

Papers In Progress. Volume One

ARCHITECTURAL & URBAN CONSERVATION IN THE ISLAMIC WORLD



THE AGA KHAN TRUST FOR CULTURE

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CONSERVATION
IN THE ISLAMIC WORLD

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*Cover: Clockwise, from top left— Painam
Nagar Village; Khan Mohammad
Mridha's Mosque; Ali Mian's Goal Talab;
and Ruplal House
Frontispiece Sonargaon National Folk
Art Museum, Dhaka
Part I View from Sonargaon Hotel,
Dhaka
Part II: Mostar Old Town conservation,
Mostar, Yugoslavia
Part III Ahsan Manzil, Dhaka*

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A collection of papers based on a workshop sponsored by the Aga Khan Trust for Culture with the Institute of Architects Bangladesh, Bangladesh University of Engineering & Technology and the United Nations Development Programme. Held in Dhaka, Bangladesh, April 1989

THE AGA KHAN TRUST FOR CULTURE

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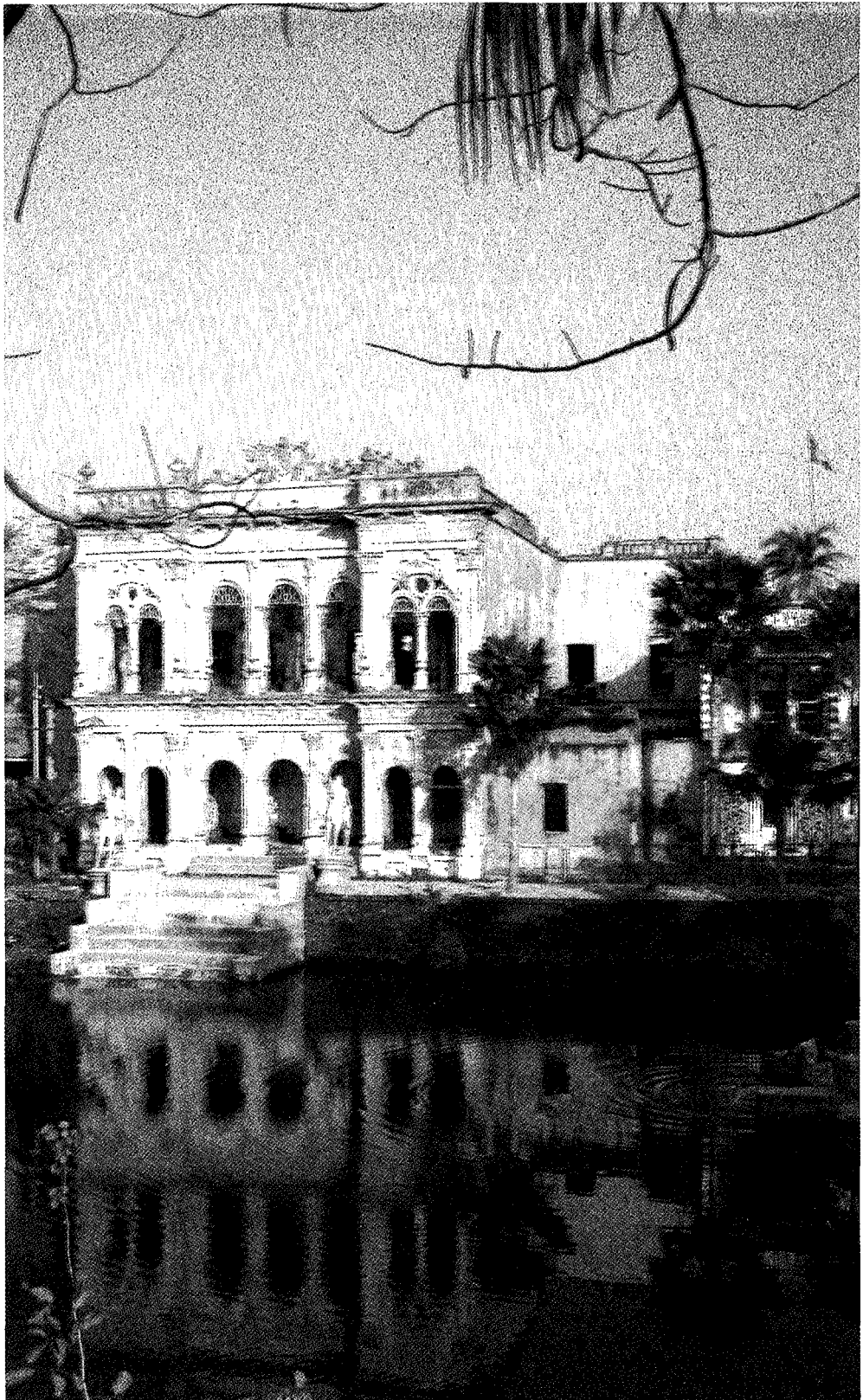
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PREFACE

