding where to build a primary school) more difficult, but it will also help us to avoid solutions that restrict the possibilities for resolving several problems at once. In the past, solving only isolated problems has often done more harm than good: the total situation was not taken into consideration and, as a result, more new problems were created than old ones resolved.

As for the revival and rehabilitation projects proposed by the Master Plan, they deal in particular with the *fundaqs* and madrasas around the Qarawiyyin Mosque, some of which are in a very bad state, and a few in danger of collapse. The basic idea was to bring back to this traditional centre some of the cultural functions upon which the identity of Fez has rested, and to make more prominent those values representative of Arab Muslim culture.

The establishment of a national or international Islamic Studies Centre is being contemplated, in order to bring academic life back to the Qarawiyyin Mosque by organizing courses in traditional subjects. This centre, located opposite the mosque, would have at its disposal a new building complex which could be connected to the Sherrafi madrasa, the largest in Fez. Once the madrasa is restored, its cells could be used as small lodgings. Facilities in rehabilitated houses or *fundaqs* would provide

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*Source. Master Plan of the City of Fez, 1978*
students or interested visitors with accommodations in the centre of the madina. At present, the accommodation capacity of the madina, aside from a few small hotels near the gates, is practically nil.

Another proposed addition to this complex is an arts and crafts centre in the Sherafin madrasa, in the heart of the craftsmen's quarter behind the Qarawiyyin Mosque. A new generation of master craftsmen could be trained there to maintain traditional standards of quality, and it could also be used for exhibitions and the promotion of crafts in general.

Conclusions

The rehabilitation of an urban ensemble as important as the madina of Fez requires a concerted and continual effort on several levels. At the level of planning it is first of all a question of preventing the congestion from getting any worse, by imposing restrictive measures (such as prohibiting any new building within the walls) and by offering viable alternatives. This is why new quarters near the madina, accessible to people who would otherwise settle in the old city, are needed. Stopping the process of slum development in the madina depends upon the availability of land and lodgings.
that reflect the needs of the population, their style of life, their economic possibilities and their specific resources. If the illegal spontaneous constructions and collective communes around Fez are any indication, it is obvious that the real models for the majority of the population are still the structures and living patterns of the madina and not those of the new city. These seem rather to serve the ephemeral need for prestige of a superficially Westernized upper class.

It is a question of equalizing and of counterbalancing the divisions between the various urban entities, without going so far as to destroy their individual characters. Although urban planning cannot improve living conditions in any direct way, it does have indirect ways of affecting them. The arrangement of infrastructure, the cleaning up of the water system, the improvement of inter-urban connections by public transportation, the planned arrangement of collective facilities and similar measures will put the madina on a more equal footing with the newer quarters. Without these improvements, there is little chance that the madina will once again become attractive enough to retain its present more prosperous inhabitants or to attract new ones, and their presence is essential for the maintenance of its economic equilibrium.

At the level of urbanism and architecture, it is important to transpose the planners' options into forms compatible with the structure and morphology of the madina. It is at this concrete level that the dual imperatives of innovation and of preservation must be reconciled. The inherent conflicts between them must be resolved step by step, with constant reference to the inhabitants and to the architectural framework. The needs of both must be integrated to achieve an optimal balance among a multitude of sometimes contradictory demands. What must be avoided at all costs is disproportionate attention to isolated objectives that would compromise the existence of the totality; the maintenance of the whole is, after all, the only raison d'être for any urban intervention. For example, satisfying demands for access by all private vehicles would require the total dismantling of the madina and would therefore be nonsensical. Of necessity, then, exchanges and trade-offs must be made between the different values of the scale. The choice that takes the whole range into account will make it possible to guarantee the individual character of each urban entity.

As for preserving historical monuments, all notions of a museum-city or of dissociating the monuments from their contextual fabric must be discarded. The historical fabric is a living reality to be protected. But the plan does not exclude evolution, provided the development takes into account the original texture and morphology of the city.

Therefore, conservation is not a question of "modernizing" the madina of Fez while carefully sparing a few isolated monuments. This will probably be the fate of certain cities like old Cairo, where the disintegration of the urban fabric is too far advanced to be reversed. Nor is it a question of mumifying an urban body at a given stage in its history, nor even of an archeological reconstitution of a past state. It is the heart and soul of the body that must be revitalized and protected against the impact of temporal circumstances that, either through neglect or deliberate destruction, suppress expressions of authenticity. These are perhaps more fragile—but also more deeply rooted—in the collectivity.

The revitalization of the internal forces and mechanisms of the city involves the search for an architectural vocabulary that will make it possible to regain and perpetuate the essential structures of the urban fabric, while integrating supplementary functions that fulfill new needs. The opportunity for such an organic development exists, perhaps more prominently in Fez than in many other Muslim cities. This is why we must take care to avoid the dichotomy between "modern" and "traditional," which is a largely Western point of view. In Europe, the break between the past and the present is infinitely more pronounced than in the Muslim world. It is based on over a century of technocratic development coupled with the disappearance of traditional construction methods—to say nothing of a style of life that can hardly be compared to that of the majority of the Moroccan population. To modernize in the Western sense would therefore be to impose alien structures entirely devoid of relevance, when it would suffice to revise and develop the existing setting. To preserve in the Western sense would mean, in the extreme, to inflict an archeological approach upon a reality that is still living and capable of innovation. Neither approach corresponds to the real interests of a city like Fez.

To maintain the living tradition and to prove that these values are in some way perennial, and therefore still vigorous, were constant preoccupations of the Master Plan team, especially its Moroccan members. Not all the experts who participated in the operation were able to subscribe entirely to this opinion, either because they misjudged the realities and the national aspirations of the Moroccans or because of differing ideological viewpoints. However, most felt it a privilege to participate in a process that amounted to a search for cultural identity through urban planning. Even above and beyond the problems of Fez, this search made it possible to conceive alternatives to the ideas of the 1950s and 1960s, in much the same way as those ideas have been called into question in Europe in recent years.

As for the Moroccan architects who will continue and implement the studies, their views and concepts have become much more independent of the European models that so influenced the preceding generation. That generation had been too anxious to appropriate, along with the instruments of power, the European style of life which had been denied them during the period of the Protectorate. The current reaction against an ill-considered Westernization is becoming more apparent every day, and not only in Fez. It is a promising sign for the future of the madina. It can make clear to all that the Muslim city model has its place in the modern world, and enable us to find new ways to link tradition to future development.
Of the five pillars of Islam, the hajj is the only one which is tied to a very specific time and place. While Muslims throughout the world express their belief in God and prayer and give alms and fast wherever they live, they can only perform the hajj at the sacred places of Mecca, Mina and Arafat, and then only during the eighth and the fourteenth days of the month of pilgrimage (Dhu’l Hijja).

Before entering Mecca, usually through the airports and seaports of Jiddah, pilgrims enter into the state of ihram, donning special seamless white garments. They are forbidden to hunt, argue, cut their hair or nails or engage in sexual relations. Arriving in Mecca, they proceed to the Sacred Mosque, the Haram al-Sharif, to perform the greeting circumabulation of the Ka’aba, the tawaf, seven times. They then perform the reenactment of Hagar’s search for water, the sa’i, making seven trips between the hills of Safa and Marwah. The two hills and the road between them have now been enclosed in a long, wide gallery, tangential to the Haram. On completing these rituals, they go to drink from the Well of Zamzam also located within the Haram. These rites can be performed at any time during the year or during the seventy-day pilgrimage season.

To make the hajj valid, on the eighth day of the Dhu’l Hijja all pilgrims must move to al-Mina, a village four miles east of Mecca. There they rest and ready themselves for the most crucial part of the pilgrimage, which takes place on the Plain of Arafat eight miles to the east. The pilgrims travel to Arafat in the morning of the ninth day for the “standing” (wuqaf) from noon to sunset, then pray near the site of Muhammad’s farewell sermon. At sundown they return to a place between Mina and Arafat, called Muzdalifah, to spend the night. Returning to Mina for three days, pilgrims stone three pillars representing the devil. The sacrifice of animals and a farewell tawaf completes the pilgrimage. Many pilgrims make the additional trip to Medina, to visit the Prophet’s mosque.

The holy cities of Mecca and Medina are inextricably linked with the hajj. They exist to service the pilgrims, providing housing

Mecca: aerial view of the Haram al-Sharif
Photo: Abdelaziz Frikha. Reproduced courtesy of Sud Editions

Mina the “toboggan” has doubled the rate of circulation by pilgrims to the site
Photo: Abdelaziz Frikha. Reproduced courtesy of Sud Editions
and food as well as guides. The sevenfold increase of pilgrims from 1950 to the present—pilgrims now total about two million per year—has had a staggering impact on the two towns. The old urban fabric was noted for its three- to five-story buildings with overhanging shuttered balconies lining intimate shaded streets. These have been losing ground very quickly to multi-storied apartment houses, large parking lots, highways with multiple interchanges, all built and rebuilt to accommodate the ever-increasing flow of pilgrims. Efforts were made to resolve the major logistic problems as quickly and as efficiently as possible, using the newest available technology.

The impact of these multitudes on the holy places of the hajj has also been considerable. The Haram has had to be extended and rebuilt, with an underground approach to the Well of Zamzam and a double-storied gallery to accommodate all who want to perform the rituals linked with the Ka‘aba and the sa‘y. The two million pilgrims all proceeding simultaneously to Mina and Arafat and back have been accommodated with vast tent cities, complete with sanitary facilities and highways. Enormous efforts have been expended to provide a safe pilgrimage for all.

Yet in the process of introducing all these new amenities, something of the spirit of the pilgrimage has been overwhelmed. The introduction of motorized transport and highways along the Mina and Arafat routes detracts from the ritual nature of the pilgrims' movement. All these changes have taken place very quickly, but the hajj, as the main event in every Muslim's life, deserves further consideration and study so that changes and additions of a purely technical nature do not contravene and impede its spirituality.
The walled city of Lahore is being conserved as part of a project known as the Lahore Urban Development and Traffic Study, which is being financed by a World Bank loan and carried out by the Lahore Development Authority. The walled city is in the northeastern quarter of Lahore, along the ancient route from Kabul to Delhi on the left bank of the Ravi River; the area encompasses roughly one square mile. Settlement dates back some 1,600 years, a thousand of which have a known history. Roughly oval in shape, the walled city was until 1859 enclosed by a moat and double walls, inside which were two mounds, a citadel and the city. Narrow twisting streets were faced on either side by three- and four-story burned brick and timber houses crowded closely together. Today the area is still home for about 500,000 people, a third of them unskilled or semiskilled labourers, a third skilled labourers or small businessmen, a third white-collar workers, entrepreneurs and professionals. Its economy is based largely on small-scale manufacturing and service industries; there is some commerce and trade.

The walled city has been described as a traditional preindustrial Islamic city. The current conservation project clearly recognizes the need to respect these historical and cultural characteristics of both the city in general and of the innumerable buildings within it. Since we are dealing with a living city and not with an uninhabited monument, the project raises a number of problems related to adaptive reuse. At this stage they can only be presented as questions, but as the project progresses we hope to be able to find at least some of the answers.

The first question is, of course, what should and should not be conserved? Presumably any object of historical, architectural or cultural value merits conservation. In the case of Lahore’s walled city, the whole area falls into this category. The economic life and social organization that gave rise to its original form not only survive to this day, but continue to dominate its urban life.

The next question can be phrased in a variety of ways: should we conserve the city’s past or its present form? If we opt for its past form, which era should we choose?

Regardless of which one is chosen, how can we conserve its past form without turning it into a museum and destroying its present urban life? In other words, how does one preserve a past while still ensuring the continued evolution, development, even transformation of the city in future years?

The walled city is rapidly decaying. It is greatly overpopulated for its size and capacities. Its drains and streets are clogged; its refuse collects far faster than it can be disposed of, its very fabric is crumbling and collapsing. But these are merely some of the symptoms of a more general decay. Is the decay a result of incompatibility with the physical environment, or of the inability of a preindustrial economy to survive in a postindustrial world? The city consumes a host of postindustrial goods and services—from transistor radios to World Bank projects—but it must pay for them with preindustrial commodities. In this exchange it is caught in a predicament comparable to a man who gets the iron lung he needs to survive, but has to pedal to keep it going. Lahore is
Timur and its rehabilitation under the Lodhi Pathans, and yet again after the pillage and burning by Babur, when it was rebuilt by the Mughals and continued under the domination of Nādir Shāh Durrānī. Whether the city that survived a half-century of Sikh domination followed by nearly a hundred years of the British Raj can be called an Islamic city or not is an academic question. It is, in any case, once again in an area and period of Muslim domination. For that reason alone, the city that has developed since 1947 must surely qualify as Islamic.

As for the future conservation of Lahore's walled city, if we talk only about the Islamic city then by conservation we mean only the preservation of evidence for Muslim dominance in the area. If by conservation we mean the conservation of an entire formal tradition, however, then we still have to consider how this can best be achieved.

hooked to a space-age technology, but its colour television sets are delivered in bullock carts.

How do we conserve an Islamic city? If we accept the definition of the Islamic city as one developed in an area and period of Muslim dominance which still retains the characteristics of that development, then we must conclude that Lahore in the three centuries (eleventh through thirteenth) under the Turkish sultanate was an Islamic city, until its devastation by Mongols. It was again an Islamic city after its subjugation by

Lahore, Pakistan. A view over the Walled City shows its dense texture
Photo: K Mumtaz

Walled City, Lahore  View onto a typical thoroughfare
Photo: K Mumtaz
While architects and planners deliberate on the problems of conservation and adaptive reuse by design, a process of spontaneous conservation also occurs that merits our attention. In the popular mind a vocabulary of architectural forms exists which it reproduces spontaneously, even when employing new means and catering to new requirements. Thus, while new techniques and materials are moulded in the dyes and patterns of a previous generation, the forms themselves evolve and adapt over time, however imperceptibly, in response to new conditions. Successive generations carry the imprint of the past. A formal tradition is inherited as a continuity established by the very process of regenerative growth and change.
Like many capitals of the developing world, Jakarta has grown very rapidly in a very short time, like many, it must come to grips with the major changes that such a growth brings to a city. Present-day Jakarta has enveloped not only surrounding villages but every previous urban settlement in the area. The old town of Jayakarta, founded in 1527, was a trading outpost known to the Portuguese in their heyday of trade as Sunda Kelapa. In 1619 it was destroyed and the Dutch colonial outpost of Batavia was built on the site. The colonial seventeenth and eighteenth century town subsequently gave way to a new centre, Weltevreden, built next to the old during the Napoleonic era. After World War II, at the time of independence, the Jakarta environs had between one and two million inhabitants. Presently the immediate area has six and the greater metropolitan area an additional three.

The Master Plan for Jakarta, completed in 1965, planned a constant growth for the period 1965–1985. But as early as 1971 it became evident that insufficient provision had been made in the Master Plan for the preservation and conservation of standing buildings, and that the rate of new construction threatened to replace entire residential quarters with high-rises and multi-lane highways. While some replacement was inevitable, a group within the city government feared that continued building activity along the lines suggested by the Master Plan would transform Jakarta entirely, leaving nothing of its former character. The Master Plan ignored the existing built-up areas, providing few guidelines for zoning, renovation, rehabilitation or reuse.

A programme for restoration and conservation in Jakarta evolved largely as an afterthought to the Master Plan. It did not come into being as the result of extensive feasibility studies, but after a series of practical and pragmatic projects, their individual successes allowed for the gradual development of a programme and of a Conservation Office in the Directorate of City Development. The Department was concerned with doing the feasible, rather than making incessant feasibility studies.

The project which provided the initial impetus was the restoration and rehabilitation of the town square of Batavia, called

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Jakarta Kota, the Old City of Jakarta: site of conservation efforts. At centre is the old town square, Taman Fatahillah

Source: DTBP-DKI Jakarta
Taman Fatahillah after the founder of Jakarta in Jakarta Kota. That resources should be allocated to an area and a collection of buildings so closely associated with the colonial past would seem rather unusual. This issue did indeed prompt considerable discussion. The immediate, pragmatic answer was that the restored square and its surrounding area was a natural tourist attraction in a city which otherwise had little to offer. However, there were broader issues which, while not clearly articulated at the time, came to the fore as this project and others were successfully completed. Indonesia has fallen heir to many colonial buildings, as have most countries with a colonial past. How should they be used, and what care should be taken of them? The following brief account of several projects undertaken by the Jakarta government demonstrates the variety of working solutions to this issue.

There was little in the way of Indonesian examples or studies that might have been useful for the restoration and conservation of the main square of Batavia and its surrounding neighbourhoods. The project was begun by collecting and studying old maps and engravings that might elucidate some details for restoration. For example, the focal centre for the square was a fountain which had long since disappeared, but was illustrated in several eighteenth century scenes. Soundings uncovered its emplacement and a copy was built. The buildings around the square were examined, and work begun on the old city hall. Built in 1707, this was a provincial and tropical version of Amsterdam architecture. The building had been in continual use as a military headquarters, and before restoration still housed much of its activities. With the construction of new quarters elsewhere, it was vacated and available for other functions.

The old city hall building was converted into a museum of the city of Jakarta, and included exhibits emphasizing the continuity of settlement of the site from the sixth century to the present. In this fashion, the focus of the building itself was extended beyond the colonial period only.

The town square was bordered with other buildings of a public administrative nature, including the court house, the post office.
and the like. Since many of these functions had also outgrown their buildings, an opportunity presented itself for the reuse of the entire square. Transformation of the other buildings proceeded apace; the old courthouse was transformed into a museum of painting and ceramics, with the collection of Vice President Malik forming the nucleus. Another old building was reused as a museum and theatre for puppetry, an ancient but still very active art form in Indonesia.

While the reuse of the square was a government-sponsored activity, the programme for restoring or rehabilitating the immediate neighbourhood had to involve the participation of the homeowners. The Conservation Office contacted each homeowner, showing him or her what could be done to upgrade the neighbourhood. In exchange for painting their houses in a series of colours chosen by the Office, a programme of planting and street paving was begun. Within a year most of the houses were repainted, and at least a cosmetic rehabilitation of the urban environment around the old centre had begun. The newly rehabilitated square was inaugurated in 1974 as the site of the Pacific Area Travel Association (PATA) conference; it has been used repeatedly for exhibitions and other events, like the "Festival Jakarta '78," with great success.

The success of the programme of rehabilitating the square prompted the Conservation Office to extend its attention to the adjacent harbour area of Sunda Kelapa. The long wharf is still used by ships that sail among the multitude of Indonesian islands; the harbour also contains the old warehouses of the East India Company and the harbour master's tower (Bastion Culemburg). The tower was repaired and refitted while several warehouses, now belonging to the Ministry of Telecommunications, were turned into the beginnings of a Maritime Museum. Further plans for other warehouses call for the refitting of these buildings to serve as a community service centre for the surrounding neighbourhood; the improved kampong of Luar Batang.

The location of community services for the burgeoning neighbourhoods of Jakarta is a continuing problem for the city government. The Building Department, with its conservation branch, was able to provide land for such centres by carefully reviewing existing built-up areas. The review process focused attention on old cemeteries. The Dutch colonial cemetery covered an extensive area and was largely unkempt. A decision was made to halve the area occupied by the cemetery, freeing it for community use. All existing tombstones were reset into a memorial park; the remaining area is now occupied by a youth centre and community hall. A similar action was taken with an old Muslim cemetery in Tanah Abang—part of its area was freed for the Said Naum mosque and madrasa.

Consistent with the policy of utilizing and revitalizing all available resources, a new look was taken at the many squatter communities which had sprung up within the Jakarta city limits. The idea of conserving what was already available prompted the development of the Kampung Improvement Programme. Instead of razing these settlements and then building government-funded housing, the conserving of the already available housing stock seemed much more economical. Services (water and electricity) were brought to the areas and streets were provided with paving, drainage, and lights. While the Kampung Improvement Programme may be classified as a housing programme, it was nevertheless generated by a similar attitude to available resources as bona fide restoration programmes.

A further application of the same ideas can be seen in the conservancy area of Condet, to the south of Jakarta, a village with surrounding orchards which specializes in fruit production for the city. The expanding population of Jakarta is threatening the livelihood of many such villages. The conservancy programme provided funds for services and house maintenance, and took the entire village and its orchards out of the real estate market. The aim was to strengthen the existing community, by providing it with better access roads and services so that its important function could

![Sunda Kelapa harbour, Jakarta: the restored harbour master's tower, Bastion Culemburg](Photo: S. Damais)
continue. Thus it would provide a living for its inhabitants, rather than see them pressed into the already overpopulated tertiary economic sector in the metropolitan region.

Finally, a word should be said about zoning for preservation. Although Jakarta does not have very old historic areas, several neighbourhoods have a consistent character. One such neighbourhood, Menteng, was developed in the thirties and is representative of De Stijl Dutch architecture. Argument can be made that there is no ideological reason for preserving an area closely linked with the Dutch colonial past and its destructive policies of discrimination and exploitation. But although it was built for the Dutch colonials, it is now entirely in Indonesian hands. Safeguarding its appearance by restricting all exterior alterations can only be a positive addition to the general appearance of Jakarta.

In conclusion, several points can be made. The Indonesian conservation policy and programmes developed slowly, along very practical and pragmatic lines. The relative success (implementation) of each programme assured the development and implementation of another. By broadening its approach in conservation and preservation, the city government was able to utilize many of the rehabilitated areas and buildings according to its set of priorities. Constant communication between several government agencies was necessary for implementing projects. Such communication, as well as appropriation of funds and rights, would not have been possible without the direct knowledge and participation of the political leaders of the last decade.
Eyüp is one of the earliest Turkish settlements on the Golden Horn. It derives its name from Halid bin Ebu Eyyub el-Ensari, a friend and standard-bearer of the Prophet Muhammad who devoted his life to the spread of Islam. He took part in the second siege of Constantinople at the age of eighty, but the hardships of battle took their toll and he died soon after. He was buried outside the city walls of Constantinople. But when Mehmed II besieged the city, the particular spot where Eyyub el-Ensari was buried had been forgotten. Mehmed was keen on finding the site, and consulted Aksemseddin, a religious leader of the time. The sacred spot was revealed to Aksemseddin in a vision, and excavation brought the site to light in the form of Eyyub el-Ensari's tombstone.

After the conquest of Istanbul, Mehmed II ordered a mausoleum to be constructed over the tomb of Eyyub el-Ensari. A mosque, a madrasa, an almshouse, a caravanserai, shops and a public bath were built near the site, as the centre of a new settlement populated by people transplanted from Bursa. Eyyub el-Ensari's tomb soon became an important shrine and a popular object of pilgrimage. The settlement developed quickly, and by the sixteenth century it was one of the most populous areas outside the city walls. Because of its location on the Golden Horn, the coastline of Eyüp was also a favourite place to build seaside villas for the royal family and upper-level state officers.

Beginning with Bayezid II, Ottoman sultans were traditionally inaugurated at Eyüp. The ceremony started at the Topkapı Palace, where the new sultan, the mifti, viziers and other officers assembled and proceeded to Eyüp on horseback. They visited the mausoleum of Halid bin Zeyd first, then entered the mosque where the imam addressed them. The new sultan swore on the Koran to work hard to propagate Islam and extirpate the infidels. To this end, he girded himself with the sword of Osman, the founder of the Ottoman state. Later the procession advanced to the harbour along Bostan İskelesi Street, and sailed to the arsenal at Kasımpaşa.

The presence of the tomb of Halid bin Zeyd lent an additional sacredness to the place, one that people wanted to share by being buried in the vicinity. Vast cemeteries with cypress trees grew up around the mausoleum and the mosque. The viziers and high officers of state had their own mausolea constructed on this holy land. Other public and religious buildings, such as mosques, madrasas, schools, libraries, tekkes, fountains and almshouses were established as vakıf institutions to serve the needs of this flourishing centre.

In the nineteenth century, industrial growth in Eyüp resulted in large-scale development along the coastline, and several of the timber houses were destroyed by devastating fires. In the twentieth century modern construction technology was introduced, and beginning in 1960, most of the surviving timber houses were taken down to make way for new apartment buildings. Pollution in the Golden Horn has made the area unfit for habitation. Few people live in Eyüp, although it has maintained its religious significance as a pilgrimage site. There is a need to revitalize its rich connections with the past. The derelict areas have to be given new life by assigning new functions to them.
Our study of the Eyüp historic centre started by recording the monuments and historic buildings on the site. To come up with a sound decision on the best mode of intervention in the historic centre, an efficient system for recording and analysis was needed, and for this purpose Council of Europe inventories were used. Facts relating to the properties of the site as a whole, its historical development, the typology of the buildings in the area, the demographic structure, traffic flow infrastructure, the number of schools, open spaces and commercial areas were all studied. To complement these facts, further graphic documentation was produced to represent the architectural importance of buildings (class I and II, historical open areas, unsuitable development), the ages of buildings, and a spatial analysis (passageways, porticoes, enclosed spaces).

Monuments and historic buildings within the conservation area were inventoried. Inventories included the general description of the building and its function, form, construction, structure and historic associations. Detailed descriptions covered such items as the use of each room, the activities taking place within each space, formal considerations relating to the planimetric and volumetric bases of the building, constructional and structural properties, finishings, decorative elements, climatic considerations and orientation. The monument inventory was later supplemented by a formal analysis of spatial elements, the form of the functional areas, roofing elements and enclosing elements; the numerical values relating to the spatial elements—one or two dimensional or volumetric; and a graphic representation of the building, its plans, cross-sections and elevations.

The first post-inventory, practical measure taken was to minimize rapid change, by scheduling alterations to buildings, trees, street lines and historical open spaces well in advance. This prevented, at least to some extent, the unchecked demolition of old buildings and temporarily halted the spread of new developments and new roads. The Eyüp conservation plan recommended the preservation of the old street pattern in the historic centre. In some cases, the old streets
had already lost some of their surrounding elements, but it was still regarded as desirable to preserve their patterns as documentary evidence. For example, cul-de-sacs such as the Oyunançılars, Cikmazi and Turbe Arkası Sokak are basic elements of the settlement pattern; they can be conserved by maintaining existing historic structures and then filling in the gaps. Since these streets in the historic centre are incapable of coping with modern traffic, maintaining them has the further advantage of freeing the centre from the noise, vibration and exhaust fumes that both pollute the environment and cause serious deterioration of the structures.