Sherban Cantacuzino
Hasan-Uddin Khan

The workshop in architectural conservation was held in Dhaka, Bangladesh in March-April 1989, taking up an initiative offered by the architectural profession in the country. It is intended to be the first of a series sponsored by The Aga Khan Trust for Culture. The second workshop is to be in Karachi in 1990 and the third workshop is planned for Amman, Jordan in 1991.

The workshops are devoted to area conservation rather than monument conservation, because this broader aspect of conservation, which includes protecting the setting of monuments and looking at groups of buildings, spaces between buildings and whole areas of the city with a view to improving them, is less familiar and less understood than monument conservation, which tends to look at a monument in isolation.

The workshops provide a short training programme for middle to upper level administrators and professionals actively involved with the issues related to the heritage and to area conservation. The form of the workshops is in three parts.

First, there are two days of public sessions at which the historical, social, economic, legislative and administrative bases of architectural conservation are introduced and discussed. At these sessions a number of illustrative case studies are also presented.

The second part consists of four or five days of actual workshop when the selected 20-25 young professionals, working in four groups, respond to project briefs for actual sites by putting forward proposals in the form of drawings and reports.

The last part consists of the final day when each of the four groups presents their proposals and each proposal is criticised and evaluated in turn.

The purpose of the workshop is, specifically, to train mid-career administrators and professionals to handle area conservation problems with more confidence and expertise; to encourage the authorities to strengthen the relevant legislation and to introduce training facilities in area conservation; to persuade the authorities to undertake specific conservation projects; and to raise public awareness of the relevance of area conservation. The purpose in a more general sense is to have a positive impact on deficient conservation policies and to help start a dialogue at a multi-disciplinary level, involving architects, planners, administrators, archeologists and above all politicians.

This is the first volume of “papers in progress” which will cover the workshops, but it does not represent a classic “proceedings”. Neither have all the workshop papers been selected for inclusion, nor do the discussions, speeches, or other presentations appear. The papers were chosen for their compatibility with the final goal, so unfortunately other papers of interest could not be included.

The texts have been edited to form this volume, which is divided into three major sections: papers on the general approach to and theories of area conservation; realized projects in Bangladesh and other countries, and finally, the workshop case studies in Bangladesh. Succeeding workshop publications are expected to follow a similar format. At the end of the series, a comprehensive, more definitive work synthesizing all of the workshop papers in progress is intended.

Besides these papers in progress, the Workshop proposed as a result of its deliberations the following **recommendations** for consideration by the Government of Bangladesh.

1. That a Cultural Heritage Council be formed in which relevant public and private bodies are represented, to help formulate policies and programmes for conservation and to encourage both governmental or private enterprises as the case may merit.
2. That opportunities be developed for the training of professionals and craftsmen in building conservation and planning.
3. That the preparation of an inventory of building and sites of national architectural significance be undertaken.
4. That a provision be made for on-site information at historic sites to create local awareness and pride as well as for continued mass media presentation and publication to create general awareness

of the significance of the country's architectural heritage.

5. That a historic zone along Buckland Bund (location of two of the workshop studies) be established to incorporate and to encourage its rehabilitation.
6. That the Painam Village (site of a workshop study) be incorporated into the present development associated with the Folk Art Museum, Sardar Bari and the proposed Recreation Centre in Sonargaon.
7. That the existing legislation be reviewed to allow the above recommendations to be supported and implemented.

It is encouraging to note the positive response to the workshop. Through articles in both the foreign media and in Bangladesh, including television, the workshop has raised awareness in the public and in the Government of Bangladesh, including at the highest levels, to create support for the field of conservation, although modifications to the existing legislation that would encourage urban area conservation have not yet been made.

Arguably the greatest impact has been felt within the architectural profession in Bangladesh, where most architects will now consider environmental **area** problems in the course of their work.