If Eyüp is to be restored to its former status as a fashionable district, the area as a whole must first be rehabilitated and regenerated. This involves major changes in the social and economic lives of the present inhabitants. Removing industry and replacing it with housing, cultural and tourist functions can help to enhance the living standards in the area.

The present planning regulations are not, however, sufficient to prevent the intrusion of out-of-scale buildings into the historic environment. Standards for new building in historic areas ought to be established that place special requirements on material, scale and colour. The results of the formal, spatial and numerical analyses that are currently being made can help the designer in his work. Since the vernacular architecture in Eyüp is mainly of timber, prohibiting further use of glass, mosaic and faience on the exteriors could be a useful first step. Timber and brick integrate better with the existing structures.

The high quality of the monuments in Eyüp deserves to be complemented by the new designs, which should also reflect the respect we owe to this important site. But the conservation of Eyüp can only be realized as part of the larger programme of the rehabilitation of the Golden Horn. To implement the recommendations, the government has to provide subsidies and long-term loans. Financial help must also be forthcoming from international contributions, and from the industry that has caused so many of the district's problems.
A Plan for Istanbul's
Sultanahmet–Ayasofya Area

Nezih Eldem
Melih Kamil
Atilla Yücel

The proposal to rehabilitate the old houses around Soğuk Çeşme Street and the Soğukkuyu madrasa in Istanbul by adapting them for tourist use was approved in principle by the Council of Monuments and Sites in 1977. Rehabilitation solutions were required to be in harmony with the environment and to incorporate a series of careful decisions regarding every aspect of the scheme, from the characteristics of the buildings themselves to the anticipated transportation system. It was decided that the area would be restricted to public institutions; any property that was not already vakf-owned would be nationalized.

It was decided to keep the study rather broad before attempting to agree on specific physical solutions. This necessitated a comprehensive evaluation of the archeological, spatial and functional characteristics of the area, including a general survey and inventory of the buildings and their utilization, transportation and infrastructure systems and other connections with the rest of the city. This constituted the first phase of the study; the principles of future development could be determined from these data.

Along with the general study of Soğuk Çeşme Street and the area west of Sta. Sophia, including Soğukkuyu madrasa, other surveys providing more detailed information on historical, architectural and archeological data and on ownership and use were compiled. Both surveys were then analyzed to form the framework for the preservation and adaptive reuse solutions we hoped to develop. Clearly, the next step for both the Ministry and the University is to develop a more comprehensive programme in Istanbul, one that will include not only plans for construction and design but also models for operation and organization which allow a realistic implementation.

Soğuk Çeşme is a street completely isolated from the other residential areas of Istanbul. It is a poor area, crowded and overshadowed by warehouses and workshops. Its social structure has changed radically in recent years, though a few wooden houses still stand in defiance of encroaching industry. They constitute some of the few remaining examples of traditional domestic architecture in the city. Despite the ravages of time and industrialization, the unity of a typical Istanbul street may still be observed here.

Different cultures and civilizations come together in Sultanahmet. It has always been an area where the most significant institutions, monuments and symbols were located. Soğuk Çeşme Street and the Soğuk Çeşme madrasa complex unite to form a small block within an area containing a considerable portion of Istanbul's historical and architectural heritage. The most significant
monumental buildings are all in this area: museums, palaces, temples, wells, the city walls—and the tourist traffic is heavy as a result. The street containing Soğukkanı madrasa performs a similar function—all the buildings, aside from a few poor or unsuitable houses, have touristic appeal and provide tourist accommodations. Our conservation and development project plans to encourage these uses, while preserving the original architectural space. Soğukçeşme Street is located between the Imperial Gate (Bağ-ı İmam) and the Parade Pavilion (Alay Köşk) where the Topkapı Palace walls follow a straight line. The houses form a single row of very narrow lots opposite the palace wall. The street looks like an open-ended passageway, with the houses forming one side and the high windowless wall of the Sta. Sophia public kitchen the other.

Since tourist accommodations constitute a nocturnal use for this neighbourhood, we must also provide a daytime use to encourage complete integration into the surroundings. The buildings of the Sta. Sophia complex that form the windowless side of the street and the spaces between them are in particular need of efficient reuse; the same can be said about the excavation area between Sta. Eirene and the palace walls. One possibility for adaptive reuse would be to employ the open space between Sta. Sophia and its buttresses, the public kitchen, the Baptistry, and other surrounding walls and buildings, as open and closed exhibition areas for modern art. This would serve to juxtapose the contemporary world with the Roman, Christian and Muslim worlds whose presence is so apparent in the architectural surroundings. The two handsome doors that connect these open spaces to Soğukçeşme Street would also acquire a suitable contemporary function: between these portals and in front of the blank wall that borders one side of the street, art shows could take place. A third door connects the proposed exhibition area to the garden of Sta. Sophia, which is now desolate and empty. It could easily be turned into a beautiful garden arranged as an archeological park, and the portals, now closed, would be returned to their original function.

One characteristic of an old Istanbul street is still amply visible in the Sultanahmet area: while religious, cultural and public buildings were monuments of stone and lead symbolizing permanence and eternity, private houses were almost invariably small and wooden. In the renovation project, care must be taken to maintain this relative scale. While some unsafe buildings should indeed be cleared from the area, additions to the remaining old buildings must be few. Renovations should be limited to those necessary for turning these old wooden houses into accommodations suitable for tourists. Special common spaces that are less visible from the street will be created on some of the suitable lower floors and in the old cisterns. Only minimal new construction is planned.

The madrasa complex will be adapted into a hostel. A feeling of open space will be formed by small plazas between the buildings blocks, repeating the pattern of the inner court. The units will be designed to give the feeling of a private house, with enclosed and inward-looking ground floors, and living areas around small courtyards oriented away from the street. In this way, cultural and environmental continuity can be established in the new conservation project. Functional suitability, rather than direct stylistic imitation, is to be stressed in any new construction.

Integration of the proposed Sultanahmet rehabilitation with the planimetric characteristics of the existing environmental patterns is imperative. The problem is to organize this important historical area using an approach that is realistic and not speculative. We believe that the creation of a livable environment and the preservation of cultural and historical values are not contradictory or mutually exclusive demands. On the contrary, they are both prerequisites to making a city meaningful, and the importance of both is sufficient impetus for our efforts at Sultanahmet.
Reference Note

The study presented here was initiated by the Istanbul Technical University's Faculty of Architecture and sponsored by the Ministry of Tourism and Information. The Ministry directed the University to develop conservation and rehabilitation plans for the Sultanahmet Plaza and Soğuk Çeşme Street. The idea of rehabilitating this historic area, by giving it new functions related to the tourist industry and to other cultural activities appropriate to its importance, has long been a project encouraged by the Ministry. The ITU faculty working on the project have been involved for several years in similar projects aimed at retaining the area's historical and architectural unity. With the aid of architectural design students, ideas are being transformed into practice using the accumulated data and experience gained from these earlier projects. The University received the Sultanahmet commission from the Ministry in 1977.

 Entrance to Soğuk Çeşme Street, with a gate to the Ayasofya complex
 Photo: N. Eldem, et al

 Soğuk Çeşme Street—view of the actual situation (above), and the elevation of proposed reuse project (below)
 Drawing by N. Eldem, et al
The Antalya Citadel: A Project for a Leisure and Commercial Centre

Güler Yalim

Among a variety of projects sponsored by the Turkish Ministry of Tourism and Information, the one closest to completion is the Antalya Citadel. That part of Antalya surrounded by the old city walls and including nine hundred residences, a commercial centre and the ancient harbour was declared a "protocol area." Since this project was to be a pilot study for similar projects throughout Turkey, it had to solve a number of administrative, financial, legal and technical problems. The first phase of its implementation was to be carried out by government authorities; then the local people were supposed to take over and complete the project, with much more limited help from the Ministry, on the basis of what had been learned from the initial phase.¹

The Ministry of Tourism and Information drew up a plan (1/1000 in scale) in 1973, which was approved in 1974 by the Municipality of Antalya, the Ministry of Reconstruction and Resettlement, and the Ministry of Cultural Affairs' Council on the Preservation of Monuments. The Ministry of Tourism and Information then began expropriating land for its implementation. 119 parcels totaling 17,139 square metres have already been acquired, and the process is still under way. The total cost of the land will be around twenty million Turkish lira. Plans were drawn up for the renovation and building of the structures on the parcels already expropriated, and in 1977 contractors were invited to present their bids.

The conservation plans for the entire protocol area are being prepared at the Middle East Technical University, and should be completed in 1979. When they are approved, actual construction can begin. Financial help provided by the Tourism Bank of Turkey and technical help provided by the Ministry of Tourism and Information will aid in the relocation of people displaced by the planned commercial and tourist activities. Contributions to the project from the Foundation for the Conservation of Monuments, Environment and Tourism Values have been promised.

To rehabilitate a historic architectural complex is much more expensive than to build an entirely new one, whether on developed or undeveloped land. Over the next four years, 350 million Turkish lire will be appropriated for the completion of the first phase. Subsequent allocations will be made on the basis of a cost analysis of these expenditures.

The objectives of the project are to save irreplaceable examples of Turkish architecture in the historic centre of the city of Antalya, examples which are threatened by uncontrolled development resulting from intense industrial activity in the region. The solutions to the financial, administrative, legal and technical problems encountered in the course of the project will also serve as models for the conservation of other historical centres in Turkey. It is also hoped that the project will discourage emigration to other areas by improving the socioeconomic conditions of the local inhabitants, mostly fishermen, labourers and other low-income people.

A small-craft harbour with quays and piers, navigation services, dry-docking and storage facilities, fuel stations, electricity, telephone and a fresh water supply is planned. The site will include streets with their original pavements restored, parking facilities, central television facilities, street lighting, telephone, and a water and sewer system. Houses will be restored to include whatever is necessary for their newly-assigned

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KEY:
1 Boarding house
2 Hotel, motel
3 Harbour master, customs, police
4 Restaurant
5 Nightclub, disco
6 Tavern
7 Snack bar, cafe
8 Library, seminar hall
9 Bank
10 Post office
11 Tourist office
12 Buildings to be restored
13 Historical and religious buildings
14 Traffic routes
15 Pedestrian routes
16 Shoreline
17 Old city wall

Photo G. Yalim
functions. The city walls surrounding the harbour and the area to be conserved will be restored or reconstructed; the existing green belt around the site will be maintained. Hotels, restaurants and leisure facilities approved by the Council on the Preservation of Monuments will also be restored or rebuilt. Restoration or construction of buildings to be used for official and social facilities still await approval by the Council, as do facilities for the harbour administration.

To date the site has been prepared, the contractors have placed their bids, the work has been contracted for and construction is now under way. The cost of the project— including road resurfacing, street lighting, the television tower, telephone network, water supply and sewerage—is anticipated to be about twenty million Turkish lira in 1978 prices. Aside from electricity, water, the telephone station and the supply system for boats, ninety percent of the funds needed for the small-craft harbour have been provided through the allocation of fifteen million Turkish lira in the 1975 budget of the Construction Ministry.

The existing structures have already been recorded and drawn; the restoration and implementation projects are still in preparation. Construction at the harbour of a hotel with a 66-bed capacity, a restaurant large enough to serve 150 people and various administrative facilities was started in 1977. The winning low bid for the hotel was ten million Turkish lira. The Ministry of Tourism and Information is constructing the restaurant and administration buildings, hiring the workmen and purchasing the equipment, but using its own engineering staff for supervision. According to an agreement signed by the Ministry of Tourism and Information and the School of Agriculture at Ankara, landscaping of the site is being undertaken by the school, beginning in 1979.

The Antalya harbour project is a pioneer effort in the state-supported conservation of the architectural heritage on a large scale. The first phase is meant to serve as a model for others. In the second phase, the inhabitants themselves will do the restoration of the houses according to guidelines now
being drawn up for the entire conservation area at the Middle East Technical University. These houses are mainly wooden structures typical of traditional Turkish architecture. This phase of the operation is regarded as the backbone of the whole project.

Since the Ministry of Tourism and Information is carrying out the project on behalf of the local authorities, support of the Antalya municipality was essential and has been forthcoming. The state is now taking steps to establish contact with the general public to ensure its cooperation in this work. Local exhibitions are presented on every aspect of the project. Open panel discussions are arranged, and polls are taken to determine public reaction to the plans. These polls unfortunately indicate a good deal of indifference and even antipathy; the Ministry of Tourism and Information continues to do its best to change this, and to display its determination by enthusiastic planning, preparing exhibitions and appropriating funds. To its credit, local people are gradually beginning to show some interest and attempts at cooperation in the Antalya harbour project.

Reference Note

1 A description of this project was presented to the Council of Europe’s Committee on Historical Sites and Monuments, at the Conference of European Architectural Heritage Year held in Amsterdam in 1975
Evaluation of the historical environment has generally been considered a cultural problem or, more specifically, a cultural-inheritance problem. But a man-made environment that has evolved through complex processes will always possess dimensions that cannot be regarded merely as cultural. Interest in these additional factors has in recent years led to the idea that historic preservation should be expanded from simply saving single monuments to conserving entire environments and social units. Since such a concept often requires consideration of an environment fully integrated into an active urban setting, conservation now involves planning on the social, economic and financial levels, and not simply questions of structure and aesthetics. Solutions to these new problems are needed in order to provide a basis for a more realistic approach to both the planning and implementation of preservation projects involving adaptive reuse.

We began to look into the problems of preserving large and populous areas in a graduate seminar. After we had considered all aspects of the problems involved and assembled as much data as possible, we proceeded to look for a practical model. The most effective way to go about a project of this sort would be to integrate theoretical studies and practical experience, in such a way that each would benefit from the other and every step could be refined along the way; however, organizing such a project in a developing country like Turkey has its obvious problems. In the face of rapid industrialization, time is quickly running out for many of our historic sites; choosing sites and taking steps without delay are essential. Their protection can be integrated with theoretical considerations later on.

The kinds of projects emphasized by research organizations in recent years have made us more aware of the practical problems involved. A more realistic approach now attempts to take economic considerations into account when cultural decisions are made. To put it another way, the criteria for selecting historical preservation areas have become increasingly objective and quantifiable because, as in the case study we present, data are collected to take these aspects into consideration on a theoretical level before the choice of site is actually made. The criteria that we will list here were of course designed to fit a specifically Turkish context.

As we all know, Turkey is in a period of rapid change. The acceleration of change in the socioeconomic structure started slowly in the course of the last century and then increased with the establishment of the Republic, especially in the 1950s. The proportion of urban to total population increased from 18.5 percent in 1950 to 33.5 percent in 1970 to 41 percent in 1975. In round numbers these figures represent an increase in the total urban population of twelve million people in 25 years; most of the increase has been in the largest centres, causing cities like Istanbul, Ankara and Izmir to become metropolitan areas. Turkey is clearly becoming an urbanized country.

Urbanization has reached particularly uncontrollable and problematic dimensions in Istanbul, which shows the highest social, economic and cultural mobility rates in Turkey. It pays dearly for this growth in terms of the destruction of its historic areas and its natural environment. Speculation in urban real estate is far too profitable to permit any optimism regarding the preservation of Istanbul's architectural heritage if it is left unattended. In addition, the lack of any viable housing policy and organization, despite provisions for them in the constitution and the laws, makes the picture one of unremitting gloom: immense squatter settlements, a devastated natural environment and a disappearing architectural heritage. The picture is by no means atypical in developing countries. Undoubtedly the greatest and most of destruction is concentrated in the units that form the urban texture, structure and appearance, especially the residential areas. As a result of this destruction, housing is disappearing and the urban landscape becoming deformed, adding still more to the cultural loss.

In Turkey, the inclusion of housing into the "historical preservation area" concept is quite recent. Law 1710, passed in 1973, provides for the preservation of monuments and historic areas; it does not even mention the word "house" or "residential housing" in its first article, where all those structures destined for protection are separately listed. The law considered palaces, seaside villas (yali) and kiosks worth preserving, but not residential buildings. While the Constitution orders our forests to be conserved, it offers no legal protection for our urban architectural heritage.

Nevertheless, through the concerted efforts of interested people and strengthened by the influence of the European Architectural Heritage Year, public support was mustered in the defense of residential dwellings. Significant steps have since been taken to make Law 1710 more comprehensive and effective.

Law 7116, passed in 1958, placed housing policy under the jurisdiction of the Ministry of Reconstruction and Settlements; solutions to housing problems were considered to be its chief responsibility. However, the response of this Ministry to the idea of preserving our architectural heritage has not provided much ground for optimism. The housing administration's social research department has conducted several studies on the squatter problem, but has kept well away from the subject of evaluating historical, or even just existing, building stock.

We therefore embarked on our study to encourage the development of proposals to evaluate the existing housing stock, a need so long neglected. The method we evolved to realize both theoretical and practical aims required a number of steps. The first phase included the determination of criteria for the selection of area and scale, then finding the areas and units that fit those criteria. We would then conduct test studies in one of the areas that seemed to fit and which included certain varieties of urban units, to see whether the criteria worked. The second phase involved making a preservation and adaptive reuse plan for the area finally selected, and designing the actual project.

The criteria we finally chose for determining the project site were as follows (disregarding questions of procedure and priority for the time being): the capacity of the building to substitute for new construction, including assessment of all the possible functions it might perform, its adaptability to them, and
a financial analysis of the comparative costs involved; its physical condition (e.g., light or heavy restoration needed); and finally, the local administrative decision system that would be involved if the project were undertaken. Our architectural qualifications included an assessment of the building’s qualities, its historical importance, its type, the population density of its location, and its value in terms of its particular genre. We also considered the urban context: transportation facilities; the availability of utilities, services, administration; its ownership (private individual, corporate, foundation or public); and the limits of its flexibility for correlation with other urban planning.

We chose Istanbul as the most likely city in which to find our proposed rehabilitation area, because of the variety and complexity of that city’s problems. To limit the scale of our project, we selected the nineteenth century rowhouse as our typological unit. Most of these buildings are still structurally sound, although they lack sufficient upkeep. Though currently in a state of neglect, they could be renovated at low cost with only minor restoration. As small units, the rowhouses were eminently suitable for preservation efforts by a group our size. They were in marginal settlement areas, and therefore largely outside those parts of the city subject to speculative value fluctuations. Thus the immediate environs were undamaged, and the preservation area itself was physically intact. The fact that the row houses were in part common property was considered an advantage for operation and utilization of resources. They were easy to typify and standardize, and appeared economically suitable for group renovation design and techniques.

The next step was to test our criteria. We identified regions where rowhouses (often built as temporary housing for those left homeless after fires) and buildings of religious foundations (vakfs) and working-class or service-personnel housing were located. After roughly determining these regions, we began to narrow our search. We surveyed the areas, and the results of these surveys were recorded on maps (scale 1/1000). Photographs and descriptions of each rowhouse were made and inventory cards drawn up. The buildings of each area were catalogued, classified according to their layout, planimetry, elevation and group characteristics. Measured drawings of typical buildings in about seventy locales were made; these were translated into a 1/200 scale diagrammatic presentation technique to enable typological classification, and an initial typification experiment was performed.

The final step was to determine how suitable the inhabitants in each area were for a reuse project, by collecting data on demographic
characteristics (see Appendix). Included in the data we collected were family type, standard of living, utilization of the houses and current demands in housing. The attitude of the user toward the house was particularly emphasized, since this would directly affect any rehabilitation decisions. Attempts were also made to determine to what extent these nineteenth century designs were fulfilling the needs of their twentieth century users. The kinds and directions of any changes envisaged by the inhabitants were also investigated.

Over most of its two thousand years history Istanbul has been the capital of empires, lending enormous variety to its cultural heritage. Beginning as the capital of the largest political organization in the pagan world, it then became the centre of the Christian world, and the capital of the first large Christian empire and civilization; then, after the Muslim conquest, it became—and remains—one of the cultural centres of the Islamic world. The material and spiritual memories of all these different cultures have accumulated, lived together, amalgamated and integrated in modern Istanbul.

In the nineteenth century, as the Ottoman Empire gradually declined and the Western world began to impose itself in the East, the general cultural patterns of the West also imposed themselves on this already heterogeneous texture. The rowhouse was introduced into housing architecture during this period. The history and characteristics of this particular housing form have not yet been sufficiently investigated, but we know that all of them can be dated to the second half of the nineteenth century and that they were houses of the petite and middle bourgeoisie. Their location in the city and their architectural characteristics both reflect the emergence of that class. Even though the rowhouse as a type had no place in the traditional urban structure of the Ottoman city, it had a significant development in the history and sociology of the period. The distribution and position of the rowhouses left in the city today can provide data about certain developmental trends in Istanbul in the nineteenth century and about the geography of social groups in the capital.

The rowhouses did not greatly alter the existing street-lot texture, but they did bring about a new house-street relation as a result of their tendency to form units with the streets in which they were located. The topography of Istanbul has made special contributions to these morphological units at certain places; these qualities alone justify their preservation as environmental units. Rowhouses are a typological category of Western origin and undoubtedly reflect nineteenth century Western architectural styles. But the cultural pluralism which
Istanbul derives from its own history has here provided a unique flavour. In Istanbul, extant neo-Renaissance and neo-Baroque elements have yielded an original synthesis in the hands of the anonymous rowhouse builders.

In conclusion, the most important finding of our study was undoubtedly the need to conserve our vernacular architecture through adaptive reuse, and to impress the importance of this need not only on the public authorities but also on the population as a whole.

Appendix

The following Social Survey Form was used to document the Istanbul rowhouses in terms of individual user reaction

GENERAL INFORMATION
1) City the survey is conducted in:
Country:
District:
Street:
House number:
Utilization of the building:
Basement: First floor: Second floor: Third floor:
Number of rooms: Total area: \( m^2 \)

2) Please list the residents of this house, starting with the head of the family:

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Monthly income of head of family:

MOBILITY

3) How long have you been living in Istanbul?
Year: Month: Day:

4) How long have you been living in this neighbourhood?
Year: Month: Day:

5) How long have you been living in this house?
Year: Month: Day:
6) Where did you live before coming here?
   What was your reason for moving here?
7) Was your job the same or different before you moved?
   Same job: ...  Different job: ...
8) Has there been any change in your monthly income?
   Yes: ...  No: ...  Did it increase? ...

STATE OF OWNERSHIP
9) Are you the owner?
   Yes: ...  If you sold your house, how much would you ask for it?
   No: ...  How much rent are you paying?
10) If you moved to a rental house, what would be the maximum rent you could afford to pay?

IDEAS ABOUT THE HOUSE
11) Are you satisfied with your home?
   Yes: Why? ...  No: Why? ...
   Partially: Why? ...
12) Do you consider moving out?
   Yes: ...  No: ...
13) If not, why don’t you move to another place?
14) If you would or could move, which district would you like to move into?
   Why that district? ...
15) If you would or could move, what kind of house would you like to live in?
16) Do you think that your home now meets all the needs of your family?
   Yes: ...  No: ...
17) If not, what is lacking?
18) Are you satisfied with the sunlight and ventilation of your home gets?
   Yes: ...  No: ...  Partially: ...
19) Which of the following does your house have?
   Running water: ...  Electricity: ...  Gas: ...
   Connection to sewage system: ...
   Central heating: ...  W/C: ...
   Bath/shower: ...  Kitchen: ...
20) Do you have a garden?
   Yes: ...  No: ...
21) If yes, are you satisfied with your garden?
   Yes, why? ...  No, why? ...

UTILIZATION OF INTERIOR
22) Where do you eat at home? Why? ...
23) Which room do you use as the living room? ...
24) Where do the parents sleep? ...
   Why? ...
   Is this space sufficient? ...
   Is this space sufficient? ...
25) Where do the children sleep? ...
   Why? ...
   Is this space sufficient? ...
   Is this space sufficient? ...
26) Where do the grandparents—if any—sleep? ...
   Why? ...
   Is this space sufficient? ...
27) Where do you cook? ...
   Is this space enough? ...
28) Where do you peel the vegetables? ...
29) Where do you do the laundry? ...
30) Do you do ironing?
   Yes, where? ...  No: ...
31) Do you do quilting? If yes, where? ...  No: ...
32) Do the children have a separate room? ...
33) Where do they play? ...
34) Where do they study? ...
35) If there is a baby in the family, where does it sleep in the evening?
   Where does it sleep during the day? ...

NEIGHBOURHOOD RELATIONS
36) Are there noisy people in your neighbourhood? ...
   Yes: ...  No: ...
37) Do you consider your neighbourhood crowded?
   Yes, why? ...
   No, why? ...
38) Do you consider the buildings in your neighbourhood beautiful?
   Yes, why? ...
   No, why? ...
39) Partially, why? ...
   No answer: ...

NEIGHBOURLY RELATIONS
39) With how many of your neighbours do you have close relations? ...
40) Do your neighbours get along well among themselves?
   Yes: ...  No: ...
41) How often do you visit your close neighbours? ...
42) Where else do you come together with these neighbours?
43) What do you do during your vacations? ...
44) Do you have any relatives living on the same street with you?
   Yes: ...  No: ...
45) Do you have any relatives living in the same district with you?
   Yes: ...  No: ...
46) Have you at some earlier time had relatives living on the same street or in the same neighbourhood?
   Yes: ...  Where did they move to? ...
   Why? ...

URBAN ACTIVITIES
47) Where do you do your daily shopping? ...
48) How often do you shop at the market place? ...
49) How often do you shop around Beyazit?
50) How often do you shop around Beyoğlu?
51) Which of the following would you like to live close to?
   1. Market
   2. Coffee shop
   3. Entertainment places
   4. School
   5. Park
   6. Bus stop
   7. Close to all
   8. Other

52) Which of the following do you own?
   1. Car
   2. Bicycle
   3. Motorcycle
   4. Other
   5. None

53) Do you plan to purchase any of the above that you don’t have?
   Yes: Which one(s)?
   No: Why?

54) Do you know of any additions that have been made to this house since it was first built?
   Yes: What?
   No: ...

55) Does your house need plastering and repair?
   Yes: No: Partially:...

56) Would you have liked any changes inside the house?
   Yes: No: ...

57) If yes, what are they?

58) Could you afford to pay for this change?
   Yes: How much?
   No: ...

59) Do you consider the old houses in your neighborhood worth conserving?
   Yes, why? No, why? Partially:

60) If you had to move because the house needed repairs would you want to return to the same house when they were completed?
   Yes, No: Undecided:...

61) What do you think is necessary to improve these old houses?

62) Would you want to help repair the house yourself?

63) If the residents of your neighborhood founded an organization to repair houses, would you join that organization?

64) If the State were to loan money for the repair of your house, how much could you allocate from your budget each month to pay back your debt?

Observations:

Surveyor: Date:

Kılıçman Street, Fener district rowhouses 7, 9, 11

Photo A. Batur, et al
Three Problems in Conservation: Egypt, Oman and Yemen

Ronald Lewcock

It is ironic that lack of money is so often such a good preserver of historic buildings and abundance of wealth so often a guarantor of their destruction, not only through demolition but, as often as not, simply through tasteless remodeling or a transformation of their setting. Old mosques that once dominated the landscape are now overpowered by multi-storied buildings, and their minarets are hidden among the skyscrapers. Admiration for Western technology and culture and the resultant inferiority complex in many Islamic countries has led to doubt about the value of Islamic achievements. This reaction against traditional societies and patterns of living makes it difficult to persuade people that the artifacts of their own culture are worth preserving. The effects of this antipathy are especially malign in architecture. Many inhabitants of traditional Islamic countries are not easily convinced that a building in its old form is of greater value than a building remodeled by Western technology. Humility and modesty make them underrate their own architectural traditions.

The more recent the construction date of a building, the more serious this problem is likely to be. To persuade someone that buildings three or four hundred years old should be preserved is not so difficult; they are rare in any case. To persuade governments and ordinary people in a traditional society that the value of a building should not be measured by age alone is a much harder task. But it is important to try, because in cultures where building traditions and patterns of use have been maintained without change for centuries, a building just a generation old can still be our only representative of an important ancient style.

Policy and Projects in Oman

The Sultanate of Oman took an important step a few years ago when it created its Ministry of National Heritage. I have been involved almost from the outset in discussions on the work of this Ministry, and it has proved difficult for me as advisor to convince them of the need for an overall conservation and restoration planning policy. One of the problems is an embarrassment of riches: the country is so full of magnificent castles and forts—a number of them containing palaces from the seventeenth and eighteenth centuries, and even earlier—that the attention of His Royal Highness the Sultan and his ministers has been directed entirely toward the task of doing something about them.

The government has shown far less interest in saving the traditional architecture in the towns from destruction. The one exception to this policy were the beautiful old buildings of the Corniche at Muscat, which were almost universally regarded as deserving protection. But even this support was not sufficient to save them; in spite of all our efforts, they are now being demolished and replaced by new and higher buildings.

Two proposals were made to remedy the lack of an overall conservation policy in Oman. Thus far, neither has been possible to implement. The first was for a thorough, region-by-region survey of the architecture of the entire country. Since Oman itself has no trained architects among its nationals and only a small handful of students at an early stage in their training, the survey was to be undertaken by volunteer workers imported from the developed countries. These volunteer workers (such as young Peace Corps and Volunteer Overseas Service architects), a few in each region, would live with an Arab-speak and possibly a social anthropologist as well. The teams would be under the direction of an experienced architectural researcher from the Ministry of National Heritage, and their task would be to record in each region all the buildings that might conceivably be of significance to the environmental or cultural history of the country. They would also report on all the likely conservation areas in the towns. The records made would include measured drawings, hand drawings, diagrams, photographs, analyses of the position of the site, layout studies of the environment, both black-and-white and colour photographs, records of local traditions about the buildings and accurate historical documentation wherever it could be obtained. This material would eventually be coordinated in the Ministry, in a file for each building or group of buildings. The contents of the file would be summarized on a card that would in turn be filed in a cross-referenced index for all the buildings in the country.

At the same time protective legislation would be introduced, phased to keep pace with the amount of information available at any given time; the ultimate aim was to achieve protection that would reflect the relative importance of each building or group of buildings. The final list would only be available when the survey of the country was complete.

The first step was to find some form of interim restriction that would provide the government with the necessary power to halt work and investigate threats to any particular building of potentially great historic value. This was accomplished through a regulation saying that all buildings valued above a certain amount could not be demolished or externally altered without official permission. Within certain restricted areas, all demolitions and alterations were subject to notification and required permission to proceed. A zone within a radius of five hundred metres around all buildings already proclaimed national historic monuments was included in this restricted category.

This programme of legislation could only be enforced with the cooperation of the Town and Country Planning Department. The difficulty, which crops up in many countries, is that town planners often believe that they are the best judges of which buildings or areas should be conserved, and they do not like their authority challenged by some advisory conservationist, let alone another ministry. So, cooperation on the highest level has first to be established between ministries.

A second problem is the almost insuperable difficulty of trying to set a time limit on objections that are heard between the declaration of protection of a building and this protection's becoming law. It is only fair to warn an owner in advance and give him an opportunity to lodge an appeal, but the time limit allowed for this appeal also allows
time for buildings to be demolished before they can legally be protected, even if the
time limit set is only one month. Unscrupu-
ous individuals, and even local authorities 
and ministries, have been known to take
advantage of this lag.

A third difficulty, which is a particularly
serious problem in some Islamic countries, is 
that nearly all private owners resist protec-
tion orders' being served on their buildings
because of the limitations these orders place 
on subsequent alterations and site develop-
ment. Protection orders are particularly
important for their restrictions on height, 
regulations made to keep high buildings
from hiding or dwarfing old monuments or
changing the scale of an entire area, or
blocking or altering famous views, as in the
case of several castles in Oman. But they are
also the restrictions most burdensome to the
owner. The only two ways we have of
persuading private owners to accept restric-
tions imposed on their buildings is to
educate the public to protect the monu-
ments, so that owners come under pressure
from their own community, or to pay
compensations generous enough to make
them happy to accept the restrictions
imposed. In some countries these include
the special advantages of easy grants, in others a
total remission of rates.

Cooperation with the Town and Country
Planning Department can be accomplished
either by posting a representative of the
Conservation Department in the section, or
by requiring that all planning authorizations
in certain categories be subject to the
approval of both the Town and Country
Planning Department and the Conservation
and Preservation Departments (the latter is
the technique used in Britain). An im-
provement on the first alternative is to set
up in the Town and Country Planning
Department a conservation planning unit
assigned to deal with monuments and
groups of buildings. This has the particular
advantage of increasing decentralization: if
regions have separate planning authorities,
protective regulations can be administered
near or within the communities most likely
to appreciate the benefits derived from
monument protection.

The conservation of the fortified palaces in
Oman has already begun. Work on one of
the largest and most remarkable of them,
the Palace of Jabrin, situated in an oasis on
an elevated plateau about two hundred
kilometres inland, is currently underway.
Built by the Imam Bal'arab b. Sultān around
1675, it was the work of architects versed
equally in Persian and Mughal architecture
of the seventeenth century. The palace is
rectangular and built of stone, with two
large circular defensive towers diagonally
opposite each other. It contains a number of
fine rooms, including a suite of high-
ceilinged audience halls, and the tomb of the
founder in the lowest level of the building.
Before the Ministry of National Heritage
was established the palace had been sur-
veyed by IsMEO, which produced a compre-
hensive set of measured drawings and a
programme for restoration. They continued
to collaborate on the restoration work by
providing engineers and architects.

This building has revealed a number of
pitfalls into which restoration work can,
even with the best of intentions, fall. Unless
modern architects are aware of the ancient
traditions of using gypsum plaster inside
buildings, for example, they will assume that
all plasters are of lime and find themselves
in serious trouble—repairing gypsum with
any material containing modern cement will
eventually turn the original gypsum black.
One rule that must be enforced, then, is that
building materials be chemically analyzed
for their constituents before restoration
work begins. The careless omission of any
one of those materials from the tested
samples can have dire consequences.

A second pitfall in the restoration of Jabrin
was the problem posed by the unusually
wide spans of the timber floors. The original
balks of timber were twenty-five centimetres
deep, and the cost of replacing the many
broken ones would be high if the replace-
ment was to be in timber. Replacing them
with steel or concrete raised the question of
whether the beams should be faced in timber
or left exposed. If left exposed, alien
elements would be introduced into the
original character of the building, a de-
batable thing to do. The answer is yet to
come. Restoration work is still proceeding
slowly on this building, but the team hopes to be able to replace the beams with timber in all important rooms.

Another pitfall of introducing new materials lies in their different rates of expansion. Introducing steel beams in Jibrin in place of timber, for example, could have caused serious damage by pushing out the walls, especially if they were used at roof level where they would be exposed to the sun's heat. This problem has already cropped up in a number of other restoration projects and has resulted in considerable subsequent repair and maintenance expenses. Using concrete beams poses two quite different problems. Either the beams are cast in situ and the wet process involved could damage the old plaster and paintwork below, or pre-cast beams are used, and expensive lifting equipment is then needed to hoist the beams the twenty metres or more above the ground that will allow them to be fixed into position. Moving lifting equipment to a remote area like Jibrin and keeping it there for a year and a half to two years—the time it takes to restore the floors and roofs—is almost prohibitively expensive.

Still another problem at Jibrin has been deciding what course of action to take in that large part of the building that has lost its roof, and is therefore in a state of ruin. An Italian proposal was to create a series of little awnings of concrete and corrugated plastic or glass to protect the walls and the ruined interior. This was rejected on the grounds that it would not preserve the building in its original condition: adding so much modern material would result in a contemporary appearance completely alien to the spirit of restoration. It has been decided instead to re-erect the original roofs over the whole plan, even where the interior is left only partially restored and some of the intermediate floors are missing.

Jibrin, in common with most Islamic buildings, also presents problems when it comes to renewing its roofing material. Throughout a large part of the Islamic world the original roofing surface was qadud, or variations on it, made by the laborious process of beating into thin layers at intervals of some weeks a matured mixture of ground Hashash marble and lime. While what results is a remarkably hard, waterproof and permanent material, it does crack, and its cracks can only be repaired by using further layers of the same qadud. The alternative roofing material in much of the Islamic world was kudrah; this material is a mixture of lime and ashes, also laboriously beaten into place.

In the roofs of the palaces in Oman we found both qadud and kudrah. In all cases roofs had been neglected for so long that they had broken up into small pieces by exposure to the sun and were no longer waterproof. In the great palace–fortress of Hazm, a similar roof has been replaced by cement. But it proved unsatisfactory, partly because of its ugly grey colour, but mostly because it cracks easily in the diurnal extremes of expansion and contraction in that climate. But replacing the Jibrin roofs with qadud or kudrah would mean both great expense in skilled labour, which would have to be imported for a considerable period of time, and continual problems of maintenance in the years to come. Any alternative materials, however, have to be selected to retain insofar as possible the original colour and quality of the surface. A proposal now being tried is a seamless plastic used under a layer of light–coloured, finely ground stone.

Then there is the problem of insulation. The roof was traditionally insulated by adding a layer of approximately thirty centimetres of earth or sand above the ceiling and below the roof finish. This results in a great deal of weight, and a frequent problem in restoration is how to reduce the loads on beams and walls. At Jibrin this is being solved by using pumice and other lightweight materials, which have the added advantage of retaining the original depth of insulation, an important consideration in the choice of materials. Finding new materials that will have lower initial and maintenance costs than traditional Islamic roofing materials is an area that merits considerably more research.

Another project in the Sultanate of Oman is the restoration of the palace–fortress in Bahla, the ancient capital of the country.

Oman, Palace of Bahla. View showing the height and condition of the walls

Photo: R B Lewcock
The palace was in reasonably good condition until it was damaged in the fifties, when it was assaulted from the air by the British coming to the assistance of the former Sultan during civil disturbances. Restoring the ruin of what may well be the most important single monument in Oman now poses tremendous problems.

The worst difficulty is that of undertaking archeological exploration underneath a building slated for restoration. Bahla is known to have been the Achaemenid capital of Oman. The palace was built on the highest point of the tell, which eventually became the fortress; the encircling walls include, in addition to the palace, a mosque, a number of barracks, subsidiary palaces and a great entrance. The elevation of the whole complex ten metres or more above the surrounding plain strongly suggests that it was also the site of an earlier city, a conclusion confirmed by the location of several outcrops of rock near the surface. It seems imperative that a thorough archeological excavation should be undertaken before the site is disturbed by builders engaged in restoration work. On the other hand, the ruined palace has walls that reach up to sixteen metres above ground level, built entirely of unbaked brick, which have lost their stabilizing support from cross walls and floors. The danger of collapse is therefore a serious one, and disturbance of the foundations by archeological excavations could precipitate it.

Whatever is decided, the problem of conserving the unbaked brick walls still remains. These have crumbled at the top, and in many places the surface is eroded and even deeply undercut. The conservation of eroded, unbaked brick walls is a major problem confronting architects in all Islamic countries, and is akin to the problems involved in preserving layered or rammed earth. Like the roofs of qa‘daq and kudrah, the walls of unbaked earth can be repaired and maintained by using traditional methods, but these involve a great many workmen and are impermanent besides—they need to be continually maintained and resurfaced. Various techniques are being investigated to both toughen the surface and increase the overall strength of the walls, and the Ministry is hoping to experiment with and eventually utilize one at the palace of Bahla that is being developed by a British engineering firm. The process will retain the existing surface appearance and even, if so desired, its crumbled skyline and undercut arcs, while rendering the clay brick water-proof and many times increasing its strength. Incidentally, the same static-binding technique can be applied to any granular material and thus used to strengthen plaster, brickwork or stonework, in addition to earth wailing.

A Preservation Effort in Egypt

Moving to another country and another project with which I have been involved, the restoration of the largest of the five palaces used by the fifteenth century Mamluk Sultan Qayt Bay involves the consolidation of a ruined building in the centre of old Cairo. Known as Bayt al-Razzaz, it is amazingly complete in all its details; the problem has been to decide what steps to take to prevent the collapse of some parts of the structure before, during, and of course after restoration. In spite of the many large cracks which the building has developed over the centuries, and the dire forecasts of some consultant engineers, tests have shown little or no present movement in the structure in any of its sections. This is an object lesson in how money can be saved in restoration work; by reducing propping and strutting to a minimum we have already inadvertently saved a great deal of money. Such gambles may be justified if funds for restoration are short—as they usually are—particularly where parts of the structure are relatively unimportant and the programme of restoration is spread out over many years. The unimportant parts can be left to last, with no workmen in or near them.

A study of the period in the history of the building during which the cracking most likely occurred can also provide some idea of how long the building has remained standing despite the serious cracks. Most buildings crack, if they are going to, during

Cairo, Bayt al-Razzaz: the large reception room (qa‘a). The central depression marks the site of the fountain.

Photo: R. B. Lewcock
Cairo, Bayt al-Razzaz. Reconstructed axonometric view
After a drawing by R B Lewcock
their first twenty or thirty years, as a result of the settling of the new loads on the foundations. If the building's geometry is seriously distorted, collapse is possible because of subsequent widening of the cracks by annual or diurnal expansions and contractions. In the case of Bayt al-Razzaz, cracking was caused by a lowering of the water table as canals were closed and wells dried up with overuse. This happened a century ago. It was followed soon afterward by additional drying, caused by the introduction of piped sewerage to replace the cesspits in the centres of the courtyards. We reasoned that the major cracks of modern times had all occurred eighty or more years ago, and although one section of the building has subsequently collapsed, this was thought to be mainly owing to the progressive effects of expansion of the original cracks in an area of shoddy construction. As almost all the other parts of the building appeared to be much better constructed, and the present stability of the structure could clearly be demonstrated, we felt justified in assuming that such stability would continue unless unanticipated external forces produced a change.

Another problem in restoring the Cairo palace was repairing the damaging effect of dust on the paintwork. In medieval times, Cairo windows were not glazed. Instead, grilles and mashrabiyas were used which permitted air to move freely in and out of rooms. Unfortunately, they also permitted the accumulation of dust. As long as the building was properly maintained, this dust did not cause damage, at least at the lower levels which were within the reach of the servants. One hundred years of occupancy by squatters, however, had allowed the dust to accumulate. Since thick dust had permitted the growth of microorganisms which attacked the paint, one of the first steps in restoration was to remove this dusty layer. Because of the relatively high cost of manual labour, we could not afford to keep the building clean over the long period of restoration, however; dust is clearly still a problem for the future, as constant dusting will have to be added to the expense of general maintenance. For the time being we have solved the problem by closing many of the openings with plastic sheeting.

The Old City of San’a

We turn now to North Yemen, and particularly to the capital of San’a. This is an old Islamic city, almost perfectly preserved, which is now threatened with destruction from modern technology. San’a probably owes the preservation of its old city to the lucky chance that the Turks separated the new city from the old in the sixteenth century. As an alien population, the Turks did not mix easily into the crowded life in the centre of the old city around the Sūq al-Miṣr. The Ottoman governor lived in the citadel on the edge of the town, creating a centre for Turkish life there, with coffee-houses and new mosques along a tree-lined street which he had constructed to link the citadel with the north gate. Most of the Turkish villas seem to have been built amidst orchards further west, in an area outside the city walls which had earlier been a fertile garden resort of the San’a’nis.

During the second Turkish occupation (from about 1870 onward), the Turks quite naturally gravitated to the same area of Turkish mosques and low villas. When the need arose for new buildings, they were constructed outside the walls. The hospital and Turkish school were also built west of the city.

With these buildings as a nucleus, the subsequent rulers of Yemen continued the development of the west city; it was in this area that the Egyptians chose to construct four-lane highways for their newly planned commercial centre in San’a after the beginning of the civil war in 1962. In the course of this work they destroyed a cluster of city gates on the western edge of the old city, but on the whole they left it intact. As a result, the subsequent influx of refugee businessmen from Aden settled and opened new businesses outside the old city as well. This new city thus became the centre of modern business activity, leaving the old city to the craftsmen, indigenous merchants and traders. The population within the walls of the old city is roughly 30,000 people, and their way of life is so entrenched that the presence of the modern city next door has had much less impact on the customs and traditional patterns of living and working.
rent these dwellings have no concern for maintaining their finely decorated plaster surfaces, window grilles and woodwork. Some of the areas are gradually becoming slums, and it seems likely that the pattern in old Cairo and old Istanbul will follow here unless some plan of action can be found to ensure the revival of pride in these old houses.

Such a programme would have to be preceded by a careful study of a number of aspects of the problem. We need to study, among other things, the attitude of the inhabitants toward the new living patterns, so that these might be satisfied; the best way to modernize the buildings with kitchens and bathrooms without spoiling them in the process; methods of control through legislation; the possible but highly controversial use of foreigners as caretakers of vacant buildings, until such time as the local people change their attitude toward the traditional houses and living patterns as "old fashioned," a change of attitude that may take as much as a full generation; and the effects of allowing foreigners to live in the traditional quarters of the old city at all.

The methods of introducing modern traffic into the old city also pose problems which could be solved in several ways. New roads that do not conflict with the traditional street pattern could lead to parking areas within at least four hundred metres of each house and provide even closer access by taxi. By allowing vehicles under a certain size into the old city only during restricted hours, the streets would be kept free of vehicles during the hours of maximum pedestrian use. Subsidized public transport and taxis could be allowed to use the traditional streets, but with restrictions on their size (minibus, minitruck, minitaxi) and speed (maximum 30 km per hour), and on noise (no horns and strictly controlled use of mufflers on cars and on motorcycle engines).

Electric cables and telephone lines throughout the old city must be introduced, but underground. Sanitation and drainage must be improved, all the more because water is scarce in San'a and waterborne sanitation is impractical. With the expansion of population and industry in San'a, the wells that tap the ground water have been steadily drying up. The water table has dropped twenty metres in the last seven years, and there is danger that ground water will be insufficient in the near future. Reaching ground water in a much deeper water table would involve redrilling most of the wells in the city, but this may be necessary; experts anticipate that a shortage of water will soon be a compelling problem.

Traditional methods of sanitation must be assessed with judgments unprejudiced by the Western assumption that only waterborne sewerage is hygienic. San'a's system of sanitation was much praised by visitors from other countries in the early centuries of Islam and during the Islamic Middle Ages, particularly for its cleanliness and freedom from smell. This was accomplished by separating in the lavatories the solid excrement, which dropped into an enclosed cellar, from the liquid, which was taken off separately into a trench drain. The solid excrement dried quickly in the dry mountain air and became odourless. It was then burned as fuel in the public baths, and the ash used for fertilizer. The liquid was washed down by water after each toilet, and it also evaporated quickly from the channels and trench drains and produced no smell. From a hygienic point of view, the complete drying of the bathroom floor and the channels eliminated the possible spread of disease, as most germs cannot survive in dry conditions. The result was a sanitary system which was probably as efficient and as clean as any ever achieved in earlier times.

The World Health Organization, however, decreed that only waterborne sewerage could be used in San'a, and they persuaded the municipality to use underground drains. A new regulation required all householders to run pipes into the old water channels so that liquid from the lavatory would run into the drains. The results were disastrous. The junction between the new pipes and the old bathroom floors was often so poorly detailed that half of the liquid ran out around the outside of the pipe. A green fungus formed in the space between the pipe and the wall which retained moisture and produced a stench. The inhabitants were demoralized into thinking that their tradi-
tional systems of hygiene were inadequate, and they ceased to maintain them properly. Modern visitors judge Yemeni hygiene by the smells produced in the worst of the San’āʾ slums in what were once fine old houses, and by overloaded public lavatories which the mosque authorities have shamelessly failed to maintain even as the population has expanded. These problems could be dealt with relatively easily by reviving the inhabitants’ pride in their traditional hygiene system and by suggesting ways of improving it, using modern, unbiased studies of sewerage systems.

The conservation and restoration of mosques is a special problem in most Islamic countries—not least in Yemen, where the mosques are so historic—as it involves religious authorities and elders who are apt to want complete control over what is done to the buildings, and to resist the advice of trained experts. This problem is compounded because new paint, additions, alterations and complete rebuilding of a mosque are sources of great satisfaction to its authorities or elders. A final difficulty is ignorance of what causes decay in an old building, which often means that repairs are left until it is too late. Money on hidden maintenance is generally spent grudgingly, preference being given to superficial re-decoration or simple repainting.

**Principles of Conservation**

Many modern restorers are concerned because repairing mud-brick walls often leaves buildings with an entirely new face, but this was an annual practice in traditional societies. A properly maintained mud-brick wall had a marvelous surface precisely because it was competently maintained. The taste for decaying mud walls is a Western one, deriving from our passion for the romantic and the picturesque. We have to guard against transferring our values and tastes to other cultures. In dealing with Islamic architecture we cannot legitimately go to the extremes of the Japanese wabi taste, which takes delight in man-made forms being lost in the original character of the material,
because that taste was—so far as we know—not cultivated in Islam.
Attitudes toward conservation range over an entire spectrum. The "archeological" attitude emphasizes scientific conservation, in which everything new is set off as distinctly as possible from everything original. It is exemplified especially in the work of archeological restorers in Italy. It is frequently visually ugly, destroys the forms and lines of the building and is an insensitive response to the architecture. Its justification is solely scientific. The "romantic," sentimental attitude frequently shows ignorance of traditional techniques and of the building's original appearance. In the case of Islamic buildings, it also ignores the Islamic practice of renewing and maintaining buildings. The "practical" architectural approach stresses the practical knowledge of a modern architect, engineer, or building technician, and frequently suffers from the same kind of ignorance. The "poetic" attitude values the patina of age, a quality difficult to preserve in many materials, especially if a building needs conservation to prevent serious deterioration or collapse. The "cautious," undogmatic approach emphasizes humility toward the work of men of other ages, responsibility to the past and future and not just the present, and a healthy skepticism toward easy solutions and single-minded attitudes; it takes all possible viewpoints into account and attempts to satisfy the most reasonable in all of them.
An example might be in order here. In Oman a ruined fort was in trouble. Confronted by the warning of excessive restorations elsewhere, the authorities hesitated to convert it from a ruin into a new building. Although parts of the fort were almost totally destroyed, several faces were well preserved; it was possible to make out the original plaster decoration, the forms of the plaster arches, and windows and doors. These few faces might have been renewed, but it would have thrown the work out of balance and destroyed the wonderful quality of aging and pitting across the surface of the plaster and its ornaments. For these reasons, the more expensive method of consolidating the existing plaster with resin injections was adopted. It was felt to be justified, although it proved much more expensive than replastering. The stabilization of the ruin against collapse was also not as cheap as other approaches might have been. Finally, a setting was created for the ruin which approximated its appearance before lean-to iron sheds had been erected around it. The site around the fort was planted with indigenous vegetation such as might have grown there originally, and a watering place near the fort was restored to what was imagined to have been its appearance after similar aging.

**Conservation Programmes**

Any country or region needs a systematic programme of conservation to maintain buildings and protected areas, and to extend control into the surrounding environment. The environment is often an integral part of a monument, possessing a quality that in itself determines the form and character of the architectural development of the building.

The programme of conservation should begin with contextual research, possibly using students under supervision to make research surveys. The results of the survey can then be recorded, with index systems to provide easy access to all the information, and measured drawings made of every important building in the region. The necessity of making this information comprehensive cannot be stressed too much—one never knows what will be pulled down next. In Oman the authorities were surprised by the destruction of one of the bastions of the old fortified merchant's quarter at Muttrah, the Sūr La' Luheiya. No one had even thought it to be in danger. Fortunately, it was possible to establish its form for rebuilding from measurements of the foundations and from photographs.

A comprehensive system of surveillance is also important. Sites and buildings due for conservation or restoration are often so vandalized that, in some cases, major
features of monuments disappear. Unscrupulous collectors and antique dealers steal decorative elements, furnishings and sometimes whole doors, windows and screens, and builders quarry materials. Whole monuments can be demolished before anyone in authority is even informed, and the environment can be irretrievably destroyed.

Public Interest and Awareness

Public interest in the preservation of cultural heritage is vital. The establishment of the Ministry of National Heritage in the Sultanate of Oman was an excellent way of directing attention to the importance of monuments. It doubtless arose, to some extent, from the regular publicity given to the meetings of the Sultanate of Muscat and Oman Historical Society. A revival of interest in old crafts and in the history of the country eventually led to interest in traditional methods of architectural design and craftsmanship, and pride in the country’s unique achievements. Unfortunately, the Sultanate of Oman is not typical. More often the response of state and local governmental authorities has not matched the widening public interest, when in fact they should be leading the way.

Comprehensive programmes need to be instituted to educate people—especially the owners, occupant and trustees of old buildings—in their responsibilities regarding conservation. Where there is an official organization, department or ministry, this can be done through a monthly or semiannual journal reporting on new work and discoveries. But this would reach relatively few people, and a broader programme is also advisable. Poster campaigns have been used in some countries with great success. Providing funds for subsidizing articles in popular magazines and newspapers on monuments, and on conservation and restoration developments, is another possible scheme. Local societies that take an interest in protection and conservation can also act as pressure groups encouraging wider public participation.