The Department of Archeology and the Public Works Department are the two main bodies that are involved in conservation and restoration in Bangladesh. During the workshop the Government recognized the need for archeologists to be assisted by an architect within the Department, and has indicated that such a post would be created. Because of the workshop, the Department was given the funds to restore Khan Mohammed Mridha's Mosque — one of the workshop projects.

Government architects in the Public Works Department and in the Architecture Department charged with implementing conservation and restoration projects say that they now have a more comprehensive view of architectural conservation which helps them approach their work with greater awareness of the broader consequences of their actions. Interestingly, some architectural conservation work is now for the first time being carried out by private firms.

According to Professors at the Bangladesh University of Engineering and Technology, (BUET) the teaching of conservation issues has been enhanced. Their library has been significantly improved by the donation of books by the Aga Khan Trust for Culture and by a major collection of visual

materials given by the Aga Khan Award for Architecture. This material in addition to the techniques and studies developed during the workshop has given the University a clearer understanding of the subject and tools with which to undertake systematic training of students.

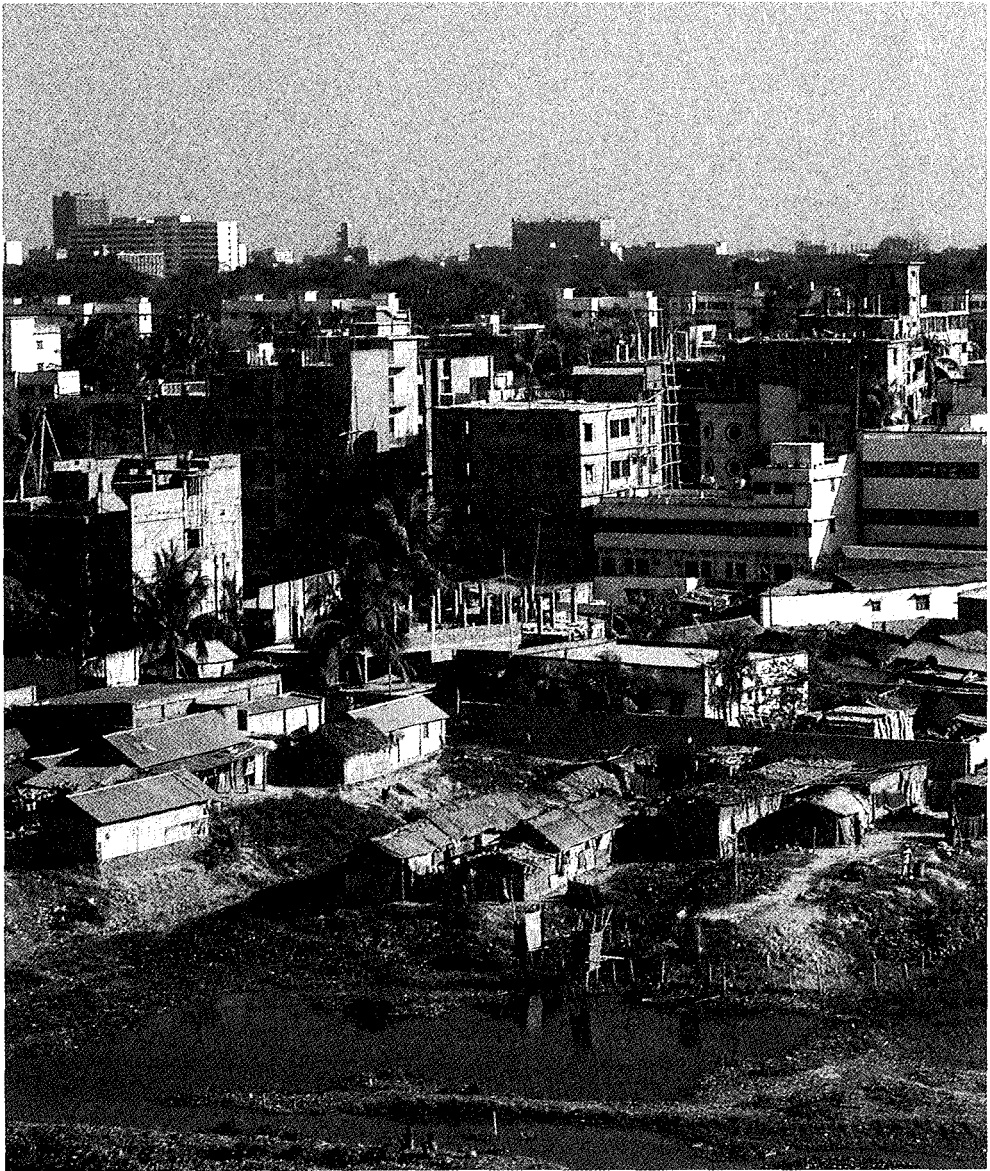
The University is also working in conservation on several fronts. The Department of Architecture held a seminar in which master craftsmen (*ustagar*) worked with fourth year students to develop approaches to the architecture of Old Dhaka. The Department has also prepared a project proposal for a conservation study of Dhaka city for possible Ford Foundation funding and the Head of the Department has been approached by the Ford Foundation to study the possibilities of restoration of a museum in Rajshahi — a late 19 c. structure.