Finally, the building, engineering and particularly the architectural professions must themselves act responsibly, both by forming professional pressure groups for conservation and by controlling their clients’ actions in regard to building in or near monuments. Their responsibilities should be more widely understood and shouldered.

Conservation Areas

The public must be made to realize what is involved in preserving a whole town or village as a unique environment. It involves the separation of alien modern urban features from the preservation area, for the two cannot be mixed without guaranteeing the eventual destruction of the old. In Europe, examples of this lesson are everywhere: attempts to introduce new shopping centres and to allow traffic into the hearts of old cities such as Amsterdam and Cambridge are just two instances. While the parts of an expanding town obviously have to be linked together, this need not be done through the old centre. A better solution is always a peripheral road. Traffic has to be kept out of some old streets altogether, except under very special circumstances. It can be discouraged in others by enforcing slow speed limits, permitting only small vehicles and limiting hours of access. More generous alternatives can then be provided outside the conservation areas.

The problem of pedestrian and vehicular traffic intermingling in narrow streets has to be tackled intelligently. Any attempts to solve it by using sidewalks to separate pedestrians and vehicles leads only to a new alien character in the old towns. The mingling of different types of traffic has to be preserved, which means vehicular speeds cannot be much faster than a walking pace. Anyone familiar with the old market centres of such cities as Cairo and Rome will realize that this can be done, if the deterrents are cleverly conceived and strictly enforced.

Old town and city walls and forts are most seriously threatened. Nobody has any use for them, and they will receive no maintenance or protection unless official steps are taken by a central or local authority. Religious buildings pose quite a different problem, because of the autonomy of religious authorities. Laws should stress the responsibility of both sides (that is, the Awqaf and the national conservation authority) to conserve the buildings. The absence of direction through legislation and the lack of advice from experts in conservation can lead to the deplorable results with which I am sure we are all familiar. The smaller shrines and tombs are even more often allowed to fall into ruin for want of financial support.

The environments of religious buildings pose a separate problem because they frequently do not come under the authority of the mosque. The government must have special authority before it can acquire land that will be needed to preserve the character of such buildings, in order to avoid incongruous juxtapositions and the dwarfing of valuable monuments by high-rise structures.

Materials and Techniques

Using the same materials and techniques in restoration work as were used in the originals has many advantages. It makes possible the perfect blending of repair work with the existing structures—particularly important where weathering is felt to be part of a building’s character. Only by using original materials and techniques can one be certain that the new work will weather in the same way. Furthermore, the introduction of different materials can result in different rates of expansion, contraction and weathering, which can cause severe cracking and eventually a discoloration which makes the patched area stand out. We have all seen examples of this in repaired plasterwork. A distinction must always be made between “renewal” and “preservation.” At all costs, the authenticity of the original building must not be destroyed.

The use of original materials and techniques involves research and the training of special work teams in traditional skills. Such work
teams represent a vast improvement over general contractors, who think in terms of modern building and resent the laborious processes expected of them by conservationists. A corollary, however, is that one must offer high wages to persuade craftsmen to maintain their crafts. As a result, restoration work is no longer cheap, for one must compete with prices paid for manual labour in modern technological societies. To expect that restoration work will be cheaper than new building work is unreasonable.

Importing craftsmen from one country to another also has its risks. Architecture throughout Islam is no more uniform than architecture throughout Europe and, as in Europe, one problem for the conservationist is to resist the internationalizing impulse and preserve what is idiosyncratic to the region and the country. Only crafts and craftsmen that work correctly in the particular style and area can be used.

New Functions for Old Buildings

The problem of the obsolescence of buildings in Islamic countries may have been overstressed by some conservationists. Madrasas have been used quite successfully as residential colleges on the pattern of Oxford and Cambridge. Khāns, caravanserais and samsaraks can easily be converted to warehouses, providing that when they serve that purpose they are adequately maintained. Since the world of commerce is not always likely to spend money on a warehouse just because it is artistic, public subsidy will have to pay at least for the transformation. The hammamāt, the public baths, are neglected and deserted because they have been allowed to run down; in Sana‘a a bathkeeper who keeps the baths clean can make them so popular that even citizens who have in other ways completely adopted Western habits can be tempted to frequent them. If it is necessary to subsidize baths to achieve this, the results are still well worth aiming for. In many Islamic communities, the public baths performed the role of social centre, where one met one’s friends and relaxed in a hot bath, followed by conversation, music and refreshments. The revival of this institution may also restore some other traditional social values. If cleanliness and good behaviour were stressed today, as they were in the past, the social decline might well be halted. In Yemen, baths were models of decorum and cleanliness until Western ways overcame the country only a few years ago.

Conclusions

Restoration involves legislation, public education and money. Without all three there is no such thing as a successful programme. Legislation alone cannot preserve or conserve a heritage; nor can ample public funds, without the public’s belief in the need to preserve and conserve. In Western countries as well, a determined private owner, a local authority or even a government ministry can subvert and circumvent the most carefully constructed legislation, if it does not itself recognize the importance of the effort.

Similarly an enlightened public unsupported by effective legislation will also fail, because the good will of the majority will have to contend with the unimpressed minority who may be the ones holding the pursestrings.

Effective legislation combined with an educated public are still no protection for monuments without financial assistance for restoration work. This was one of the painful lessons learned just after the Second World War in Europe: unless public money was available, the high costs of conservation forced the private owner to turn valuable buildings and property over to developers. Lack of resources will also lead to inadequate research and, ultimately, to superficial and often damaging restoration. The need to satisfy all three requirements—money, laws, and education—before a successful restoration programme can be undertaken is daunting, but only if it is squarely faced is there any hope that a nation can save any of its heritage.

Architecture is concerned at all levels with the fulfilment of people through an expression of their individuality. The pace of
living and its attendant pressures are making it increasingly difficult to maintain our sensitivity to those feelings. At the same time, technological advances encourage internationalism and the ironing-out of differences—whether between men or between built environments—at the expense of the expressions of our personality, whether as individuals, groups, regional inhabitants, or as nations. Traditional architectures were produced out of man’s attempts to come to terms with nature, to reach a rapport and a balance that allowed him to make the most of natural warmth and the least of cold, and to appreciate the utility and beauty of materials that lay at hand. Now that the technology of building is so advanced that we have gained control over our physical environment, we are protected from this daily experience. Unfeeling toward the world in which we live, we become unfeeling in other ways as well. The lesson of the great monuments of the past, as well as of its most humble buildings, is that through them ordinary people experience architecture as it relates directly to the environment and to their everyday lives. This is a more fundamental justification for conservation than the immediate function—a modern utilitarian purpose for the retention of a particular building—since it is a justification that goes beyond the confines of our own times.

Traditional buildings were on the whole much more within the comprehension of their users than are today’s complex environments. The continuum of materials and climatic conditions linked, in concept, structure and finishes, even the largest public buildings to the humblest house built with the owner’s own hands. The technological architecture of today, whether it is the multi-story office block or apartment building or the prestressed concrete hyperbolic paraboloid of the modern mosque, is beyond the ordinary man’s understanding and the scope of his individual skills.

There are indications that some people in Western society are turning against the technological way of life for these very reasons. They are becoming interested once again in the problems of survival in a natural environment unencumbered by the specialist as intermediary. The conquest of nature is being replaced by respect and appreciation for it. That architecture should reflect its natural habitat, and indeed derive from it, is now an article of faith of the emerging generation. That old buildings are important is an integral part of a tradition that evolved from that same direct relationship.

Living and working in buildings made of natural materials that come from the surrounding landscape and still form part of it, walking in streets free from the menace of the speeding motor vehicle, under awnings that bring shops out into the streets and offer shelter from sun and rain, are things that make people more aware of their place in the world and in society, and as a result make them less alienated and less anti-social. Cities and towns with walls encircling them, enshrined since time immemorial, constitute places celebrating aspects of town life that ought to be revived and reorganized in sympathetic ways. The walls force us to make clear and necessary distinctions between urban and rural life.

Conservation should preserve these traditional values—the fascination of labyrinths in the old cities, the mystery of the courtyard spaces behind the walls, the magic of brightly coloured and decorated tile work or marbles after endless streets of dull mud plaster and rubble stonework. Its essential function is to enhance our understanding of experience, to revive past values and to provide a standard for comparison against which we can judge the achievements of our own times.

Comments

Ardalan

I believe that the points raised by Mr. Bianca’s paper are essential and fundamental. I repeat the argument for my own benefit, to ascertain whether I understood some of the points correctly. Concerning the many poor people in the madina, they would require great social pressure to move away from there; they have a much greater incentive to stay and preserve it. Another point is that the madina, the heart of the city, is so large and so dense that it constitutes a major city population. Third, the most basic question is whether industrialized societies can competently design for non-industrial societies, or whether the urban dweller can really design for the rural poor. These are fundamental questions that should foster further discussion, because they are critical points to this entire process.

Bianca

A quite surprising fact is that the Fez madina still accounts for sixty or seventy percent of all the commercial activities of the whole urban conglomeration, even though the merchandise has to be transported there by donkey or on horseback. Things are cheaper in the madina, because the shops involve smaller spaces and bigger turnover. People travel from a newer section of town to buy in the madina; it acts as the shopping centre for the whole city. This is a fact which surprised us.

One of our major concerns in Fez is the inherent stability of the area, reflected in the pattern of proximity to the river and to roads. If commercial activities are diverted from the east–west routes to the north–south axis, the unity of the traditional east–west sides will be disrupted, and result in a break in continuity. That is why we have established the policy of limiting commerce to the southwest side. Of course, there will be all kinds of facilities connected with the new points of access: depots, for instance, to
manage the switch from the animal to the motorized system, and the maintenance of a certain storage capacity. There will have to be coffee shops and all kinds of services, as well as accommodations for the new facilities which are not compatible with the traditional structures of the madina. These new facilities could find their place around the central square, but we cannot allow any extension to the south because this would dangerously disrupt the traditional structure of the town.

**Akçura**

We should remember that saving the entire madina of Fez was the aim of imperialists over sixty years ago, which lends itself to comparison with the contemporary Kemalist attitude in Turkey. Total preservation is difficult in any case—as the relative importance and vitality of old city centres diminish, they must be artificially connected to other vital centres to counteract that trend.

I fear that we lose sight of our objectives in urging excessive conservation efforts. Conservation should not result in worsened living conditions for the urban poor. Yet the influx of poor people into old neighbourhoods often causes the middle classes to abandon that area, yielding an artificial segregation. We must not neglect the basic overriding demand for housing required by the very large poor population in Islamic countries. We cannot sacrifice urgent large-scale provision of shelter for the aesthetics of preservation.

**Cansever**

If the appealing aspects of life in the madina are rediscovered, the rich will start coming back to the traditional milieu. In Turkey, the middle class trend toward moving into modern apartment buildings is already reversing itself.

Both universal and local solutions to the housing crisis must be sought. It is necessary to establish a cultural policy, and to determine optimal usage of resources. Admittedly, the many aspects of development are contradictory; we must seek the means of reconciling them, and think about change in terms of future as well as present demands.

**Tekeli**

I would like to ask a new question. Throughout the seminar, speakers have brought forth interesting observations based on their experiences in different countries of the Islamic world. How can we derive any general conclusion from these disparate experiences? If we want to extract certain generalities from these valuable studies, we must first determine the major goals and elements of conservation. We realize the importance of change, and have therefore considered the question of rapid versus slow change within the system. I believe the problem to be one of classification. What relationship do political classifications have to conservation problems? The questions raised are truly multi-dimensional. In regard to political ideology, which topics constitute conservation topics? What type of tools are being used? How are funds raised? What types of organizations are behind the ideas? What is the relative stability of a given conservation policy? The answers to these questions are closely tied to a country’s predominant political ideology.

**Holod**

I just want to point out three things about Dr. Batur’s presentation that struck me. First, this is the first time that someone has made specific the actual ways in which information is collected. Second, the presentation made clear the importance of passing municipal codes. Third, it raised the question of whether this particular importation of the housing form had any kind of impact on the existing or later social form. These are three topics which may merit our further attention.

**Correa**

Regarding the high population density of traditional urban centres like the walled city of Lahore and the madina of Fez, it is clear that the poor move to areas in proximity to job opportunities.

**Bianca**

I would like to go back to the questions raised this morning about my paper, not to discuss the Fez project in more detail, but because I think the questions are of broader interest and concern policies in general. There are three points to which I would like to address myself. The first is the courtyard house, the major component of Islamic towns. It seems to me that to view the courtyard house just as a place for separating the sexes is not to consider the courtyard house in its full dimension. The courtyard house provides the basic intimacy and privacy so necessary for Muslim family life. It also gives human beings that direct contact with nature which they lose entirely in high-rise apartment buildings. I do not think these values are substantially altered by modern developments, such as whether the women are working or not; this would in no way lessen the intrinsic value of the courtyard house.

**Williams**

The World Bank approach favours project funding which will aid that part of the population earning less than half the median income in any country. When this affects a large segment of the populace there is a relatively small per capita cost. Before embarking on a project, points to be considered include: who the beneficiaries will be; how service, security, stability and employment will be secured in the affected area; the sources of financing; and finally, the ability to implement the desired goals and processes.
The second point is about the possibility of having universities in the madina; would this be unthinkable because of poor economic conditions there? I think we need to consider that knowledge is linked to a spiritual atmosphere, to a certain environment. The Qayrawiyin mosque and university in Fez are a thousand years old. The university is one of the oldest in the world and it certainly possesses this spiritual atmosphere. This praise might express a purely spiritual or cultural point of view, but it is, simultaneously, an illustration of modern educational theory. The current trend is to avoid separating the student from his town, and in these respects the mosque-university of the Islamic town is the most modern achievement one can imagine. I would like to state this quite firmly.

The third point concerns the opinion that people want to leave the madina. This might be true, but it is a very dangerous assumption to make for two reasons. The first is that it is only an assumption; there is no real proof. No one has made a survey asking whether any individual wants to leave his house or live in some other house. Nor have the concomitant questions been raised: do you have the means to afford that kind of life? Do you even want to have that lifestyle? What style of life do you want to have, given the constraints in material standards of living? All things properly considered, we cannot ascertain at this stage whether the inhabitants of the madina would prefer to be elsewhere. Furthermore, in the case of Fez, one simply cannot compare the madina with the new town. In the past thirty years all major investments have been made in the modern town; nothing has been done to raise the quality of living in the madina. To make things comparable, comparable investments are necessary in the madina along the lines of the Master Plan. I have described the introduction of schools, improving the transport system, classifying the commercial scheme and other mandatory improvements. Once the implementation of these policies has made conditions competitive, then the old and new systems can be discussed and a fair comparison made.

The challenge for us is to take the offensive in demonstrating that what has been an exemplary Islamic town through the centuries can continue to be a modern exemplary town today. Most of the basic or human values reflected in the madina are qualities which are more deeply rooted than any that might be called progress. This does not say anything against meeting new requirements and new needs. This should indeed be done, but one must evaluate up to what point new needs are compatible with traditional structures, to what point they are mutually exclusive and to what point they are combinable. It would be wrong to satisfy new requirements at the price of destroying old, traditional values which go far deeper. The challenge is to determine on an individual case basis at what point balance between old and new is reached, and then to begin using coherent policy and strategy to form a viable plan.

Fathy

We have to keep in mind that the problem is multi-sided, with social, economic and cultural aspects. I would like to speak about the functional. Until now we have not considered it, but in old quarters and buildings we must consider the functional point of view in order to evaluate the ground planning, the architectural concepts and the design concepts of old Arab houses. I am talking about the Arab here, rather than the Islamic, because our immediate focus is on Fez. In any case, the lands of Islam are spread from India to Morocco, and comprise especially the hot arid zones extending from latitude ten to thirty-five.

Some scientific research has been done in Fez by a man who investigated the design concept of the Arab house, considering the value of the courtyard house as a regulator of temperature. By applying modern science to the design concept, the aesthetic was combined with the structural to produce the functional. But these days we discard our heritage in the name of function. So I would like this concept of function to answer those who assume that traditional solutions are non-functional. They have really been confusing modern science all too superficially with function. For example, glass walls are modern and are indeed quite appropriate in some climates. But in the hot and arid countries, a building with an elevation of glass becomes a solar furnace, requiring a huge air conditioning effort and expense. This may be contemporary, but it is far from functional.

The proper aesthetic includes viability and functionality. The state of a healthy man can be judged by his appearance, because illness is ugly and health is beautiful. We can apply this to housing as well. To discount the aesthetic element in the environment is a symptom of illness, and any society that condones ugliness is a sick society. We feel that the houses in Fez are still healthy and beautiful, and still reflect the society which sheltered them.

I remember a group from the Architectural Association School in London who came to Cairo and evaluated some of the old houses. But they did an incomplete job, because they only considered the aesthetic element. They ignored the same conditions in old buildings and modern quarters, and compared them. They did conduct a quite comprehensive comparative project, on some model buildings situated on the grounds of the Building Research Centre in Cairo. They found two extremes there: one was a modern prefabricated model and the other a humble mud-brick construction. The air temperature inside the "backward" mud-brick building was 17°C lower than it was in the modern prefab. So if we are to evaluate what is to be added to our buildings in the name of preservation, we ought to have full knowledge of what we are doing and what the ramifications will be. We have to conduct comparative research in old quarters and modern ones, and see what they are doing to our country and our people. To my mind, if we add even one degree to the interior air temperature, this is as backward as backward can be. We need not sacrifice time-tested technologies and related aesthetic sensibilities in the name of modernity and a false functionality.
Makiya

Throughout the presentations, conservation has meant much more than mere rebuilding of antiquity, its beauty being revived and restored. Conservation denotes the quality of life and the environment: it means the sky, the water, the streams, the trees, the landscape—the whole of nature. It means respect for the isolated elements of nature, and an ability to view them in a not merely isolated way. The view of Lahore this morning was just such a comprehensive endeavour.

What does a comprehensive approach to conservation mean? It means a lot of hard work, including that which goes into the training of the decision makers and professionals. It might mean a revision of our own approach to the teaching of these professions, in order to come to a proper understanding of our objectives. We need to recreate or generate a balance of activity in the city, and this cannot come about by itself. We recognize that this is part of a much bigger scheme of things, that there are constraints of all sorts. The revitalization of the city is only a single component of national planning. It is not a part of our global consciousness, but this may yet be realized. We have entered an era of global cooperation, realizing that our individual capabilities cannot rival our collective ones. The problems in Lahore are problematical in many cities; their solutions, or the tools for their solution, should likewise be shared ventures.

Kuban

Let us discuss the subject matter of this conference. It is said that the future shape of our environment cannot be predicted, but we can observe that if it is at all like the present plan, it will have no personality at all. We must change that. The past has the potential to create an atmosphere in which the future can be shaped in the manner most expressive of our culture. This shape must not be frozen, but should be able to change while maintaining the integrity of its particular personality. So I was born Kuban, and I am Kuban still; this is an organic process. I am enriched by progressive growth and change. The cessation of this progressive development would mean death.

Islamic cities are dying, because the rupture with their past has linked them to the ailing conditions of industrial society. Mecca is being destroyed, from outside and from within. What we must do is define our future by ourselves. We have to define ourselves by our own future, not in terms of modern industrial society, but using a larger definition of the future as an integration of past and present. This has not been done, and that is why Mecca is dying.

Let us clarify some points in detail. We should not define conservation in terms of stopping change. We have to accept change as a process, but make it a slow change in which the sense of continuity of the environment is maintained. What we are trying to save is a rather small part of the built area in all larger cities; smaller cities are apt to be even more vulnerable. For each case we must find the limits of our resources, and define our methods accordingly. Modern standards can be integrated with the old standards; certainly the importance of the preserved area makes it a prime concern. Socioeconomic implications always follow the definition of aims and methods, inspiring problems of politics, of policy, of public opinion. So why preserve? Perhaps remaining close to history can provide a deeper and clearer basis for examining our problems. I am not going into more detail. I can only emphasize that the first problem is really to define what we want, what the goal of the seminar is: in short, what conservation is. We should not define conservation based on Western models, but as a slow and controlled change. The appropriate technology will emerge only if we accept this rate of change.

Onsy

When we talk about Islamic architecture, we are not talking just about Muslims. Islamic architecture is found in the many different countries which embrace Islam. Does the faith have an effect on its adherents that inspires them to produce architecture in some particular fashion? Does the term "Islamic" in this architectural context refer purely to religion, to the exclusion of other influences? Religion is but a compass, suggesting direction. In Asia and Africa and
Turkish Architecture, Past and Present:  
A Brief Account  

Apullah Kuran

Medieval Christian architecture in Europe is always considered in terms of general styles, subdivided according to regional and periodic variations. In the early Middle Ages the powerful monastic orders in the West fostered a revival of the arts. Using a common vocabulary, vast churches, monasteries and other buildings were constructed throughout Europe. The round arches of the Romanesque style gave way to the pointed arch of the Gothic. Tuscan architecture in Italy and Norman architecture in England both represented expressions of the Romanesque. Thirteenth century cathedrals in northern France and Germany are equally Gothic works; such terms as Decorated and Perpendicular merely denote stylistic variations in England of the same Gothic themes. In the Islamic world of the same period, on the other hand, there were no well-developed architectural ideas serving as common denominators. Islamic architecture is therefore always considered in terms of the political entities that evolved in the Islamic world. Rather than Islamic civilization influencing the architecture of the regions it embraced, the architectural heritage of the Islamicized regions moulded Islamic architectural ideas and forms.

Seventh century Islamic architecture was understandably modest, reflecting the indigenous building materials and construction techniques of the Hijaz. The typical mosque of the period was simply a mud-brick walled rectangular courtyard, with a shaded area on one side covered with a thatching of palm leaves on beams supported by palm trunks. In a short time, reused columns replaced the palm trunks as posts and earthen roofs replaced the palm leaves.

This simplicity obviously did not suit the Umayyad taste. The architecture of Syria in the eighth century strongly resembled articulated Byzantine buildings in form, decoration and style. Later, when the centre of power in the Islamic world shifted from Damascus to Baghdad, architectural influence shifted from Byzantium to the Sasanids. The mosque retained its original form of court followed by open-sided hypostyle, but the Abbasid palaces emulated in spatial organization, rhythmic treatment and ornament those built by the Sasanids. Pointed arches, vaulted arcades and eyvans (reception halls) prevailed.

Further to the east, in Central Asia, the Turks introduced the four-eyvan scheme to Islamic architecture. The cruciform plan had been used in the Ghazni region in Afghanistan since ancient times, and was typical of the houses at Bamiyan during the Seljuk period. As the Turkish Islamic states emerged in Central Asia, it was only natural that this regional system of architecture would be utilized in their monumental works as well. The cross-axial four-eyvan scheme is equally manifest in Ghaznevid palaces, Karakhanid rabats, and Seljuk caravanserais, madrasas and mosques.

If we disregard the funerary towers erected as memorials to be viewed from the outside, Seljuk architecture can best be described as introverted, in the sense that its internal organization is well hidden behind its walls. This architecture shows a contrast of expression between the unassuming, plain, and often irregularly shaped external mass of the
building and the orderly internal composition of arcades, vaulted recesses and rooms arranged around a courtyard.

By the mid-eleventh century the Seljuk Turks had arrived at the eastern frontiers of the Christian world, and by the end of the century they had moved into Anatolia. East of the Euphrates River, the Ortuksids developed in the next hundred years a mode of building within the context of the Mesopotamian and Syrian architectural heritage. To the north, the architecture of the Turkoman settlers reflected the Armenian and Georgian styles with certain modifications. In central Anatolia, where the Seljuks came into close contact with the Byzantines, their buildings exhibited a mixture of wall-and-column architecture as opposed to the solid-wall architecture further to the east. By the beginning of the thirteenth century, however, a distinct style of architecture began to appear on the Anatolian plateau.

Unlike the Great Seljuk buildings in Iran which were built of brick, Anatolian Seljuk buildings were usually of stone. It is obvious that the Seljuks adopted certain local masonry techniques along with local building materials. It is equally obvious that they must have been inspired by the wealth of architecture in Anatolia, as certain stylistic influences in their works can be traced to Anatolian sources. But, regardless of the change in building materials, adoption of local construction techniques and the critical confrontation with the remains of the earlier Anatolian cultures, the basic characteristics of Central Asian architecture were retained. The cruciform plan which constituted the backbone of Great Seljuk architecture did not play as important a part in Anatolian Seljuk buildings, but the eyvan continued to be the essential feature. More often than not, one of two eyvans opened onto the central court, either uncovered or surmounted by a dome. Thus, although the cross-axial four-eyvan scheme did not persist, the traditional introverted quality of the building hidden inside an austere rectilinear mass remained unchanged.

Up to the second quarter of the thirteenth century, Seljuk architecture in Anatolia was unsophisticated. As it matured, the interiors became articulated and the decoration on the masonry or wooden surfaces increased. Entire walls or inner shells of vaults and domes began to be covered by faience mosaics and glazed tiles. Although the severity of the rectilinear external form continued, portals that heralded the world within assumed monumental dimensions and often rose above the cornice level. The door was set inside a deep muqarnas-crowned niche with small mihrabs on its sides, and the portal was framed by decorative bands of geometric and floral designs. Some portals were further accentuated by twin minarets that flanked them on either side. At times the whole façade was adorned and the front corners marked by carved turrets. Tall, cylindrical brick minarets provided a vertical accent which contrasted with the basic horizontality of the rectilinear mass.

After the dissolution of the Seljuk sultanate, the principalities that emerged in central and eastern Anatolia continued to carry the banner of Seljuk culture and architecture. Those in western Anatolia, however, began to develop a different mode of architectural expression. These efforts culminated in the Ottoman style which reached its peak during the sixteenth century and, by its rational appeal, in time overshadowed and eradicated the medieval Seljuk architecture.

The basic characteristics of Ottoman architecture are rationality, modularity and centrality. Unlike the Seljuk buildings, whose internal organization is blanketed under a flat earthen roof or tiers of vaulting
that are well hidden behind exterior walls, the arrangements of Ottoman interiors are revealed by the formation of their roofing system. It is as if the Ottomans lowered the height of the walls to expose the various spatial relationships through the modulation of the upper structure.

The exposition of the inner building led to the accentuation of individual parts and, whether big or small, each unit of space was surmounted by a dome or vault—the larger the unit was, the higher it became. In a madrasa, for instance, where function requires the classroom to be larger than the student cells, not only did the classroom have a bigger dome but its walls rose above the cornice level of the cells.