The workshop has recommended that an inventory of significant architectural sites be undertaken. (The inventory of archeological sites continues to be done by the Department of Archeology). The inventory of more recent buildings and neighborhoods of architectural significance is now being carried out by Chetana, a private independent group of people volunteering their time.

A group of government and private architects have met within the last year to form a Cultural Heritage Council, although it has not yet been formalized.

Finally, all the participants in the workshop — both those from abroad and from within the country — profited greatly from the exchange of information and experiences and parted with a renewed sense of commitment and interest in architectural area conservation.

PART I
BACKGROUND PAPERS



A POLICY FOR ARCHITECTURAL CONSERVATION

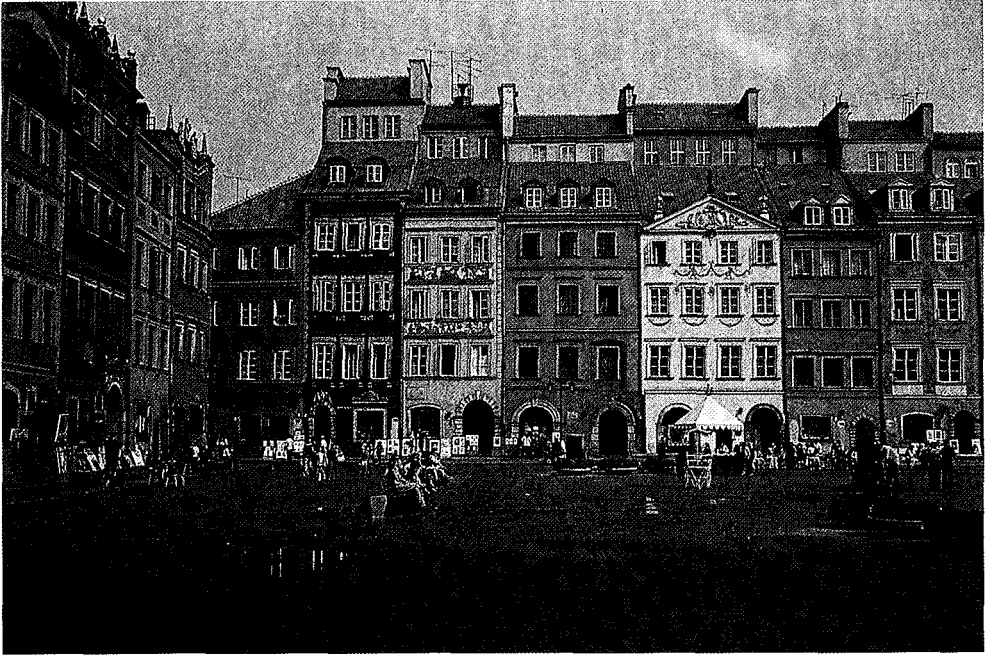
Sherban Cantacuzino

Restoring buildings to their old use or adapting them to a new use, and so keeping a whole area of a city alive, are practices which have existed as long as building and cities have existed. In the past when the rate of change was slow, the sense of permanence was correspondingly high. So much so, that after its destruction in the Thirty Years' War, Dresden was rebuilt in the new Baroque style. There was no question of erecting replicas of any of the medieval buildings which had been destroyed.