A second important Ottoman innovation dealt with the integrity of space. In the fifteenth century, Ottoman architects began to search for means to contain large spaces with as few vertical supports as possible. In the first stage, each bay of a hypostyle mosque was surmounted by a dome. This was a deviation from the Seljuk practice of using a single dome in front of the mihrab or a row of triple domes for special effect. In the second stage, the four middle bays were united under a single dome that was double the diameter of the others. Then came the final stage when the small-domed double units around the central space were integrated under half domes to augment the main dome in one, two, three or four directions. Throughout the stages of development that accomplished this integrity of space, the integrity of the traditional rectilinear structure was not impaired because the form of the roofing system did not dictate the geometry or the simplicity of the outside walls on which it rested. A quadrifor structure, to give an example, was completed by corner domes so that the square lower structure preserved its geometric clarity. Nor were the structurally articulated, hierarchical roofing systems of the Ottomans out of character with the basic external simplicity of Turkish Islamic architecture, in the sense that they did not embody the superfluous. It was only after the eighteenth century, when European art and architecture began to exert an influence on Ottoman taste, that the sedate restraint of Ottoman architecture was rejected in favour of the ostentatious Baroque and Rococo.

A significant development of Ottoman architecture was the gradual disappearance of the traditional eyvan as the essential feature of courtyard planning. Although the Ottomans erected buildings with rectangular-shaped, barrel-vaulted eyvans during the fourteenth century, they soon became square in plan and domed. The domed eyvan was widely used in madrasas and constituted the basis of the eyvan-mosque which recalled the cruciform plans of the Seljuks. By the sixteenth century the eyvan-mosque had virtually disappeared from the programme of Ottoman architects, however, and the domed eyvan of the madrasa had been transformed into an enclosed classroom.

Interestingly enough, the cruciform plan was retained in two types of Ottoman buildings: the bath and the pavilion. The calidarium of the Anatolian Seljuk bath invariably consisted of barrel-vaulted bathing recesses, opening onto the four sides of a domed central hall with private bathing rooms at each corner. Despite a great deal of experimentation, with fascinating geometric results, the cruciform plan was not altogether eliminated in Ottoman architecture. Of more interest, however, is its appearance in Ottoman residential architecture, since the ruins of the few remaining thirteenth century palaces or pavilions do not indicate that the Seljuks particularly favoured it. Curiously, one of the earliest imperial residences in Istanbul was built according to the cruciform plan, and a number of sixteenth and seventeenth century pavilions consisted of three eyvans and a room on the four sides of a central space. The theme of the three- or four-winged central space continued to form the core of palaces and mansions during the following centuries, even while Ottoman architecture was otherwise conforming to modes of European taste and ideals.

The eyvan, as a direction-setting element in space, did not play an important part in Ottoman architecture. Instead, the axes were emphasized by simpler and more subtle means. The walls of domed square rooms
complexes. Anatolian Seljuk and early Ottoman complexes have an amorphous character; their haphazard site plans give the impression that they were not designed as a whole, but grew out of an accumulation of buildings erected at different times. By the fifteenth century, however, Ottoman building complexes began to show a more harmonious order. The mosque assumed a central position, and geometric relationships appeared not only between the mosque and the other buildings of the complex but among the individual buildings themselves.26 Centrality and axiality are the essential characteristics of Ottoman complexes built according to pre-set designs, but the use of cross-axial planning rarely comes into the picture as a significant factor, as it did farther to the east. For instance, the

Istanbul, Şehzade Mosque, 1543-48 A.D.

After A. Kuran, The Mosque in Early Ottoman Architecture (Chicago, 1968)

were marked at their centres by doors, windows, fireplaces or niches. The middle bay of a portico was built slightly higher, and the shell of its upper structure was made a little differently from the others. In mosques, the main portal, the central dome and the mihrab defined the longitudinal axis. In those built with a forecourt, the outer portal and the ablution fountain were also situated along the longitudinal axis so that the qibla orientation was further accentuated. Where the fountain court of a mosque incorporated a madrasa, the classroom served as an additional axis determinant.

As in individual buildings, the concept of centrality and axiality played an important role in the planning of Ottoman building

Edirne, Selimiye Mosque, 1569-75—the zenith of Ottoman architecture, an architectonic expression of centrality, modularity and rationality

Photo: Mustafa Nıksarlı
monumental Baburid mausolea placed inside square precincts relate to their outer walls through the portals located across from the entrance eyvans on their four façades, and the cross-axes are visually delineated by water canals that run from the portals to the eyvans. A subtler expression of cross-axial planning is seen in the Maidan-i Shah in Isfahan. There the monotonous rhythm of the rectangular plaza defined by rows of two-storied shops is broken by two pairs of buildings, located across from each other on the longitudinal and transverse axes to create geometrical pinpointed accents in space. No such distinct cross-axial manifestation can be observed in Ottoman building complexes, which are held together not so much by axial relationships as by a harmonious affinity of components that results from common denominators of standard building materials, similar rhythmic sequences and cellular formation.

The decline of Ottoman architecture was a gradual process. The importation of the Baroque and the Rococo did not destroy the essence of Ottoman architectural philosophy, for of the two basic traits of the Baroque, only one had any influence on Ottoman buildings. Unlike its European counterpart, Turkish Baroque architecture does not possess an intricate conception of space or a strong sense of movement. What it does have is surface plasticity, inspired by the Italian Baroque or the French Rococo. This is perhaps why most of the relevant works of eighteenth-century Ottoman architecture are small buildings such as fountains and mausolea, in which interior space plays little or no part. It could be argued that eighteenth-century Ottoman architecture is basically a continuation of a well-rooted sixteenth and seventeenth-century architecture, with overtones of mannerisms on the one hand, and Europe-inspired decorative features on the other. In the eighteenth century, Ottoman aspirations were not so much to become European as to resemble the West.37

By the nineteenth century the West had come closer, and Ottoman architecture had its share of eclectic and revivalist movements. This was a critical development, for it occurred at a time when Ottoman society

Istanbul, Ortaköy Mosque, 1853 This mosque on the Bosphorus is built in the manner of the Italian Baroque. Not only the Renaissance decorative elements, but the three-dimensional quality of this building are totally alien to classical Ottoman architecture

Photo Mustafa Nıksarlı
was most susceptible to European cultural influence. Not even the emergence of Ottoman neoclassicism could help to revive Ottoman architecture—it did not have a sufficiently forceful creativity. It did not attempt to kindle the Ottoman architectural ashes, but strove to replace alien forms and ornaments with those of the Ottoman classical period. In the years following the proclamation of the Republic, Turkish architecture found itself in the midst of intellectual soul-searching. Some architects were ardent supporters of Ottoman revivalism, which satisfied them emotionally. Others, inspired by the modern movement in Europe, advocated a new architecture in the spirit of the Atatürk reforms. The fight for a new architecture captured the imagination of the people, and throughout the 1930s young architects struggled to foster this new architecture within the general framework of the International Style. Unfortunately, these efforts were disrupted on the eve of the Second World War, when Turkish architecture entered a new phase of neoclassicism which lasted until the mid-1950s. Since that time, architecture in Turkey, as in most developing countries, has been moving along an ill-defined path of neo-eclectic modern, only occasionally illuminated by buildings of substance.

Modern architecture is obviously related to contemporary civilization; it cannot be segregated from modern materials, methods and engineering systems. But technology is only a tool; it does not by itself stand for modernity in architecture. Nor does modernity mean the rejection of indigenous values in order to achieve a universal abstraction. The failure of the International Style clearly indicated that universality in architecture is not possible. The enchantment of the Third World with Western civilization, in whose developmental process it had taken no part but had simply adopted wholesale, is a fact. It is also a fact that instant communication and rapid transportation accelerate the process of cultural change. But so long as cultural differences exist, architecture as an art must resist mass-produced formulas, and cultural factors must continue to shape architecture.
Architectures is a continuum which, throughout history, has progressed by a chain of classical revivals. Renaissance architects created a new vocabulary out of classical Roman forms; Gothic architects took the pointed arch from Islamic architecture and shaped it to suit their philosophy. Ottoman architects revitalized the hemispheric dome of the Byzantines, and made it the most distinctive feature of their unique architecture. As our fascination with contemporary Western civilization wanes, and as expedient form-borrowing loses its attraction, Turkish architects will once again meet the challenge of the new architecture collectively. Utilizing the wealth of modern technology, novel architectural expressions with a sense of appropriateness and a sense of place will yet be forged.

6 One of the most important of the great Seljuk caravanserais is the Ribat-i Sharaf on the road between Nishapur and Merv, believed to have been constructed in 588/1194-5. It is a two-storied caravanserai composed of four-eypw courts, one square and the other rectangular. The rectangular forward section is plain, but the rear section—comprising a mosque, arcades and private apartments forming a small four-eypw courtyard on both sides of the great eypw across from the entrance—exhibits a rich and articulate architecture.

A significant contribution of the Seljuks to Islamic architecture were the large madrasas known as the Nizamiyas, named after the famous vizier Nizam al-Mulk who administered the Great Seljuk Empire from 1064 to 1092. The most celebrated Nizamya was the one in Bagdad, which was completed in 1066. Others were located in the cities of Baara, Mosul, Rayy, Isfahan, Herat, Tuz, Balkh and Khurasan. Unfortunately, these were all destroyed during the Mughal invasion and little is known of their architecture. However, Godard, who excavated the Nizamya of Rayy in 1937, showed that it was a four-eypw building, and it is possible that the others were comparably constructed.

The Tarik Khana at Damascus, dating from the eighth century, suggests that the earliest mosques in Iran closely followed the Arab model. The Masjids-i Jum’a at Nayin, from the tenth century, also shows that the simple hypostyle hall with a courtyard at its center continued to be built during the’Abbasid domination of Iran. On the other hand, by the twelfth century the cruciform plan was incorporated into mosque architecture. The earliest known example is the Masjids-i Jum’a at Zawara dating from 530/1135-6.

7 Turkoman tribes began settling in Anatolia during the eleventh century when the Seljuks had annexed the Kingdom of Armenia, but the gates of Anatolia opened to the Seljuks after the Battle of Malazgirt (Manzikert) in 1071.

8 Ortuk Rey, the founder of the dynasty bearing his name, was the son of a Turkoman chieftain who took part in the conquest of Anatolia. The Ortukids who ruled in southwest Turkey from the beginning of the twelfth century through the first decade of the fourteenth century created an architectural style of their own which influenced that of the Anatolian Seljuks. Examples of Ortukid works were presented by Albert Gabriel in Voyages Archéologiques dans la Turquie Orientale (Paris, 1940). For a more comprehensive study of Ortukid architecture, see Ara Altun, Anadolu’da Arttukdu Devin Türk Sanatina Geleme, The Development of the Ortup Period Turkish Architecture in Anatolia (Istanbul, 1978).

9 E.g., the Citadel Mosque of Erzurum dating from the twelfth century. It is a rectangular structure built against the walls of the inner fortress with the mihrab fitted into a recess in the wall. The interior mucarnas or pendentive is flanked by barrel-vaulted aisles while the two central bays are surmounted by a cross-vault and a hemispherical dome. This latter is encircled inside by a building whose surface is decorated by blind arches and topped by a conical cap, not unlike those of the Armenian and Georgian churches in the region.

10 E.g., the madrasa of Ertekuş in the village of Atabey in Kuparta, dated 621/1224, whose courtyard is surmounted by a domical vault. Similar madrasas were constructed in eastern Turkey, where the dome covering the courtyard sits directly on the inner walls. The domical vault in this madrasa, however, does not rest on the walls but on four reused columns which lighten the interior and heighten the sense of spaciousness.
There were no four-eyvan mosques, and the only known mosque with one eyvan built during the Anatolian Seljuk period is the great mosque of Malatya, which has a single eyvan in front of its domed prayer hall. Nor were there any four-eyvan caravanserais. The types of building in which the eyvan was used are the madrasa, dar-ı-şifa (hospital), hankefe (convent) and türbe (tomb). 

E.g., the Ulucamii (Great Mosque) of Bursa (1399), or the Eski Camii (Old Mosque) at Edirne (1413)

E.g., the Alaeddin mosque at Nigde (630/1232) in which all three bays in front of the mihrab wall are covered by domes; or the Burmalı Minare (Twisted Minare) mosque at Amasya (1246), where the three successive domes surround the middle bays along the longitudinal axis of the building

E.g., the mosque of Gülçehce Hasan Bey at Hayrabolu (809/1406-7)

The Fatih mosque in Istanbul (1471), which was rebuilt on a different plan after it collapsed in the earthquake of 1765, has a single half-dome. The mosque of Bayezid in Istanbul (911/1505-6) has two, the mosque of Mihrimah Sultan at Üskudar (1543-54) has three and the Şehzade mosque (1543-548) has four half-domes

For an analysis of early Ottoman mosques, see Apollonius Kuran, The Mosque in Early Ottoman Architecture (Chicago and London, 1968), pp 202-17

E.g., the mosque of Timurtaş at Bursa dating from the second half of the fourteenth century; or the Mosque of Hüdavendigâr (Marâd I) at Bursa which was completed in 787/1385 The latter is of particular interest, for it comprises four barrel-vaulted eyvans around a domed central hall

E.g., the Green Mosque (822/1419) or the Mosque of Murad II (838/1426-7), both at Bursa

So far as I know, the only Ottoman madrasa with a barrel-vaulted eyvan is that of Lala Sahin Paşa at Bursa which was built during the second half of the fourteenth century. This was an exception, since Ottoman madrasas in the fourteenth century had an open or an enclosed classroom covered by a dome as, respectively, in the madrasa of Yıldırım Bayezid at Bursa, or of Suleiman Paşa at Iznik Curiously, in a few madrasas built during the fifteenth century the open and the enclosed classrooms were placed side by side, as exemplified by the madrasa Gedik Ahmed Paşa at Adıyaman. This feature of the combined summer and winter classrooms is not seen in sixteenth century madrasas, but it was not altogether eliminated since a number of primary schools (mekteb-ı sâlyon) built by Sinan comprised two such adjoining domed units

E.g., the baths of Huang Hatun at Kayseri (before 1237), Şahîh-âsta at Konya (between 1258 and 1285), Eğriboyu at Beştepe (669/1269-7)

E.g., the Çinilli Hâşimâm (Tiled Bath) at Zeyrek (1546), Ağa hamami at Samatya (1547), or the hâşimâm of Haseki Hürem at Ayasofya (964/1556-7), all in Istanbul

This is the Çinilli (Tiled) Kiosk which was built by Fatih Sultan Mehmed on the grounds of the Seraglio (Saray-i Cedid) in 877/1472-3

Articles published in the Turkish architectural magazine Mimar (Architect) during the early 1930s reveal the sentiment of young Turkish architects. Apollonius Kuran (Koçaniolu) wrote: “Taklîl eden on duzuncu aammini imişti. Bugün yeni bir sanat döşêyêst: Tapko Msr, Yusuf, Türk mimarî sanatî gibî bitir. Yeni minâresi asîn senâtî ve minâresi midanîda gelecek mi?”: “The architect of the nineteenth century who imitated is dead. Today a new art is being born – like the Egyptian, Greek and Turkish architecture, a twentieth century art and architecture will come into existence” (1932, p 98) Beştepe Sahin (Usâla) and Bedreddin Hamdi (Uşur) wrote: “Yeni harf, yeni sanat gibi yeni mimarî, yeni Türk mimarîligi için bir sanat seferberliği yapmak zor” “Like the new alphabet, new language, new history, we must mobilize for a new architecture, a new Turkish architecture” (1933, p 247) Again: “Bu inan miltelier mihtîne tahtêk edînes tek bir mimari stil olmazacaçtir Ancak mahalle ışyan rasyonel Türk eserîyeti müstir bir mimarî yap trabalsî “There will not be a single architectural style for all nations A national architecture can be realized only by rational Turkish buildings that fit the environment” (1934, p 20)
Toward a Local Idiom: A Summary History of Contemporary Architecture in Turkey

Sedad Hakki Eldem

To define the needs of a company of one billion people apparently bound by nothing more than a common religion, and to synthesize these into a functional whole would be difficult tasks at any time. In our century, they are problems of unimaginable complexity, when one considers the number of separate nations involved. It might be more realistic to limit the goal of unification to that of mutual understanding, and thus increase the possibility of its realization.

The Miracle of Islamic Culture and Architecture

Islam made its first attempt to solve the problem of unification twelve or thirteen centuries ago. In the first centuries after the death of Muhammad it expanded with unprecedented speed, conquering whole continents by the sword. Islam embraced mankind from the Pyrenees to the Himalayas, bringing to those within its sphere of influence a new outlook, a new civilization and a way out of the darkness. Islamic civilization followed in the wake of this great religion, spreading and quickly taking root in the conquered territories.

The areas conquered by Islam enjoyed a social and cultural harmony that encouraged rapid development. Islamic civilization first had to pass from a nomadic to a settled pattern of living. This transition took place over a very short period of time and an extraordinary effect. It was effected in part by the eclectic attitude of Islam, which sought to assimilate those elements of previous civilizations that would best accord with its own sociocultural structure. Islamic itself became the organizing principle in the legal and administrative structure. While the various ethnic, racial and religious groups gave the lands dominated by Islam a heterogeneous character, the civilization that resulted was completely homogeneous.

The arts and architecture were part of this extraordinary development. In a short period and over a huge geographical area, architectural works were built that clearly shared common characteristics. Instead of destroying particular resources and styles of the lards it embraced, Islam used them to serve its own ideals and in this way succeeded in uniting them into a single whole. In time, the Persians and Turanians in the east and the Syrians, Egyptians and North Africans in the west joined forces with the Arabs to create new shapes of their individual devising that would become new architectural miracles.

Islam did not produce these miracles from thin air. It considered itself the heir to the Roman Empire, the other great civilization which achieved fame as a builder and urbanizer before the eleventh and twelfth centuries. Islam held itself responsible for the continuation of the traditions of learning, medicine and philosophic thought of classical Greece. It retained its dominance as a world leader for centuries, and as it expanded its sphere of influence eastward, it met with other civilizations in various stages of decay and was able to assimilate them.

In the nineteenth century, the pragmatic and technologically-oriented European civilization crushed the delicate structure of Islam and reduced it to a second-class civilization. From the political and also from the cultural point of view, most of the countries of Islam completely lost their individuality and their freedom to the crushing new civilization. But perhaps this loss has not been quite complete. Is there still a smouldering spark? Can our present enterprises be reconnected with the successful ventures of so many centuries ago? The passing years have changed men's lives and given them a new and different pattern. The peoples of Islam have come under different influences, taken different paths and grown apart from each other. The arts, architecture and an established culture can play an important role in reconciling these people once again. I should like to briefly review previous attempts at this kind of reunification in Turkey and other Muslim countries.

Architectural Reform Movements in Turkey

The period starting in the mid-nineteenth century and ending with the early years of the First World War, or rather, of the Second Turkish Constitution, saw two separate attempts at a self-conscious architectural redefinition. The first, in the form of the partnership of Selcuk and Nikogos Balyan, resulted in the grafting of the Andalusian and Gothic styles to classical Ottoman architecture and the emergence of a style which might be called neo-Ottoman. This style is not eclectic as we understand that term today. Though inspired by old styles of architecture, its forms were original and new. Important examples are the Balyan brothers' Çitrağan Palace and the Valide's Mosque by Montani. At the turn of the century, Vallaury put new life into the old Ottoman style when he designed wooden houses with overhanging eaves (Mejt Efendi Kiosk and the Duyun-1 Umumiye, now the İstanbul Boys' Lycée).

In the same period, large and splendid buildings were constructed in a historicizing style based on Gothic and Renaissance prototypes. In other Muslim countries, particularly those under British influence, buildings were designed in the Mughal-Gothic (Mysore Palace) and Mamluk (Rifai Mosque) styles. All of them, including those in Turkey, were created by non-Muslims and, except in Turkey, by non-residents. In Turkey, the use of resident architects was a strong tradition, so at least some of the architects were Ottomans.

In the second reform period, which also ended with the First World War, native Muslim architects (Vedad, Kemalettin, Muzaffer) dominated the scene. These men had studied in Europe, but they were also familiar with every detail of classical Ottoman architecture, particularly of mosque architecture. They remained faithful to and even bound by these traditions, although architectural form had become completely eclectic. The architect Mongeri, though an Italian, was in the forefront of this movement. His greatest work is the Ziraat Bank building. Kemalettin and Vedad produced the İstanbul post office and the Vakil Han (office building), and continued their activities after the foundation of the republic with a series of undistinguished buildings, such as Ankara's Palace Hotel. When in 1926 Atatürk rejected Mongeri's plans for a towered and domed Ottoman
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President palace, an architectural era came to an end

Around this time the "Cubist" style of central Europe found a foothold in Turkey and dominated the scene for the next fifteen or twenty years. The Turkish cities, particularly Ankara, became a conglomeration of gray flat-roofed buildings, entirely foreign to their environment. Urban planning, again especially in Ankara, developed along lines unsuited both to the ancient character of the town and to local topography. These plans, the products of the aesthetic of Camilo Sitte and the leadership of Jansen, were applied in numerous cities, effectively wiping out their ancient characteristics. New cities were built over the old, a decisive factor in this annihilation. The foundation of a locality named "New City" (Yenişehir) in Ankara did not prevent the destruction of the ancient city by the planners.

During the same period, new towns of exemplary beauty (Fez, Rabat) were being built in North Africa. These cannot be dismissed simply as products of the colonizers, for they are worthy examples. In most cases the ancient city centre (casbah) and the palace areas remained untouched, while a new city was founded in a separate location where it would interfere as little as possible with older settlement areas. In this way the terrible mutilation that took place in Turkey was avoided.

The Turkish House and the National Architectural Style

The Cubist style had a tremendous influence, and over a period of ten or fifteen years it changed the face of our cities. But from 1935 on, a reaction set in. Its origins were in the Academy of Fine Arts (Güzel Sanatlar Akademisi), and its aspiration was to establish a national architectural style. Between 1935 and 1950 it extended its influence over the whole country, until between 1950 and 1955 it was forced to give way to international, particularly American, styles and trends.

Until the 1930s, all attempts at a renaissance of or a movement toward a national Turkish architecture had their roots in the tradition of monumental religious buildings. Each new edifice was domed, arcaded and porticoed as the old had been; only proportions and functions were changed. The style was often debased, and a lifeless decor was endlessly repeated. Stations, hotels, office buildings, any structure where a measure of monumentality was found desirable would be padded out with domes. At the same time, the massing of elements intentionally or unintentionally betrayed European Renaissance models. Over the period of seventy years in which the attempt to find a national style continued, Vallaury seemed to be the only one who was able to find his inspiration elsewhere. He found it in domestic architecture, and produced buildings like the Büyük Ada Hotel in Prince's Island, Istanbul.

The movement toward a national style began with the discovery of the Turkish house; to avoid mere imitation of the European style, national characteristics were sought in Turkish domestic architecture. Previous attempts at defining a Turkish national style had been inspired by the use of brick and stone arches and domes. But the age of reinforced concrete had now arrived, and world architecture had adapted itself to that material. The Turkish national style had to modernize or, in other words, to be applied to concrete. It had to reject the massive, the weighty and the solemn and embrace the light, transparent, multi-windowed forms that seem to hover above the ground. Attention had to be focused above the ground floor level, as it was in the old Turkish houses perched on stilts above a stone courtyard. The ground floor of the Turkish house was usually no more than an empty space, not used as a living area. The house did not rely on massive walls but on dainty pillars for its support, as did the piloto style that Le Corbusier began to popularize from 1925 onward.

To convey the atmosphere of that period I will fall back on my own experience. I was a student under Mongeri at the Academy of Fine Arts when Le Corbusier's *Vers une Nouvelle Architecture* was published. Our textbook was Vitruvius. We would draw a series of capitals, starting with the Greco-Roman and ending with the Ottoman style; each represented an architectural trend. We would occasionally make use of these capitals and the pillars beneath them in our projects. Notably, the secondary textbook of the period was the *Beaux-Arts Grand Prix de Rome* collection.

I made a study of the architecture of Le Corbusier both from books and site visits, although there was little to see at the time. The Villa Savoie had not yet been built, and Stein's house at Garches had only recently been finished. Le Corbusier was working in his studio on the Rue de Sèvres. I visited him often and showed him my drawings. He took an interest in me, and his influence over me was profound. I was fascinated by the Domino project; who would have imagined that I would attempt it forty years later in Libya (though it met with no success)? I was unhappy with only two aspects of Le Corbusier's work: he did not pay sufficient attention to the reinforced concrete skeleton, and his roofs leaked. I was then, and still am, a devotee of the reinforced concrete skeleton. To me, modern architecture must be judged by the beauty of its structure. Turkish proportions and infill walls could fit into such skeletons.

I moved from the Rue de Sèvres to the Rue Franklin and A. Perret was pleased that I had done so. I wished to learn how to leave reinforced concrete bare: that for me was the...
main point—the beautiful skeleton should be left to speak for itself. I pictured the infill walls coloured, as they were at Ankara, Kastamonu and Amasya. Perret's concrete was colourless. It was moulded, but not "brutal," as it is so often wrongly described today. On the contrary, it was delicate and refined. The surfaces were textured, *boucharda* as it was known in those days. Time has shown that these surfaces grow old beautifully.

Corbusier's houses were always white, for he made no distinction between framework and wall. His windows were panoramic, the same length as the walls, and horizontal; Perret made his windows vertical, like a standing man. This essential difference in their points of view disturbed me for some time, but in the end I found a solution to which I have always remained faithful. In the traditional Turkish house, windows are arranged in rows of differing vertical and horizontal proportions. In the hall the windows cover the whole wall, forming an unbroken band except for a few bridging elements kept as unobtrusive as possible. I adopted that form. Neither Corbusier nor Perret approved of my idea, though they never said why.

Could modern Turkish architecture follow the same pattern? I tried out this idea two years later in Berlin, producing detailed projects of concrete mosques with and without domes. The skeleton would speak for itself and would be finely textured. Above a certain level the walls would be divided into white concrete sections, in place of the old plaster window frames, while the lower area would be tiled or marbled. I put these early ideas into practice in Libya in a more massive form, using geodesic or faceted forms in place of the halfdome.

In Berlin, I first saw the Frank Lloyd Wright album published by Wasmuth; the "prairie houses," a few of which had already been built, attracted my attention. I believed I had discovered some important elements of the Turkish house of the future in these designs. The long, low lines, the rows of windows, the wide eaves and the shape of the roofs were very much like the Turkish house I had in mind. These romantic, naturalistic houses were far more attractive than the box-like architecture of Le Corbusier. The use of rough-hewn stone and natural wood increased their effectiveness. I was not, at the time, able to detect the difference in quality and intellect between these two styles of architecture. How had Wright arrived at these forms? This question kept me occupied for hours at the Volkerkunst Museum. Wright's sources were not in America, but in Asia, and "prairie" was merely a metaphor for the long, low lines. Under the influence of Wright, I designed a project for a series of houses that were exhibited at the Turkish Society in Ankara.

Wright was later to find inspiration in Aztec and Mexican forms to use a new type of concrete. This concrete was also brute, massive and moulded—that is, it was not in a skeleton style. I was to get my first look at this technique in a visit to the Unitarian Church in Oak Park, near Chicago, ten years later in 1938. During my student days I used to visit the American Girls' College in Arnavutköy, where I studied the concrete walls of the building in detail. They had been mcudled, using yellow sand, in 1916, but instead of being brute they were deliberately smooth and refined. The walls of the Oak Park church reminded me of the walls of the school in Arnavutköy. The two were worlds apart in architectural taste and decor, but in form and value they were similar. Thirty years later Le Corbusier would discover how to do this with concrete (Marseilles 1960), even though forced by lack of funds to mould it by the most primitive methods.

**The National Architectural Style, 1932-1952**

In 1932, a seminar on the national architectural style was opened at the Academy of Fine Arts. Its goal was to encourage a new, modern style based on Turkish domestic architecture. It stipulated that the development of the new Turkish style begin with an examination of existing structures, which should then be reconstructed. I was able to continue with my own students the research I had done in Anatolia during my student days. We discovered hitherto unknown and fascinating beauties.

Building projects and construction research ran parallel to the work of the seminar. Between 1935 and 1950 Turkey evolved its new architectural style. Cubist forms lost their appeal and were replaced by buildings with pitched roofs and eaves. The cause of this change was not ideological, but prosaic; nearly all the flat roofs of the Cubist buildings in Ankara leaked, and the terracotta facings came away from the walls. All the roofs had to be replaced, and the Ministry of Public Improvement and Housing stipulated that all new construction must have pitched roofs and eaves. (The same Ministry is now trying, twenty to twenty-five years later, to deal with a second trend toward flat roofs by imposing various specifications, minimum roof angles and the like.)

With the outbreak of the Second World War, iron and cement disappeared from the market and high-rise structures were abandoned in favour of buildings of a few stories. Massive-walled structures replaced reinforced concrete. Nationalism took on a different meaning in Europe, and Germany's influence began to express itself in new forms in Turkey. Bruno Taut, who came to Turkey from Japan, was able to make use of the work done at the Academy seminar in his building for the Faculty of Languages, History and Geography in Ankara. He attempted to impart a Turkish character to his brick and stone walls and was, in my opinion, highly successful.

![Tripoli (Cenzur), Libya- Libaf Project](Image)
The Stone Age had begun, with both policy and the economy playing their part in this development. Policy demanded that buildings be built of stone, strong and durable, unlike the frail Cubist buildings of Ankara. The national style was therefore solid and monumental. The presence of Paul Bonatz in Turkey during the period contributed to this outcome, as he was a devotee of stone construction. Many of the bridges over the German autobahns had been built of stone. Between 1940 and 1945, buildings such as the Faculties of Science at Istanbul and Ankara, the Atatürk Mausoleum and many buildings of the Technical Counsellorship were all constructed as massive eaved or pitch-roofed buildings in the national style. In many of the cities of Anatolia these rambling, large-scale structures were well adapted to their surroundings and to the landscape; it cannot be denied that they have weathered well over the thirty years or so since their construction. They have merged completely into their surroundings, and do not seem to have spoiled the ancient character of the Anatolian towns.

In the late 1950s a reaction ended this national architecture. The buildings of the period were regarded as too eclectic, and nationalism was equated with fascism. In any case the Academy had burned down, and the seminar had come to an end. At that time an important design competition for the Istanbul Law Courts was announced. From among the projects submitted, most of them solid stone buildings, a light reinforced concrete design which retained individual and local characteristics was selected. For various reasons the building itself was never completed, but its design was enough to begin a new era, as Turkish architecture sought to express itself through modern techniques and not simply through the past.

The concrete skeleton was to remain naked and the infill walls to appear functional. With the building of the Istanbul Hilton Hotel, architecture lost much of its regional character and the trend toward European and more particularly American architecture made its appearance; in the process it became, as every imitation is bound to, an exaggerated version, almost a cartoon of the original. The trend continues; meanwhile, the concepts of architectural function, frame and structure have been overshadowed by constantly changing formalist and mannerist trends. The search for a local Turkish style has become almost obsolete, although the still incomplete Law Courts have been the inspiration for one or two isolated movements and projects.

The Academy's seminar on the national architectural style was revitalized as a Preservation Department. Various schools of technology (the Middle East Technical University, the Istanbul Technical University, the Yıldız School of Architecture and others) are continuing the work started at the Academy forty years ago. Along disciplined and scientific lines, they continue to promote interest in Turkish architecture and the protection of monuments, towns and cities.

Ankara, Embassy of Pakistan (1966-72) by S. Eldem

Photo: S. Eldem
New Projects

New construction projects that treat buildings as groups, rather than as individual structures, are evidence that the old idea of the neighbourhood is again gaining validity. Among the most important projects planned along these lines are the constructions at Yıldız and Zeyrek. Houses inspired by old forms have been built, and some of the embassy buildings in Ankara also belong to this group. The Embassy of Pakistan attempts to apply the architectural principles of Islam to the climatic conditions of Ankara, but it cannot be established that the real inspiration for its reinforced concrete vaulting was any particular design by Corbusier.

About this time the government of Pakistan approached me about a large project, an offer that represented an important mile-
stone for Turkish architects. Louis Kahn’s project at Dacca had embarrassed the government of Pakistan, and the Muslim countries had grown tired of acting as a training ground for foreign architects. I was unable to accept the offer, although I did have subsequent opportunities for carrying out my ideas in Pakistan. In my stead Vedat Dalokay designed a mosque in Islamabad, the first mosque in concrete which is both modern and Islamic. The design is Turkish in origin, with four minarets and a central dome. Its decisive form was not accepted in Ankara, but the structure is now rising in Islamabad. I hope this most modern and most important creation of Islam will soon be completed.

Another smaller though equally important modern mosque is being built at Cenzur in Tripoli. This building is softer in character and more familiar in spirit. Its dome is of concrete, horizontally patterned in a basket weave. I hope that we shall soon see the successful completion of this project as well. Generally speaking, however, contemporary religious architecture which symbolizes Islam is regrettably lacking in quality and aesthetic merit. The fact that it is often planned by outsiders to the traditions is certainly a factor. The mosque at Medina and the Shrine at Mecca, for example, are being rebuilt in an entirely imitative style of architecture which should never have been accepted by the Islamic world. They are a throwback to the past rather than a step forward into the future.

It is quite clear that our capital of Ankara, which was built simultaneously with the Republic, was wrongly planned. The additions and improvements made in other cities at the same time are no longer effective. The appearance of shantytowns in the past fifteen years shows that it is inappropriate to claim any serious town planning or housing projects in Turkey. Housing and urbanization in this country are in a chaotic state. Plenty of academic and scientific establishments in Turkey could supply the skills and facilities necessary for the ordering of this chaos, but all of them run parallel to reality, on different tracks.

In North Africa, and to some extent in Iraq, Pakistan, India and the Far Eastern Muslim countries, establishments of this type were set upon firm foundations; they have been responsible for the completion of many exemplary projects, with standards generally maintained at a high level. This has not been the case in Turkey. The material and technical quality of most Turkish buildings is lower than that in other countries. Our cities are never built to the same high standards, and even the old Turkish houses which we admire so much have failed to stand up to wear and tear as well as have the houses in other Muslim countries. Constructed of wood and sun-baked bricks, many of them are now in ruins. Muslim countries in which stone is the traditional building material have an advantage; their buildings are not likely to disappear unless they are deliberately demolished. On the other hand, in a country such as Iran where the main building materials are brick and baked earth, the situation is even more serious than it is in Turkey, since buildings made of these materials fall into disrepair at the first sign of neglect.
Owing to the increasing importance of oil production in the last ten years, the Muslim countries now have resources at their disposal never before witnessed within their borders. An unprecedented level of building activity in the oil-producing countries of Kuwait, the United Arab Emirates, Saudi Arabia and Libya is one result of the new wealth. It is increasing in momentum as British architectural and engineering firms are engaged in large-scale projects, joined by well-known American firms and even Bulgarian and Yugoslavian companies. Their work is in the international style accepted by the world. Along with interesting and ambitious projects, one can find tasteless buildings of low quality. One factor common to all is that they remain alien to their surroundings. One may ask how an airport, an office block or a hotel can be fitted into a regional mould, since all these functional buildings have to display a similar set of characteristics. They are similar, but not necessarily identical.

The world of Islam has become a testing ground for Western architecture. While many of the buildings being produced are alien from the architectural point of view, most of them do at least show attempts at a regional, Eastern style. However, since the basic tastes and styles involved are so completely different, the results are uneven and uncoordinated. It would be overly optimistic to see in this type of architecture anything of great use to the Islamic architecture of the future. To admit this is only being realistic, and is not to denigrate the quality of every building that has gone up; some of these represent modern architecture of the highest standards.

The buildings put up in Ankara half a century ago were also the products of central European architects. The Holmmeisters, the Elsassers, the Eglis, the Orleys, the Jansens, even the Breuhausises divided the field of Turkish architecture among themselves for many years, and the next generation of Turkish architects long remained under their influence. But the work of these foreign architects made no lasting impression on the face of the country. Le Corbusier was persona non grata with these designers. The introduction of a building in the style of Corbusier into the centre of Ankara met with strong opposition. It was only with the awakening of the national architecture movement that two architects broke away from the group and began to think along regional lines. Taut and Bonatz became devotees of the national style and bequeathed interesting, and at the same time modern, buildings to the country. However, their work remained isolated, and was swept up in the all-enveloping trend toward Cubism.

One hopes that this pattern will not be repeated in the Arab countries upon which the gaze of world architecture is now focused. The environmental data should be considered on a larger than regional scale. The scale must be all of Islam. It may be difficult to create the desired ideal at first, but this should be the aim in urban and domestic planning. After all, man's immediate surroundings are his home, his neighbourhood and his city.

In formulating our goals for the future we must not overlook the work that is already being done by Muslim architects in the Islamic world. Chief among these are Hassan Fathy of Egypt, and Nader Ardalan and the Firoughi D.A.Z. group of Iran. The Iranians, while heroically attempting to carry on the traditions of their own regional architecture, have not been entirely successful in holding themselves aloof from general trends—the names of Sert and particularly of Kahn come to mind. But this view is not necessarily a criticism. Is Le Corbusier not the common inspiration of the Japanese school, whose architects represent the most original regional style of architecture in the world today? Is he not also the father of the modern and simultaneously baroque local architecture now dominant in Brazil? Kenzo Tange, Costa and Niemeyer are all giants in their own right, but they cannot deny the debt they owe Le Corbusier. The new generation in Iran, having left Aalto and Rudolph behind, is currently under the influence of Kahn. It
may be hoped that one day they will shake off his influence, and stand on their own feet.

Hassan Fathy is a different proposition. He seeks his inspiration only in the aesthetic of his own country, using simple native techniques. As a result, it is difficult to place his buildings into any period. What contribution can this style of architecture make? What can it offer on a larger scale? Can it hold its own in an urban setting? Is it really eclectic? Architectural theoreticians may concern themselves with these questions, but Hassan Fathy has opened up new vistas for us and for the Islamic world. His designs may take us back through the centuries, but they are thoroughly regional. Can the label of eclecticism be a bad thing, when compared with the bewildering mannerisms of modern architecture? Fathy has heralded a new era in architecture, with new forms, a new environment and new possibilities. He has the same sources of inspiration and the same wealth of ideas as Kahn and Aalto. I trust that the new generation of Muslim architects will take Fathy's lesson to heart.

Toward the Revitalization of the Islamic Architectural Tradition

We have now reached the third and most important aspect of our subject. Up to this point, much of what I have had to say has been concerned with Turkey and with my personal experience, partly because I know both subjects, especially the latter, very well, but also because the explanations related to my personal experience are intended to give future Muslim architects an idea of what kinds of commitments they will have to make. The chief aim of my fifty years of professional life has been to create a regional architectural style. I have approached the problem from various angles, not all of which have been appropriate or successful. With time I have become even more convinced that internationalism in architecture is not a productive choice. This conviction is indeed one of the reasons for gathering here today. World architecture is in a state of crisis. The various "isms," such as functionalism and internationalism, are no longer valid. We now face a new "ism": regionalism. It should be our aim to realize the claims of regionalism in Islamic society, but how are we to achieve this aim? I would like to direct my attention to this question.

Before attempting to look to the future, and in order to protect ourselves from the influence of alien cultures, we must concern ourselves with our own architectural heritage, reap its fruits and take strength and inspiration from it. Any other approach would be unproductive and would necessarily be swallowed up in the flood of world architecture. We must first gain an understanding of our own individuality, become familiar with the values of our own culture and architecture and learn to love them and be proud of them. Only after structuring the new foundations with the help of knowledge and sensitivity can we design our own new style.

One might ask why it is necessary to look into the past. Why can we not simply look forward? The answer is that Islam's only way into the future is through the past. The greatest achievements of Islam are those of the past; since then we have merely been marking time. It is a regrettable fact that we must first journey into our past and seek our inspiration there. Only then can we venture forward onto new ground. Our first requirement is a solid foundation.

The programme through which the preservation and development of Islamic architectural culture and its leadership in that field can be realized may be summarized as follows: research into the architectural values of our civilization; detailed examination, definition and presentation of these values; the most effective preservation of the values remaining from the past; technological, climatic and sociological research into new architectural possibilities and appropriate experimental work; encouragement in this area by means of competition and reward. The main activities of research, definition and presentation lie in recording and research work, the publication of findings and their presentation at meetings.

The world of Islam first came into contact with the West in the seventh and eighth centuries, during its expansion as a religious and political power. These first contacts had a lasting effect on future relations between the two cultures. In the centuries that followed West–East movement continued, in the form of religious wars and later with journeys of discovery. In the fourteenth century Islam entered Europe through the power of the Ottomans, while in the fifteenth it declined in Spain. Commercial motives as much as political ones led the Westerner to familiarize himself with the East, even though he might remain prejudiced. When in the nineteenth century the West became concerned with tracing its roots, the Aegean–Mediterranean basin and the East were still under the control of Islam. While the West placed the origins of its civilization in the Greek, Hellenistic and Roman past, it also realized it could no longer ignore Eastern and Islamic civilizations.

A few centuries ago, the Western world's thirst for knowledge led it to explore the East and show an interest in Islamic architecture. The academic standards of those times cannot, of course, be compared with those of the present day. The difficulties encountered by Western scholars in their examination of the artistic worlds of Islam
must not be overlooked; they have still not been entirely overcome. In spite of this, the architecture of Islam has been a subject of interest and research in the West for at least the past 150 years. The earliest works of importance in this field are the albums of Egyptian and Persian architecture published by Pascal Coste in the 1830s. Even earlier than this, scholars under the patronage of Napoleon recorded Egyptian houses, though this work had no scholarly motives and did not amount to anything of importance. We owe our knowledge of the Istanbul of 190 years ago to the interest and efforts of the architect Melling. Flandin undertook similar work in Turkey and Iran, drawing the many palaces of Isfahan. Texier must also be remembered.

In the present century, much invaluable work has been done in the Islamic world by talented scholars such as Herzfeld, Franz, Cunningham, Creswell, Gabriel, Pope, Godard, Reuter and La Roche. Although Bannister Fletcher treated what he calls Saracenic and prehistoric Islamic architecture with a certain flippancy, this attitude has been changed somewhat in the most recent edition of his book. Seljuk and Ottoman architecture are now being allowed to take their deserved place in the Islamic scene. If it were not for the tremendous work carried out by C. Gurlitt in Istanbul, Edirne and Damascus, and the wealth of his publications, these architectural styles would have remained unappreciated.

With the widespread use of drawings and coloured photographs in the last few years, many works of interest have been produced which seek to present the Islamic world not only from a scholarly, but also from an aesthetic and human angle. Photographic reproductions have opened new vistas. The West has made full use of these opportunities to study the world of Islam and to express its own views. The most recent developments have added to the available information. Recent publications on the architecture of Islam, whether books or articles in academic, or just as importantly, in professional magazines, continue these investigations. An example are the articles on Isfahan or Aleppo by Cantacuzino in the Architectural Review. Research of this kind is to be encouraged, and it should be undertaken more frequently by native architects and academics. Organized efforts must be remembered along with the work of individuals. Western organizations have founded architectural institutes in the Middle East, in Muslim countries and in their own countries to promote interest and research in the Muslim world.

In countries that were formerly part of the Islamic world, buildings built under various Muslim dynasties have been preserved and made the subject of published research. The Soviet Union has been particularly active on this front. To date, however, none of these countries has shown the commitment to conservation and preservation evident in the small states of Bulgaria, Yugoslavia and Greece. Whether the efforts of these establishments are adequate for unbiased study and presentation of Islamic civilization is a matter worthy of discussion. It cannot be said that increasing interest in this field of study has led to any clear-cut achievement. The most telling factor in the attainment of this goal will certainly be the success of Islam in presenting itself to the West—rather than the success of the West in understanding Islam—and in its being able to make certain facts about itself accepted, although they may lead to controversies. Are we still an amorphous society on which foreigners carry out research? When will we begin to analyze ourselves and present the results of our work to our people, and to those who share our religious beliefs, before presenting them to the world? How much longer is the Islamic world prepared to remain aloof from the activity going on around it? The research that is being carried out at the moment should be seen as experimental. I prefer to speak of the situation in Turkey with which I am familiar. Besides the movement toward a national architectural style at the Academy, which after all is forty-five years old, five universities now offer preservation and restoration courses and three other institutes are concerned with these subjects. The work done by these establishments will eventually be published. One of their activities is research in specific localities, which will no doubt arouse interest when available in print. It is to be hoped that this work will be followed by activities on a larger scale.

The scope of such activities in Egypt and Iran cannot be defined with any certainty, but the Iranian publication Art and Architecture is a useful source of information. A satisfactory level of cooperation between our countries has not yet been established, however, we hope that the Aga Khan Foundation will open the way to greater cooperation.

The Muslim countries have remained indifferent for too long to their own architectural heritage. It is as if Islam believed it unnecessary to preserve old buildings in their original state. The attitude that complete renewal is preferable to preservation is particularly apparent where houses and cities are concerned. Quite apart from the business of reconstructing abandoned buildings left to decay, no one has thought to preserve them through drawings and photographs. Cities, for instance Jiddah and even Mecca and Medina, are being ruined in the name of modernization. The old streets and houses have been annihilated, replaced by ugly piles of concrete. Not a trace of the beautiful wooden mashrabiya balconies of Jiddah remains.

Over the last hundred years, countless architectural and artistic treasures have been irretrievably lost. Survey and study of these buildings are new developments. Such studies had not been entirely lacking in earlier times, but again they have been carried out for the most part by non-Muslims. Evaluation and classification have also been carried out by foreigners. We must not forget that the work of these foreign researchers, archeologists and architects, which we now take such great pleasure in criticizing, was carried out only a few years ago under conditions of extreme difficulty. They were sometimes unable even to enter the buildings they were studying, or were forced to resort to guile to gain entry. I am eternally grateful for their efforts.

The aim of our research work should undoubtedly be to convey to future generations an idea of the nature of the cultural values of Islam. Much work has already been done in many of the Islamic countries by both foreigners and native scholars, and
by research institutes attached to universities and academies. Most of this work has been concerned with monumental architecture, a much smaller proportion with regional, domestic and urban architectural history. The first and most important work of the Aga Khan Foundation will be to collect, evaluate and publish the results of this research. This will require the establishment of a centre so that disorganized and diffuse elements may be gathered into a whole, and a unity of aim and method can be achieved.

This centre, while involving itself with the classification of work already undertaken, could also begin its own classification work. The European Council, an international body, follows a systematic policy of conservation of its cultural heritage which has been agreed upon by all its members. Our centre could attempt to develop a similar intergovernmental policy for the three-continent world of Islam. Inventories could then be made, using a common methodology which would provide categories for single monuments, group monuments and sites. Apart from that, scholarly research could be carried out on the subject of the Muslim town. This institute would of course work in close cooperation with other individuals and establishments concerned with the same areas of study. Work might be facilitated by the foundation of a library, the donation of research scholarships and the provision of necessary tools and materials. The institute should also be responsible for the publication of the results of research work. Publications might be in the form of journals dealing with different aspects of the work and individual monographs in various Eastern and Western languages.

Research and promotion work must be coordinated. The Muslim countries should remain in the closest possible contact with one another. Research centres should be set up, and their work closely integrated. They should have a library of publications dealing with the work already carried out in the Muslim countries. The first ones might be located in Lahore, Cairo, Tehran and Istanbul to be joined in the future by others in Indonesia, North Africa and Russia.

Research must cover, first of all, the functional buildings of Islam. Since mosques and tombs have up to now been the only category to receive attention, comparatively speaking one could say that they have been sufficiently studied. The results of research on them have also been published. They will, of course, require more detailed examination in the future, but they may be deemed of secondary importance at the present time. Urban domestic architecture must hold the primary place. This subject, so far neglected, promises to yield great artistic and cultural treasures. After local investigation and research are completed, it will be possible to classify and synthesize the results and determine the effects of climate, materials, environment and types of inhabitant.

Conservation work should also be undertaken by these bodies. Progress reports can be presented at occasional meetings, and the results of completed work published immediately; a flow of architectural ideas within the Muslim world will thus be maintained. In addition to these various activities, a periodical journal or newsletter dealing with survey, recording and restoration work throughout the Islamic world should be produced at the central institute. Experience gained in the construction of modern buildings could also be made generally available through publication, so that all countries will be able to benefit from the experience of others. The publication of a second periodical for this purpose would be desirable.

The terrible destruction and demolition unfortunately prevalent in Muslim countries at present must stop. A policy that includes the foundation of establishments concerned with conservation and the initiation of various pilot projects in all countries concerned must be implemented. The importance of conservation must be instilled in the Muslim mind and made to comply with religious beliefs. Exhibitions and museums must be opened. The financial support of all the countries concerned must be sought, and all should be allowed to benefit from the existence of our oil-producing friends.

The preservation and restoration of those buildings left to us is a subject of the utmost importance. Complete indifference to the pitiless demolition of old buildings is still a feature of the Muslim countries. Europeans generally take pride in their old buildings and cities and are anxious to preserve them; they even try to reconstruct buildings destroyed in wartime. Here the situation is quite different. Countries lose buildings and whole cities without a war even having been fought, simply because the people have no respect for the past and because new buildings are carelessly built. The same situation exists on the ecological front: the natural world is being destroyed by a growing population, trees are lost and the desert encroaches. This state of affairs is a source of increasing anxiety to particular segments of the population. Conservation courses, institutes, societies and foundations are being set up to combat the decay. But the common people, engaged in the business of living, are unaware of the importance of these activities. It will take time to teach them that love of and pride in one's country can be exercised in everyday life and not merely on the battlefield. It can only be hoped that during this time the country will at least be able to retain the beauties and treasures left to it. The situation in Turkey is repeated in different forms and degrees of intensity throughout the world of Islam. In some places conservation is more readily accepted; in some the work of demolition goes ahead fast and furiously, with no apparent regret for the treasures which are sent into oblivion.

It is high time the idea of conservation was impressed upon the Islamic mind. This could perhaps be undertaken first on a small scale and using isolated examples. We must not forget that new life must be injected into those buildings and areas to be preserved. This life must somehow recreate itself, or the point of preservation will be lost and sooner or later will become superfluous. Projects of this sort have been undertaken in Turkey, but they are still at the planning stage. A foundation has also been set up for the purpose of conservation, but the social structure of the country and the indifference of its people have prevented any results. I must stress, however, that the problem cannot be solved by the creation of dead buildings and museums.

In the Balkan countries, in contrast, both the patriotism of the people and the nature of the regime have allowed conservation
work to go forward on a large scale and with a great measure of success. Many cities have been included in conservation programmes, and many districts have been nationalized. At the same time they have been kept filled with life and have not been allowed to become mere dead museums. I am very pleased to say that the cities and buildings being preserved are among the most beautiful of our Ottoman heritage.

The following are proposals concerning the work to be undertaken after the still extant architectural works have been identified: the reformation of the system of contracting for new buildings; close socio-technological cooperation among the countries of Islam; assurance that the best interests of Islam are served, even where alien architects are at work; assurance that a large part of the income from oil is used for the reclamation and support of the areas that do not normally benefit from this income; encouragement of investment in those areas; rewarding from time to time those who produce outstanding work; presentation of the aims, activities and ideas of Islam to the rest of the world; definitions of the forward-looking attitude of Islam and encouragement of this attitude.

Governments are, up to a point, already involved in the organization and promotion of such programmes. However, the problem has overreached the bounds of merely national programming and has become international in scope. Its importance requires the prompt formulation of an international policy by an independent, flexible, unbureaucratic and unbiased—in other words, an Islamic—body.

It is not enough merely to examine the cultural values of Islam’s past. We must also be able to convey the achievements of the past to the future, and this only becomes possible when the results of research into the past are evaluated, developed and reinterpreted. Types and sizes of settlements, their administration, building techniques, choice and utilization of materials are all areas of regional architectural study which must be carefully considered and evaluated, so that their results can be used in actual building projects.

The Aga Khan Foundation can perform an important role in promoting coordination between nations, responsible ministries and other bodies in their work of development; this will include the study of traditional examples and their adaptation to modern technology, to local materials and the local work force. While the Muslim countries are in various stages of development on these fronts, a common factor is that all, from the economic point of view, are “developing” countries.

The extremely high gross national product in some of them is related to the income from oil. The oil-rich Muslim countries are certainly the most active in construction work, though this work is unfortunately carried out for the most part by foreigners. The buildings that emerge may be status symbols and a source of pride to future generations, as the cultural heritage of the past has been, but they are unacceptable as monuments and are alien to the cultures and technologies of the countries in which they stand.

How long will the Muslim countries of the twentieth century be content to remain part of an Islamic culture based solely on the criterion of economic power? Islamic civilization is not the possession of one, or even a few countries. It should be, as it was in the past, a common mode of thought and expression and a harmonious whole. The question is one of a common cultural policy: it is regrettable that it has not yet been dealt with either by an individual nation or an international organization. This is where the importance of the Foundation lies. Without doubt the task will be a difficult one, but it is essential that it be undertaken on an international level by an unbiased, non-political body. Only then will regional and sociocultural differences cease to present problems.
In talking about the challenge of evaluating the Islamic heritage and the criteria and objectives for dealing with urban transformation in the Islamic world, we have one common denominator regardless of time and space. This is human scale, a phrase often bandied about by architectural professionals, but one which still means a great deal. Regardless of technology, the human scale is the human scale, a consistent measure. It answers a lot of questions and suggests many more. It yields an idea of the social conduct of space; it expresses itself in the pattern of the city or town through the vertical and horizontal scale values. The human scale can be considered a criterion, an objective and a philosophy for the built environment.

A second common denominator is the physical environment—the earth we tread on, the climate, the nature of the materials at hand. Here we can also include laws and mathematics that affect our understanding of architecture and our evaluation of our heritage. A third unifying factor is the physical fact of life and its temporal and spatial dimensions. Once one knows every aspect of life and unity in Islam, the present and the future become one. It is an appreciation of inherent values that creates the synthesis which is the physical environment, both in the shape of things to come and in what has already been established. Another concern is the quality of life, or whatever you want to call it. It is a human demand, not a luxury.

A note about conservation. Conservation is not a rigid thing. It is not simply a matter of saying, "We'll keep it because of its emotional quality, because it is like an open book which should be preserved for the next generation." It is something money cannot buy, a thing beyond value and an irreplaceable asset. Conservation is flexible: it can include restoration, creation, or simply respect for the environment and climate. It implies a desire to live in harmony and sympathy within the global scheme. So it is not a rigid word, and its interpretation can differ. There is no "one right way" of conserving. Certainly we are concerned with giving priority to the original way of doing things—if you have a good carpet, best to
Isa Town, Bahrain, town gate

Photo: Makiya Associates

restore it using the skills of a good craftsman. No decision is needed apart from the initial decision to restore; it is clearly something worthy of restoring, because it is a valuable part of our past that should be maintained for the present and the future. But conservation has a broader meaning, one which includes an attitude of the creative mind willing to delve into the past. This eclectic attitude requires dedication and sincerity. We have to face the future, and I think approaching it with the attitude that we should be the guardians of our heritage is really what this seminar should encourage. I feel it is impractical just to talk about history and the past; we must see a living dimension, an attitude toward a much more worthy environment for the human race.

When I was first informed of the aims of this seminar, I realized that there was a great opportunity to contribute toward what I like to call the “regional identity of our global settlement.” Our world is becoming ever more unified through increased international mobility and economic development. However, we are paying a price for this. We are in danger of losing much of the remarkable variety in the kinds of specific environments which human beings have created over the centuries. In the name of cross-cultural exchange, we are losing those architectural qualities which identify localities and regions. It is evident that, at least in the Islamic world, a reaction to this trend is beginning.

The desire and search for a regional identity has, until recently, been largely unconscious; however, as a practicing architect and planner in the Islamic world, I observe that it is a desire now being loudly voiced. Despite this new degree of public support, the realization of cultural and regional specificity still poses many intellectual and practical problems. Nonetheless, a public awareness of design alternatives would help to overcome the lack of vision that has unfortunately become commonplace in the built environment of many Islamic countries.

It is becoming increasingly difficult for an individual architect or planner to competently fulfill the dual roles of thinker and builder. If one is in the fortunate position of thinking, one may well be isolated from doing. If, on the other hand, one is in a position to build, one is often too busy with the practicalities of work to formulate ideas and synthesize experiences fully. The builder seldom has time to conceive of his work as more than a practical and physical mass; he cannot consciously seek an architecture that is not only modern, but also uniquely associated with the culture into which it is inserted. The “thinking versus building” dichotomy, a process of fragmentation and specialization, may be responsible for the distressing professional situation in which so many of us find ourselves.

Muscat, view of a reconstructed street

Photo: Makiya Associates
The successful design of any urban or regional environment depends upon sympathetic understanding and mastery of the elements that make up the whole culture. True abstraction and synthesis can only be arrived at by long and studied acquaintance with the indigenous character. The monuments and materials of the past are often useful for the present. Any aspect of the local past may be incorporated into contemporary construction, assuming that a dignified and appropriate synthesis results. I continue to use the traditional desert vocabulary and scale in my projects in Muscat, Bahrain and Iraq, because it is still appropriate there. The rhythm of façades articulated by niches, crenellated borders, brick construction, use of walls as membranes shielding the internal structure, all reflect the past while respecting the design capabilities of the present. I hope the illustrated examples of my work effectively convey my attitude toward the past and to the theme of this seminar.
Comments

Kuran

The two great periods of architectural synthesis in Anatolia were the Seljuk and Ottoman empires; let us examine the latter. The Ottoman synthesis was not an imitative process, but incorporated significant features of existing local architecture. Its achievements were dependent both on new materials and on available technology. In any period, the challenges posed by new materials and new technologies yield positive results only when architects are in control of these variables, not enslaved by them.

Fathy

I just wanted to comment on the nature of change, the importance of continuity and the preservation and conservation of our monuments and towns. Change has taken place in our countries at many different times. In Europe and the West, change has continued along the same lines, while in our countries change has been diametrically contrary to our traditional culture. This movement toward Westernization has been described by one French sociologist as auto-colo- nization. In the past, cultural change has been forced and Westernization superficially imposed. But the new phenomenon we have now is that of the people imposing a different culture upon themselves, and this is what we call Westerniza- tion. They are even trying to deny their colour, to get out of their skins, because this is what auto-colonization means. In Europe traditions continue; in our countries they do not. I think we have to remember that the importance of conservation is not limited to maintaining the forms of historical buildings for posterity; conservation is also the mechanism for the carryover of the old traditions, from the conceptual as well as the functional viewpoint.

Grabar

The Muslim world, and for that matter any world, develops, creates itself, changes, evolves, it constantly works in a kind of dialogue with its own past. What is important to know is whether there are permanent, consistent tendencies characteristic of city A or area B which we can subdivide to the point of saying that every street, every quarter, has its own peculiarities, or whether there are only consistent long-range tendencies that exist within a given ecosystem. But then the question arises: how old is what we consider to be old?

One paper, for instance, pointed out that some things we think are old—say, the Anatolian city—are not so very old; these cities are a nineteenth century phenomenon. Should we, in developing our understanding of Turkish architecture, put them into the same bag as Mr. Kuran’s examples that go back to the thirteenth or to the fifteenth century? How old is the old we should use in evaluating the relationship of an architectural creation to its setting and to its own past? Or is this not a pertinent question? The past is the past; what counts is a series of totally different kinds of criteria, including the contemporary criteria that have been developed at this seminar. It seems to me that the slides and presentations of Professors Eldem and Makiya have strikingly pushed to the fore the question of degree to which an architect should relate to the past.

S. Batur

I would like to say a few words about the nineteenth century Istanbul phenomenon, although as our Turkish participants know, it is not a simple matter to be discussed in a short time. Almost all nineteenth century mosques in Istanbul were designed and built by architects from the same Christian family. Thus, after contact with the West, communication between the two worlds was
a catalyst for major change. This change was only external at the beginning, characterized by many people speaking foreign languages and epitomized by a large Greek population in Istanbul. Almost all ambassadors sent to the West were selected from among these minority groups.

Because of the structural changes in Turkish society, the traditional master-apprentice system used in training architects declined. Turkey needed architectural schools, which they did not have—but there were schools in Paris. So students were selected from among these minorities to go to Paris, because it was easier to support children studying abroad. At that time the minorities formed a rich stronghold in Istanbul society, since they also controlled almost all business. During the entire nineteenth century, the royal architects and virtually all architects in Istanbul were Christians; they designed and built all the major buildings, including the mosques.

Now to Grabar's other question: how old is the old which we ought to preserve? I would answer one year, even one day old, not only because of intrinsic cultural value but also for the sake of economy. We are now doing just the opposite in our big cities: demolishing three-story buildings just to build five-story edifices on the same site.

S. Eldem

There should be no mistake about the Christian architects. Of course they were Christians, but they were Turks, they were Ottomans. They were local architects and should not be considered foreigners. The Balyan family, for example, practiced architecture in Anatolia for 150 years, and before them there were other Greek families who were also architects. So, I think we should make a distinction between foreign architects we see in Muslim countries today, and these nineteenth century architects; I consider them completely Turkish architects.

Porter

As a brief summary of the presentations, I will reiterate some of the problems formulated during the seminar. In each situation we must try to keep in mind how decisions are made, and by whom. Whose decisions are critical to the success or failure of the project? How rooted in the local culture is the whole process we are looking at? What do we mean by "rooted"? How should we define the culture in which this process is rooted? Is it a culture of the moment? Is it a fad, or something that dates well back into the past of the area? Does it do so to the degree of excluding the present? What kind of evidence might one muster to discuss any one of these questions? What evidence ought to be reviewed in order to figure out who was involved in the decisions? What evidence should be presented to demonstrate that people in the area were or were not truly involved?

Are there independent criteria for excellence which we should be alert to, that can enable us to identify a project and consider what process it should be subject to before we make an Award? How do we test whether a project is worthy of a further look? How can we look at it, and what inquiries should we make? Should they be the same or very different questions for each project? Should they be the same or different according to each region of the world we will be looking at? What, in other words, are the dimensions of the considerations we should be taking into account, and how can the local situation best be scrutinized in order to evaluate its dimensions and concerns?

Each of these avenues of investigation will unearth a larger direction of approach to environmental change. Specific projects within this framework will have relevance to the local culture, but this requires a more firm definition: what is local culture, and to what degree and by what criteria may a project be deemed "indigenous" or "alien" to it? The answers to or at least honest consideration of such questions are necessary prerequisites for an understanding of our purpose here; thus far they have been broached but not examined in sufficient depth.

Ardalan

We need some means of organizing our discussion when this much variety exists among the speakers. The word "connection" might be a useful tool in formulating questions. We might consider the connection stated by Kuban between industry and economic determinism as factors influencing conservation; for Tekeli, the connection between his socio-political approach and the objectives of the Award merits investigation; for S. H. Eldem and Kuran, the connection between materials and architecture is a viable consideration.

Correa

I thought Dr. Makiya presented one possibility for conservation potential when he mentioned a sense of human scale. That is a very useful criterion, which he presented as an objective one. I think it is ultimately a subjective one, because we think we need human scale but we simply don't know whether the future will really need it or not. Having disposed of that, I think we all agree that we really have use for the past in one simple way: as Prof. Kuban said, it gives meaning to the present and the future.

S. Eldem

Concerning the conservation of cities, we sometimes seem to forget that all Muslim cities are not alike. When we speak of Turkish cities, we should not think of African or Arabic cities, because the Turkish problems are completely different. This is especially true in northern Turkey; in the southern part of the country the conditions are more or less the same as in Syria. But in the north, different problems require completely different solutions. There are no inner courtyards; the houses are reached through gardens. The cities are all surrounded by trees, almost never by walls. The Turkish city differs dramatically from Fez or any other southern Muslim city, and this should be taken into consideration. Turkish cities take
up much more space, and the houses have more green area, gardens and trees. The problems of preservation in Turkey are unique, and for that reason we should not try to generalize the issue.

The other point I want to make concerns the physical quality of Turkish buildings. Most of the houses in Turkey are built of wood. Preserving this kind of building is a much more difficult problem than preserving a solid stone building as found in Syria, for example. In order to formulate a plan of conservation, we have to take into consideration both how the buildings are constructed and how big they are. Because it is made of timber the Turkish house has large spaces, big openings. With time and with the normal decay of the materials this building begins to crumble, and becomes very difficult to maintain. So we face problems quite different from the ones we have in the south.

Now, are we discussing the qualities and differences of Turkish cities as Muslim and as Christian cities, or have we been talking about specifically Muslim cities? I think we should not assume such a great difference between Muslim and Christian cities in the same region. For the inhabitants, the environment is simply the old city; they do not care whether those cities are specifically Muslim or Christian. The vernacular is more important, the location of the city is more important and the way the people live is more important. Whether Christian or Muslim they live the same way, and they live together. Region is more important than religion. The way of life depends on the climate, on the area, on the situation of the town. In different locations we have to apply different criteria. So I aver that we should not overemphasize the religious factors affecting settlement, since a larger network of variables determines the appropriateness of the built environment.

**Biddle**

While conservation projects may have idiosyncratic local implementations, the problems—privacy, scale, livability—are really international in aspect. Education is universally important to instill pride in and identification with place. This pride can only be achieved through a sense of continuity of the past. Conservation is the very embodiment of slow change; it differs from preservation, which does not allow for changing situations. Yet we cannot applaud all conservation schemes uniformly; we must be wary of those misleading examples, such as Williamsburg, which reflect only our contemporary view of history. The Award should only be given to those who have reached a serious understanding of the past. Before premating any projects, time should be allowed for observing how well the buildings work in the community. Although we stress the conservation of whole areas—the madina, the walled city—we ought not ignore the value of individual monuments.

**Lewcock**

The subject under discussion is not the abstract conservation of inanimate monuments or of antique specimens—we are concerned with living buildings and living communities. The issue is not the preservation of historical evidence per se, but the intrinsic value of the areas or edifices as representatives of high points of human achievement. It must be acknowledged that some buildings or environments cannot be destroyed without an incalculable loss to all men, both present and future, any more than great paintings or great literary or musical compositions can be effaced. It is impossible to preserve more than a fraction of everything, but we should never allow research and mere recording to become an easy substitute for the genuine attempt to preserve. The latter, superficial, philosophy is not one that we who value life and the living could ever condone.

In Yemen, there is still time to preserve the heritage of community life. It is not yet necessary to urge the population back to the use of traditional buildings; they must simply be shown a strategy for improvement and the achievement of their aspirations within the traditional framework. What must be encouraged is an ongoing, progressive use of the past.

I am concerned with undue emphasis on tourism as a justification for conservation. Tourists are alien, not only to the local culture but to their own home cultures as well. It is often observed that the tourists of some particular country are awful intruders—yet how civilized they are back home. Tourism is a corrupter, a destroyer of the indigenous character. It demoralizes the local populace, leading them to false expectations through emulation, and tempts them with the desire to dissimulate friendship for gain. They are led to the extreme of prostituting themselves and falsifying the native environment. Alterations in the built environment prompted by the expectations of tourists have little to do with conservation. True conservation should of course be directed to the benefit of the indigenous society and to the continuing momentum of their culture.

It has been pointed out that urban conservation is essentially political. But does this necessarily mean that our conservation efforts should be concentrated on the people at the top? It is important to consider another point of view. In a historic urban complex there are two types of inhabitants: those who are ruthless about destroying almost everything, usually for gain, and those who wish merely to adapt and modernize their lifestyles slightly, and yet retain the social and environmental benefits of life in a traditional city. The success or failure of urban conservation depends upon the balance between these two groups. The balance is deeply affected by many factors—by example, public information, propaganda and finally by involvement. These therefore
become major factors in any project of urban conservation. I believe that such factors can also create important political pressure points; even in an autocratically structured society, they can play potentially crucial political roles.

Kuban

I would like to use my concluding remarks to bring some related practical problems into focus. As a first thought, we cannot deny future generations the right to create their buildings in their own way. Nobody should understand our position as being against the new. Whether our descendants build courtyard houses or skyscrapers should be their business. But this tolerance for variety does not mean that we are not concerned with the fate of a Fez or a Safranbolu. Nor does this mean that we are unconcerned about the physical form of our environment. I am ashamed of what has happened to cities like Istanbul, and I am filled with horror when I see the modern face of Mecca. The visitor to these cities does not have to be a Muslim to feel that way.

I am not even going to use the catchwords “preservation” or “conservation.” We have to maintain familiar components of the built environment as long as they function as elements of continuity and stability, as long as they keep their symbolic meaning and as long as their survival is technically possible. By saying that, we recognize that everything on earth has a survival limit; we also have to ask who decides what this limit is. What are the relevant factors in making this decision? We agree that everything created as a result of human needs, ideas and goals acquires its full value only through time. Anything rich in content, anything beautiful, becomes so by the accumulated experience of generations. We cannot and we should not deny the wisdom of experience. The enduring courtyard houses should be examples to study; they should be given the attributes that will make them usable in the modern context. There should be no restriction on their use, and the industrial age should not destroy them.

We can conclude from this chain of arguments that the “old” is a misnomer; our problem is not the old or the new. Our problem is the effect of change upon our culture and environment. As far as the adaptive reuse of single buildings is concerned, there is no hindrance whatsoever to the regeneration of a building. However, in the older parts of our cities where so much of the physical fabric has deteriorated, the proportion of preservation efforts between reuse, renewal, reconstruction and new building has to be decided upon. Who decides these proportions? There are many levels of decision making and subsequent action, but at the very least we have to fight against an inappropriate industrial ideology. Here, as Professor Porter put it, we can use the provisional ideology of change to continue to examine our cultural identity. Let us integrate the old with the new, while imposing measures to slow down architectural and planning genocide.

We may cite the example of Fez. The madina of Fez with its 250,000 inhabitants is a big problem, but it is not just a problem of preservation. It is a social and economic problem. Even if the madina could be razed and modern apartments put up in its place, the social problems would remain. There is a concomitant problem of political and economic systems.

Successful rehabilitation of the madina of Fez presupposes change on many levels of policy making and implementation. This across-the-board policy is necessary whether you build anew or whether you preserve the old. Work must be done on every level, with politicians, with local administrators, with the people. From the politicians we obtain the necessary laws, having forced these by influencing public opinion. This public opinion is created by propaganda, indeed by all necessary means. With the local administrator you again use the created public opinion and the pressure of politicians. The value of this approach may be seen in the case of Safranbolu, the Turkish village whose name is synonymous with timber architecture. In only three years, the concerted efforts of national and local policy makers, acting in conjunction with public opinion, have transformed Safranbolu into a successful conservation venture.

Tankut

The desirability of changing public opinion regarding conservation is amply clear. There are a variety of ways to effect this change, including financial incentives. In fact, it is altogether possible for a concerted effort to alter public opinion in a very short time. However, as Prof. Kuban noted, the optimal way to effect any lasting conservation effort is through slow and controlled change. The conservative approach to conservation is the best.

Okyar

I feel I must say a few words about the economics of conservation. I am in complete sympathy with the majority here who think that we can still save our old monuments and old towns. These should be saved if we can do it, because they are part of our heritage and contribute to our cultural and national identity. I am happy to see that people are becoming more and more conscious of our national heritage even at this late date. This has not occurred for a very long time—not even during the period of rapid economic development that Turkey went through after the First World War, when a sudden industrialization, urbanization and immigration occurred in many parts of the country.

Decades later, the result has been that building sites have greatly increased in value, imposing tremendous pressure on the social order. I think it was Prof. Kuban who said that he is ashamed of what has happened to Istanbul. In a way I agree, but were we able to stop what happened? I don't think we could. I think that the economic pressures made it impossible. The owners of the Istanbul houses, for instance, were squeezed between the money that could be earned by renting apartments and the cost of their upkeep. It was impossible to stop the inevitable deterioration of the buildings, nor was there any awareness of the necessity to do so. Now there is more awareness on the part of the planning authorities, but I wonder if planning authorities can stop this trend without more substantive concern on
the part of the general populace. The only way to halt the mindless destruction of old houses and monuments is to provide compensation for those responsible for them. This can only come through public contributions, either local or international; and I wonder how much help can be expected from Turkey, in its present state of financial difficulty, toward restoration and conservation.

**Dülkay**

Architecture is an art form, but buildings cannot be stored in museums for the benefit of posterity. This is why preservation is vital. Islamic architecture particularly merits preservation, in the face of massive importation of Western styles. In fact, it is difficult to isolate criteria for Islamic architecture, since the Koran lacks aesthetic and artistic clues. The absence of such clues yields difficulties in the identification of a typical “Islamic” architecture.

**Grabar**

It is clear that the most oft-repeated question at this seminar is "what should be preserved, and why?" What period of time, as reflected in architecture, could be deemed definitive? What particular manifestations of that time ought to be restored? The criteria by which the environment is examined for conservation potential should not reflect just contemporary usage. The aims of preserving history require evaluation, objectively as well as subjectively, and any changes must be carefully monitored.

One must consider the ideology that created any environment in order to evaluate it. The difference between industrial and non-industrial ideologies is crucial in the decision-making process. Ought our view of an ideology be explanatory or judgmental in nature? We have heard Prof. Tekeli espouse the latter, and Prof. Kuran the former viewpoint.

The process of change may be dialectical; we may well ask whether any permanent tendencies or directions exist. We should differentiate between "Islamic" and "Islamicate." We will also want to investigate the moral and physical funding inherent in conservation, and the technologies which support it. We would do well to question the role of the architect. Does he reflect, does he create, and to what extent? Does he adapt himself appropriately? How does he deal with the tools at his disposal, from the contractor all the way to the teacher?

The task of deriving the processes for selection and judgment of projects from the very specific cases and theories we have heard is a difficult one. How does one transfer the information received from restoration project A or B, and who can determine whether the physical manifestation of any complex ideology is good or bad, successful or not? These kinds of issues have been raised in conjunction with specific problems of preservation and conservation, but they are relevant to the entire Award review process.

**Yenal**

The theme of Seminar Two was "Architectural Transformations in the Islamic World," and its major topic was "Conservation and Adaptive Reuse." During three days four major papers were presented, plus five major and seven minor expositions on implemented or projected case studies. Lectures on the first day were supposed to be concerned with different scales of the built environment in both the past and present, mainly in Turkey but with reference to other parts of the Islamic world. Unfortunately, three out of four major presentations were unsuccessful. They were very general in nature, insufficiently explanatory and quite far from the seminar's avowed theme.

Of twelve case studies, only four were implemented. All Turkish examples were still in the preparatory phase, all uniformly tourist-oriented and presumably having potential for implementation. This dearth of implemented projects was one of the most disconcerting aspects of the seminar. Surely there exists a completed historical conservation project in Turkey worthy of exposition.

Why was a country boasting so rich a cultural heritage not proudly displaying its preservation efforts, whether modest or ambitious, good or bad, successful or not? Indeed, few of the seminar participants were willing to admit the existence of many problems seriously affecting conservation efforts, including the erosion of time and ever-increasing negative socioeconomic factors.

There were numerous comments and some controversial remarks following each presentation, but most of the discussion focused on a subjective and passive, even static, conservation methodology. Some very important points were not even alluded to. Integrated conservation was rarely mentioned, and the social and economic consequences of integrated conservation were totally neglected. Only Mr. Williams cited historical conservation in the context of urban and regional/national planning initiatives. The responsibilities of local authorities and the possibility of citizens' initiatives also were missing themes. Finally, although the impact of ideological or belief systems on the decision-making process for conservation policy was often mentioned, this never went beyond the theoretical level.

The seminar had a total of 44 invited participants. Fourteen Turks and twelve foreigners represented the academic world; seven Turks and eleven foreigners were practicing professionals in architecture, planning, restoration and the like. Thus there were twenty-six academics and eighteen practitioners. This quantitative analysis of participants may appear realistic and representative, but it is not. Among the academics, those representing social science disciplines most closely related to historical conservation—social psychology, social anthropology and social history—were totally absent. Nor was the complement of practitioners any more representative; those very active in the various implementary fields of historical conservation did not number more than four or five.

A review of the avowed aims of the seminar must precede any evaluation of its success. It was envisioned as a forum where scholars, specialists and practitioners might explore the issues raised by the Award programme, thereby developing the areas and criteria for
the Award. Its purpose, then, was to investigate and analyze the components of the built environment—the unit, the cluster and the total environment—and to ascertain which forms are regionally or temporally specific, and which persist through time and region and can be attributed to the impact of Islam. The ongoing goal of each seminar is to explore guidelines for the Award Steering Committee’s immediate consideration, who would eventually reconsider and reformulate these guidelines for the disposal of the Award selection committee, the Master Jury.

Clearly, one must ask many questions to determine whether these avowed purposes were achieved in Seminar Two. Were any healthy or objective criteria established, and if so, were these invoked by the Steering Committee or derived from participant discussion? Since no qualified case of implementation was presented during the seminar, were criteria to be based solely on theory? How successfully and explicitly were the dimensions of historical conservation discussed? Was the focus primarily on the Islamic sphere in general and Turkey in particular, or on a somewhat camouflaged universal but Islamic scale? Did a real dialogue take place between the Steering Committee and the participants, between Easterners and Westerners, between industrialized and non-industrialized ideologies? Or did separate monologues mar what should have been a process of discussion and compromise?

It is difficult to answer these and similar questions. Presumably no one was anticipating definitive resolutions to conservation problems in any case. The purpose of Seminar Two, like that of most other scientific seminars, was to raise questions. This it certainly has done.
Concluding Remarks

*His Highness the Aga Khan*

My words to you this morning signal the conclusion of the first seminar organized by the Aga Khan Award for Architecture to be held in an Islamic country. The Aga Khan Awards, the first of which will be granted in 1980, will be substantial: $100,000 each of the five different categories for a potential total of $500,000 every three years. Their purpose is to make a strong and continuing impact on the architectural profession, on decision makers and on public opinion everywhere. I want to begin by reminding you how the Award will try to achieve this, for the members of the Steering Committee and I feel that it has certain unique aspects that deserve to be both emphasized and repeated.

In the first place, the Award will not be confined to architects competing with designs for a succession of prestigious public monuments. We are concerned with the Islamic world and, above all, with the people of Islam. This seminar has therefore been devoted to conservation and adaptive reuse—those to follow will explore other major areas of concern to all people, such as housing and public buildings. Second, the Awards will be open not only to designers, but also to the promoters and decision makers who generally employ them, to craftsmen and builders, to civil servants, and even to ordinary people who have shown initiative in improving their own habitats. A third feature is that they will go only to projects that have been tried and proven over a number of years. How many buildings have won acclaim at the time the ribbon was cut, only to be rejected as impractical and inconvenient by those who had to live or work in them? Heralding a venture which eventually proves unsatisfactory is a trap we fully intend to avoid.

Finally, we do not seek anything less ambitious than true excellence in any architecture intended for the Islamic environment. We are not here to advocate a specific school of architectural thought; we have no grandiose ideas to promote, no axes to grind, no facile solutions to propound. The machinery of this Award—which of course includes this seminar—has developed gradually over time, with care and thought. We have tried to take advantage of expert opinion in every category and on every issue we have identified, and to listen to the practical experience of professionals in as many regions of the Islamic world as possible.

The seminar in Istanbul has been devoted to conservation and adaptive reuse—a major area of interest to the Award Committee. We chose Turkey because of the richness and diversity of its architectural heritage, the long exposure of this heritage to the forces of change and, above all, the presence here of a lively and enlightened profession that has had extensive experience in dealing with the problems of transformation and change in all aspects of the built environment. Our expectations have been more than fulfilled. The contributions of the participants have been invaluable, and the interest which our ideas have elicited, both officially and professionally, has been most encouraging.

What have we learned from our three days of deliberation? Speaking generally, I believe everyone has benefited from hearing about the problems and the achievements of conservation projects in widely separated areas of the Islamic world. We have had case histories presented and illustrated from countries as diverse as Morocco, Indonesia, Pakistan, Saudi Arabia and Yemen, as well as Turkey itself. This has been a remarkable experience, if only because so often this type of information tends to be derived almost exclusively from the West. Clearly, a useful bonus of these Awards may be a much greater awareness of what is actually happening in the Islamic world; we shall promote the Award's objectives not only by discovering architectural successes, but also by learning from the mistakes that must inevitably occur. At this seminar we have listened to some dramatic examples of both.

This seminar's discussions have also brought out the importance of public opinion. An awareness of the issues raised by conservation and the ability to directly involve the people affected by each project can avoid the dangers inherent in solutions that are charyly imposed. Journalists will readily appreciate the importance of the press in building an informed and enlightened public opinion. Related to this is the necessity that conservation projects squarely face the complex human problems produced by environmental change, especially in our big cities where community values are lost and financial resources fail just where they are most urgently needed. These are, of course, universal problems, but they can often be found in their most extreme form in some of Islam's most renowned cities.

Finally, I extend a word of gratitude to those who have participated in the seminar, as well as to those who have helped organize it with invaluable local assistance. I have already referred to the important role Turkish architects and academics have played in our deliberations, and to the broad international scope of the professional contributions from other countries. Those deliberations have been rendered all the more useful because of the presence of representatives from international agencies, governments, local authorities, and bankers and consultants to all these institutions. These people are often the final arbiters, and I hope they have learned as much from us as we have learned from them. I also hope that, especially among the decision makers, the seminar has set in motion a train of thought that will at last help them to ask the right questions. It is when we reach that stage that I shall feel our objectives have already been half achieved.
After welcoming the guests and participants, His Highness the Aga Khan stated the reasons for choosing Turkey as the site of Seminar Two. He briefly explained some of the objectives of the Award, focusing on the future of the physical environment in Islamic countries in the face of intensive building activity. What the Award seeks is not a return to the outdated norms of the past, but a reinvigorated development of an Islamic architecture which incorporates design solutions capable of meeting contemporary and future demands. The Award will not be satisfied with simply preserving the Islamic heritage in architecture; it seeks to help catalyze a rediscovery of the inspirations that led to architectural greatness in the Islamic world of the past, and to draw afresh upon these inspirations to build for the future.

Said Zulficar read a message for the Director General of UNESCO, affirming that the objectives of the Istanbul seminar fully coincided with those of UNESCO. The participants were reminded of similar seminars planned under the auspices of that organization. To underscore the importance of conservation, attention was drawn to the ongoing destruction of the environment in the name of progress, but actually for monetary gain.

The initial presentation, by Prof. Doğan Kuban, posed questions about the viability of preserving historical cultures and their true images in the built environment, under the pressures imposed by modern industrial ideologies. He identified the rapaciousness of industry as the singular enemy of the environment that ought to be confronted. Kuban conceives conservation not as an isolated, nostalgic undertaking, but as a logical step in the evaluation of changes in the environment as a whole. According to Kuban, buildings should be conserved as long as their forms have meaning and their survival can be prolonged by technical means. Conservation does not hinder the development of the new which could exist in harmony with the old.

Kuban proposed the relationship of a building with the continuity of its spatial and temporal environment as a criterion for evaluating its significance. In this way, historical monuments would not be the sole concern of conservation. In the absence of a comprehensive plan for the entire physical environment, conservation and reuse efforts should employ an empirical approach. Kuban suggested the term “reverse planning” to describe conservation. It is a cultural decision made in the face of financial constraints which also involves the education of the public, since efforts by the intelligentsia are not adequate to achieve large-scale conservation. Finally, detailing the connection between preservation and the creation of the new, Kuban maintained that not the contrast but the harmony between the traditional and modern would create better living conditions for individuals and their society.

The next speaker, Martin Biddle, focused on the role of archeology and history in conservation, in the search for identity and in the quest for stability. Historical and archeological evidence may serve as sources of inspiration and understanding for future generations. He described work at Winchester in terms of comprehending a historic town through archeology, and showed maps of English towns as they were before the onset of the industrial revolution. Due to periodic waxing and waning of urban centres throughout history, any city is better understood with the help of archeological evidence. Such evidence also provides future guidance, in that it affords comprehension of those aspects of the urban fabric being weakened by modern destruction. Biddle explained the project entitled “The Future of London’s Past,” and demonstrated it to be a replicable and widely reapplicable method of storing and making available the evidence of the past for current investigation and future growth. According to him, sources and methods of the English efforts at slowing the erosion of history could well be utilized in the Islamic world.

The paper delivered by İlhan Tekeli was concerned with the question of Turkish architecture and urbanism as reflections of ideological currents. During the rapid contraction of the Ottoman Empire after the 1850s, a variety of ideologies developed as possible vehicles through which the integrity of the Empire might be preserved. Nationalist ideals in architecture came about shortly after the pan-Islamic ideology of the early twentieth century, and a second period of Turkish architectural change occurred along with the rise of capitalism and alterations in the class system.

Tekeli identified five periods of transformation in the organization of urban life in Turkey since the sixteenth century, and chose to discuss two of these in detail. Urban spatial organization was discussed in terms of production, transportation, social stratification and leadership. Dramatic changes resulted from a major sixteenth century population increase. In this period, urban centres were extended to include commercial centres, in addition to the extant administrative and residential quarters; the resultant dynamic of conflict may have induced the rise of urban consciousness. During the seventeenth and eighteenth centuries the power of the central government declined, but this was not accompanied by a significant change in the structure of the cities. However, the social, political, ideological and technological changes of the nineteenth century were accompanied by fundamental transformations in the urban structure. As traditional state and class structures were totally altered, different spatial arrangements were required in the working and residential quarters. These and other factors profoundly affected the organization of the cities and their relation to peripheral areas, as well as architecture and building technology. Tekeli views the nineteenth century transformation as a vitally important phenomenon, the study of which could contribute greatly to an understanding of later periods.

In opening the discussion following the prepared papers, William Porter noted several institutions and developments that may play a destructive or positive role with regard to the built environment. These include corporations, administrations, grass-roots efforts, political and social ideologies, patterns of wealth distribution, social transformation and attendant changes in motivation. Stressing the strategic possibilities of the Award, since premonition could reinforce the role of any of those institutions, he reminded the participants of the search for Award criteria.
Kuban made a distinction between conservation and preserving, adding that ideology first grew out of the existing human situation, and only subsequently controlled behaviour. He reiterated that conservation did not deny or hinder change; the old and the new can be harmonious in many ways, and an old building may acquire a new function. For effective conservation and reuse, local public support must be sought. He cited Safaranbolu as a preserved habitat which is deemed highly desirable by its residents.

After Porter called attention to the distinction between political and ideological issues, Mahmoud Onsy referred to the necessity of preservation for the benefit of future generations. He agreed with Kuban in urging slow change for architecture despite contemporary pressures to create new buildings quickly, and added that continuity in the built environment was a source of moral comfort.

David Williams discerned two lines of discussion—the attention to Islamic quality in new buildings, and the conservation of existing buildings regardless of whether they have an Islamic heritage. He then touched on several important points: the old environment contains clues for the future; Islamic architecture emphasizes unity, and conservation represents it; conservation policies resemble a "holding pattern," allowing for the continuity of human experience; conservation efforts are not solely concerned with historic monuments, but include the protection of the human scale in residential areas as well; finally, rigid politics may have negative effects on conservation.

Charles Correa averred that non-Muslims could and did contribute to architecture in the Islamic world. According to him, the past is needed for the present and future; what portion of the past is necessary could be determined by a subjective process. Those aspects of the past that have simply lost their meaning for us could be eliminated. Correa urged the identification of specific areas to be preserved, adding that any change may have good or bad results.

Hassan Fathy returned to the functional aspects of traditional solutions, and called for an honest comparative evaluation of old and new environments. Porter believed that the group was nearing the identification of valid provisional ideologies. Onsy continued with a series of observations about intellectual and material funding of a project. Biddle pointed out that students used in archeological and conservation work were an irreplaceable repository of both abstract and technical knowledge, upon which the future might draw.

Tekeli reiterated that structures reflect both the needs of social classes and the political ideologies which determine social stratification. He urges that the issue be approached from an overall social viewpoint, and doubts the validity of imposing professional values on lower classes. He also views the source of financial backing for conservation as an outstanding problem. Porter noted that the seminar was approaching the ideological problem by extrapolating general principles from a range of specific examples, which may or may not be the most fruitful method. The issues under discussion also represent criteria to be satisfied before a project can be deemed successful. Onsy attempted to summarize the discussion by offering six steps for planning: determining what (goal), why (justification), where (location), when (time), ways (method) and who (responsibility).

Stefano Bianca began the portion of the seminar devoted to case studies with a presentation of the UNESCO-sponsored Fez project. Preliminary work for this project led to the realization that the entire medina of Fez ought to be saved. Among the problems encountered were the inadequacy of preliminary surveys, rivalry between national and local government, and the difficulty of generating the Master Plan. The medina of Fez, along with many traditional quarters in other Islamic cities, faces the problem of the exodus of its rich inhabitants and the settlement of a poor immigrant population.

Bianca then explained the site in terms of architecture, infrastructure, demography, social, and cultural factors. A significant aspect of the medina is the absence of monumental complexes: its organic composition and vernacular architecture reflect the daily behaviour of its Muslim dwellers. He then discussed the main points of the Fez conservation project in terms of spatial arrangement, institutions, living conditions, water and sewage systems, commercial areas, transportation, and religious buildings.

Sami Angawi highlighted the rituals of the hajj and the problems associated with the sites of Mecca, Mina and Arafat. Unprecedented numbers of pilgrims in recent years have required accommodation, at the expense of the historical urban fabric. Kamil Khan Mumtaz next discussed the conservation and upgrading of the Lahore walled city, and explained several questions that arose with regard to this IBRD project. The decision-making process entailed determining what should be saved (whole of the old walled city), whether it should be conserved in its present form or restored into a past shape, whether its restoration should aim at freezing it in time or conserving its vitality, and evaluating the causes of decay and the best means of conservation. Mumtaz agreed with Biddle on the uses of preservation and supported the evolutionary model implied by Tekeli. He sees politics as capable of reconciling different ideological and moral arguments with regard to change and conservation.

Soedarmadjii Damais offered a survey of conservation projects in Jakarta. Recent efforts have rescued, preserved and reused individual monuments and neighbourhoods. Conservation areas receiving particular attention are the colonial Dutch centre, the old harbour and various squatter communities. Stressing the importance of an integrated action programme, Damais urged better cooperation among relevant government agencies.

Zeynep Nayar presented the Eyüp case study in terms of historical background and system of analysis. The site study included monument inventories as well as research on infrastructure, demography, services, traffic, commercial and educational centres. The study suggested that the first measures toward conservation in Eyüp attempt to control rapid change, and then rehabilitate and regenerate the whole area while preserving its basic spatial organization. However, present planning regulations are inadequate to restrain ongoing destruction,
and such a project can only be part of the larger programme of rehabilitation of the Golden Horn.

Nezih Eldem and co-workers explained the Sultanahmet conservation and rehabilitation project. The project intends to revive a typical traditional Istanbul street completely isolated from other residential areas and surrounded by monumental architecture of an institutional nature. The first phase of the study consisted of a general inventory of the buildings and assessment of their architectural value, general functional utilization surveys, a survey of transportation systems and the determination of development principles. The project aims at developing a residential quarter which would also be of tourist value. It hopes to achieve cultural and environmental continuity, with the assumption that the creation of a livable environment and the preservation of cultural and historical values are not contradictory.

The next speaker, Güler Yalım, explained the Antalya Citadel project, which seeks to both preserve the old city centre as a residential quarter and develop its artistic and commercial potential. The project has attempted to derive a model for the conservation of whole sites in Turkey, and to protect the social structure of the community by bringing economic opportunities to a largely low income area, thereby preventing a residential exodus. Cooperation among ministries, local government and various agencies has been established, and care has been taken to educate local public opinion and secure grass-roots support. The first stage of the project emphasizes the commercial centre.

Aife Batur’s presentation on the nineteenth century Istanbul rowhouses pointed out the constraints of time in salvaging and conserving an environment which is rapidly disappearing. The survey aimed at approaching the larger problem through the study of a specific area type. The importance of the complementary nature of micro-level approaches was stressed, as were the need for further research, the roles of legislation (municipal codes) and of educating public opinion. The rowhouse conservation project attempts to ascertain scale and criteria through a survey method, taking into account the intrinsic architectural value of the edifice, the possibility of replacing old buildings with new construction or with rehabilitation, the relationship of the preservation area to the city as a whole and economic feasibility. Design development will be undertaken in the project’s second stage, as the rowhouses appear to constitute viable operational units for rehabilitation.

Ronald Lewcock offered the final case study on conservation efforts in Egypt, Oman and Yemen, drawing most examples and conclusions from his own experience. According to Lewcock, admiration for Western technology and culture has resulted in an inferiority complex in many Islamic countries which makes conservation efforts difficult. He gave particular attention to the Bayt al-Razzaz in Cairo and to the Jibrin Palace and fortress of Bahjah in Oman, before turning to the fast-deteriorating walled city of San’a, Yemen. Many problems in conservation policy stem from a widespread disregard for traditional residential architecture, legislative tangles and the homeowners’ dislike for restrictive measures. According to Lewcock, the following issues should be addressed before the conservation of whole areas is undertaken: opinions of the inhabitants toward new living patterns; means of modernizing without spoiling buildings; controlling building activity through legislation; effects of allowing foreigners into traditional quarters; traffic patterns; methods of distributing electric and telephone cables; and improvement of sanitation and drainage.

Lewcock favours the cautious, undogmatic approach to conservation. Conservation programmes ought to begin with contextual research; the public must be educated and awareness encouraged with regard to the value of preserving environments. He pointed out the significant advantages of using original materials for conservation and summarized restoration as involving three components: legislation, education of the public and financial inducement. The purpose of conservation is the preservation of traditional values in order to enhance our understanding of experience, revive past values and provide a standard of comparison against which the achievements of the present and the future can be judged.

The discussion which followed the case study presentations focused on specific problems and solutions, particularly at Fez, and on more generalized attitudes derived from the other papers. Nader Ardalan began a dialogue with Bianca by reiterating some of the important points presented by the latter. Bianca then elaborated the economic importance of the Fez medina, and discussed the overriding difficulty of maintaining a stable urban pattern while interpolating modern necessities.

Turgut Akçıra reminded the discussants that total preservation was difficult, and perhaps not even a desirable goal since it is liable to inflict greater hardship on the poor. Correa noted that the poor gravitate toward job opportunities, as in the walled city of Lahore and the medina of Fez. Turgut Canser felt certain that the appealing aspects of life in the old city centres would eventually draw both poor and rich inhabitants. He urged, therefore, that change be considered in both present and future terms. Tekeli queried how any general principles might evolve from the disparate case studies presented. The key, he felt, was to determine and define the major goals and elements of conservation. He views political ideology and its practical ramifications as the pivotal topic. Williams cited economic variables, describing how the World Bank funds projects. Renata Holod pointed out several elements of Batur’s paper that were unique and deserving of further attention.

Fathy assessed the functional aspects of conservation, directing his comments toward the Arab lands and the local courtyard house. This traditional housing solution is climatically more appropriate than any modern substitutes; this is proved by a comparison of interior temperatures in a mud–brick home and a prefabricated house. Fathy deems functionality and time-tested technology components of a healthy and viable aesthetic.

Bianca continued the evaluation of the courtyard house in terms of Moroccan values. Another value in Fez which is not fully appreciated is education; he cited the presence of the ancient Qarawiyin mosque–university in the medina as an embodiment of remarkably modern educa-
tional theory. Bianca viewed an earlier remark about residents wishing to leave the madina as an outsider's opinion based on scant evidence. He averred that comparisons between old and new Fez are unfair until the implementation of the Master Plan makes their relative situations more equitable.

Mohamed Makiya urged a comprehensive approach to conservation, encompassing the entire environmental spectrum. He opined that an era of global cooperation was near, and suggested that specific conservation problems might have universal solutions or tools for solution. On the theme of universality, Onsy remarked that Islamic architecture is found in many countries. He wondered about the relationship of faith to architectural form, and about religion versus regionalism as inspiration. Kuban concluded the discussion period with an injunction for slow, controlled change. Change is necessary and organic, but must not present a rupture with the continuity of the past. This is the essence of conservation as cultural survival.

Aptullah Kuran began the final session by stating that Islamic architecture had always been considered in political context, because Islamic architectural ideas and forms had been moulded by the architectural heritage of its component regions. He supported this argument with examples drawn from the Umayyad period through the dissolution of the Seljuk sultanate. Kuran then summarized the basic characteristics of Ottoman architecture as rationality, modularity and centrality, and pointed out a number of Ottoman innovations: exposition of the inner building through the roofing system, the resultant accentuation of parts, preservation of the integrity of large spaces and the gradual disappearance of the çayvan.

Ottoman architecture gradually declined after the seventeenth century, but Kuran maintains that European influence was not immediately destructive. The Turkish Baroque did not adopt the basic traits of European Baroque, namely an intricate conception of space along with a sense of movement. By the nineteenth century, however, European cultural influences were so dominant that movements to revive Ottoman architecture fell short of achieving a creative rebirth. World War II disrupted the efforts of the architecture schools, and since the 1950s architecture in Turkey has been proceeding along a hazy path of neo-eclecticism.

Although according to Kuran modern architecture cannot be segregated from modern materials, technological borrowings ought not lead to the rejection of indigenous values. Despite accelerated cultural exchange due to modern communications, universality in architecture is not possible as long as cultural differences exist. Kuran is hopeful that Turkish architects will meet the modern challenge and collectively revitalize the country's architecture in the context of new technological wealth.

The next speaker, Sedad Hakki Eldem, stated that Islamic architecture, civilization and identity were crushed and relegated to a secondary position under European cultural and political dominance. Living under different influences, the Islamic peoples have grown apart; one of the chief aims of the Award Programme is to bring the nations of Islam closer together. Before considering solutions to modern problems, however, past efforts toward architectural revival were examined. Eldem did this through a survey of architectural developments in Turkey in the nineteenth and twentieth centuries, focusing largely on the synthetic nature of his own work.

Architectural reform movements in Turkey may be divided into two periods: neo-Ottoman architecture (c. 1860–1908) and a brief period of eclecticism based on classical Ottoman architecture (ending in the 1920s). In the years 1920–1938, Turkish architecture came under the influence of central European Cubist tendencies, with negative effects on the native urban environment. As a reaction to this, the years 1935–1950 saw the development of a nationalistic architectural movement, chiefly concerned with residential rather than monumental construction. Due to wartime shortages, brick and stone were widely used in the 1940s, but after the 1950s reinforced concrete became the most common building material. Throughout this survey, Eldem pointed to those aspects of the past which particularly influenced his own architectural style. He perceives the emergence of a new movement, regionalism, and suggests that the pursuit of regionalism within the Islamic context should be the objective of modern architects.

Eldem praised the aims and capabilities of the Aga Khan Award Foundation, and stated the need for a programme, under its auspices, to preserve and develop Islamic architecture. The programme should be charged with investigating, determining and disseminating information on Islamic architectural values; trying carefully to preserve extant architectural values; and doing technological, climatological and sociological research and experimentation on new architectural possibilities.

Mohamed Makiya voiced three factors that ought to be taken into consideration in developing criteria for the Award: human scale, physical facts of life and quality of life in Islam. He does not conceive of conservation as being dependent on rigid values. It is a function of human demand, and pertains to the living environment as well as to the heritage of the past.

Makiya stressed regional identity in the context of global problems. According to him, there are no shortcuts to achieving dignity and simplicity in design; true abstraction and synthesis in the design of the environment depends upon a mastery and sympathetic understanding of the elements which make up a culture. Three elements that make Islamic architecture Islamic are regional unity, the reflection of social order and the primacy of word over picture. Makiya then reiterated the importance of respecting human scale and the continuity of the environment.

Kuran initiated the final discussion period by pointing out that architects should control innovations in materials and technology, not be subordinate to them. Fathy discussed the larger nature of change. With self-imposed Westernization increasing, the continuity of the Islamic heritage is more threatened than ever before. Hehnz lies the importance of conservation, as the mechanism for the carryover of traditions. Grabar remarked that change and evolution are the only constants, then posed questions about the definition of "old." What are proper criteria for the evaluation of age, and to
what degree is this relevant to the issue of conservation?

Seljuk Batur answered Grabar’s question: from an economic and cultural standpoint, even a day-old building may merit preservation. He also reviewed the reasons for the nineteenth century phenomenon in Istanbul, which saw virtually all major buildings designed by Christians. S. Eldem countered that these Christians were, first and foremost, Ottoman Turks; their efforts should not be compared to those of foreign architects in Muslim countries today.

Porter reiterated other issues which had emerged during the seminar, including questions of decision-making, criteria for judgment of projects and directions of environmental change. Ardalal suggested the word “connection” as a useful means of focusing discussion, since the variety of presentations had betrayed an equivalent variety of issues and opinions. Correa felt that Makiya’s insistence on human scale as a factor in conservation might be misleading; although this scale is necessary in contemporary construction, its validity for the future cannot be assumed.

S. Eldem argued a differentiation of architecture according to region, citing the disparity between buildings in northern and southern Turkey, and between Turkey and any Arab country. Variety exists in both conceptual layout and building materials. Eldem also cautioned against too strong an emphasis on religious differentiation; the dictates of region supersede those of religion, and Muslims and Christians who share the same environment will have common lifestyles.

Grabar concurred with Eldem’s caution against generalization, only such a practical matter as methodology of construction can be extrapolated beyond a given region. Biddle averred that while conservation may be locally idiosyncratic in implementation, its larger aspects are indeed international. Only conservation schemes which display a serious understanding of the past deserve premilation, and then only after time is allowed for user reaction. He concluded that, although the seminar’s emphasis was on total environmental conservation, individual monuments should not be ignored.

Lewcock saw little merit in the preservation of monuments without their revitalization and reuse. He urged an ongoing use of the past, not a dichotomy between past and future. Lewcock was also dismayed by the emphasis on tourist appeal as a rationale for conservation, and urged that conservation efforts be designed for the continuity of the indigenous culture.

Kuban urged a tolerance for varied conservation solutions, but stressed the universality of the need for stability and continuity in the built environment. He cited the wisdom of experience and the role of time in assessing the value of any architectural effort. Kuban agreed with Porter about the validity of provisional ideologies for change, and reiterated the role of public opinion in any successful conservation ventures. Gönül Tankut elaborated upon the importance of changing public opinion and the possibility of effecting rapid opinion change, but she too felt that slow change was optimal.

Osman Okyar discussed the practical economics of conservation. Financial constraints, coupled with a lack of awareness on the part of both planning authorities and the general public, have often hampered conservation ventures. Although Vedat Dalokay felt that preservation is vital, because buildings cannot be stored in museums like other works of art, he repeated the observation that the Koran lacks clues for architectural criteria. Grabar then took up those questions which had recurred most often during the course of the seminar.

These concerned ideologies, the processes inherent in change, the role of the architect and of new technologies, and the application of any derived criteria to the actual Award procedure. Most relevant to the seminar’s theme of conservation as cultural survival was the question “what should be preserved, and why?”

A later critique by Engin Yenal summarized both the problems and successes of the seminar. The problems included an apparent bias of participants—numerically, by discipline and by nationality—and a paucity of implemented conservation projects. Yenal agreed, however, that the purpose of the seminar was to raise questions, and that it was successful in this venture.
ayan
group of community notables in seventeenth
to eighteenth century Turkey

bedesten
covered marketplace

cesme
fountain

direkler arası
entertainment area

dirğaf
Muslim landed gentry

eyvan
reception hall; three-sided room opening
onto a courtyard

funduş
warehouse, inn

hâmmâmât
public baths

imam
religious leader of a Muslim community

imaret
complex of public buildings and institutions;
kitchen for distribution of food to the poor

kadi
administrative judge who enforces religious
laws; has a variety of municipal responsibili-
ties

kahya
community superintendent

khan
inn, hotel, caravanserai; Turkish Hân

konak
mansion

köşk
villa

kudrağh
roofing material of lime and ash, beaten into
place

mahalle
neighbourhood organized by religious or
ethnic group

mashrabîya
a projecting balcony or window with a
carved wooden latticework enclosure

mihrağ
recess in mosque wall indicating direction of
Mecca and orientation of prayer

millet
religious-based community

mimar
engineer or architect; a member of the
military class, not of the guild

mimarbaşi
chief engineer or architect

miri
state-owned land in the countryside

müfti
Muslim legal advisor

muhtesip
assistant to kâdi who controlled merchants
and fixed prices

mümalef
large, spacious house

mulk
privately owned land in the city

muşarras
vaulting system with stalactite decoration

qadağ
roofing material composed of marble and
lime in thin layers

rabat
fortified retreat or caravanserai

re’aya
peasants

samsârâh
specialized warehouse

şehir kethûdasi
liaison between city and central government

şehrememi
caretaker for sultan’s buildings during
Ottoman empire

sheik al-Isâm
chief lawyer of the realm

sûfî
single-story home

sûq
marketplace

takht-al-qâla
section of town below fortress walls

tebaa
subjects of an empire

tekke
chapter of the Dervish order, hospice

ulema
learned class

ulvi
two-story home

vakf
religious foundation; land or property held
in religious trust; North African Habus

yalı
seaside villa

zaviye
Dervish hospice (see tekke)