It has been said truthfully that "it is rapidity of change which increases the psychological need for permanence."¹ In Western Europe since 1950 we can talk about a greatly accelerated rate of change, impelled on the one hand by the destruction of the war and, on the other, by new technology engendered by the war. Phrases like "wholesale demolition" and "comprehensive re-development" were invented at this time when whole city quarters were giving way to the bulldozer. Already the war had caused the decline of that earlier sense of permanence and the consequent desire to recapture it. So much so, that after its destruction, Warsaw was rebuilt as a replica of what it had been. There was no question of erecting even a single modern building within the reconstructed walls of the old city.

Without having to go as far as John Ruskin, who believed that old buildings were held in trust for future generations and were not ours to destroy,² there are a number of good reasons why we should preserve buildings. The first is based on the profound psychological need of permanence. The widespread destruction and renewal of old quarters, which have affected most of the major cities of the world, have made us realise that the loss of the familiar can go too far. A second reason is the realization that the old buildings often do their job better than the new ones. It should perhaps be a condition of any demolition that the new building must always be better than the old which it is replacing.

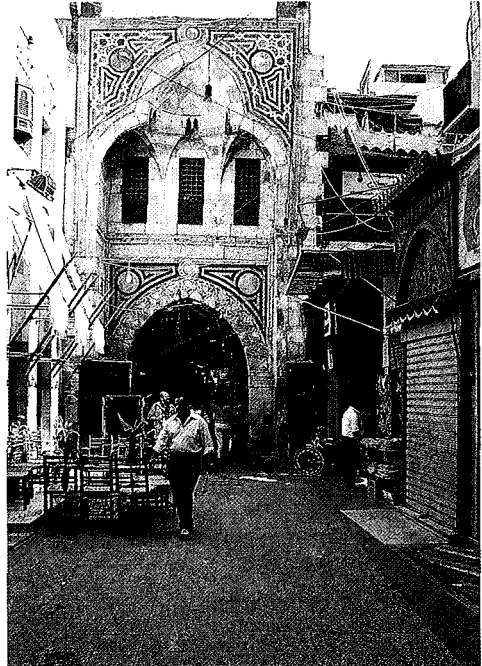
Thirdly, the oil crisis of 1973 has made it clear that we cannot afford to demolish buildings which still have plenty of life in them. This is not



The main square in old Warsaw was rebuilt in replica after its destruction in the Second World War



A nineteenth century house with elaborately carved woodwork on the façade in the walled city of Ahmedabad in India. The two top storeys were added later and they should be accepted as part of the history of the building in any restoration programme.



A gateway in Cairo — an example of a building with a façade that belongs more to the exterior space of the street in front of it, than to the interior accommodation behind it.

only because old buildings are usually more efficient in energy conservation than new ones, but also because the actual work of rehabilitation or conservation costs in energy terms a mere fraction of new building. Lastly, and relating to this last point, is the fact that rehabilitation is labour-intensive. It creates employment and keeps both the small and the large builder busy, whereas comprehensive redevelopment and tower blocks rely far more on factory-made parts and mechanical assembly which only the few large builders can manage.

Having given you some reasons for wanting to preserve buildings, I shall next endeavour to put adaptive re-use and historic preservation in a wider context. I shall also look at the specific problems of preserving buildings, and finally, I shall return to the wider context and attempt to outline a policy and a structure.

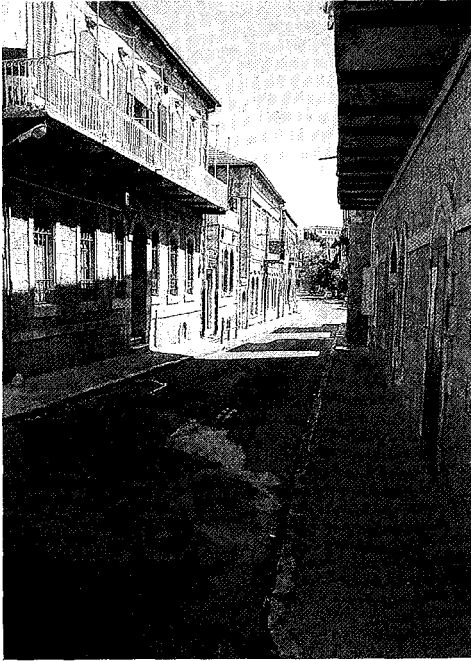
Adaptive re-use and historic preservation fall within the wider term *conservation*. I like this word because it means *the act or process of preserving something in being, of keeping something alive*. And in keeping something alive — that something being in this case anything from a single building to a whole city quarter — it may be necessary to infuse new life.

So conservation does not exclude demolition or new construction. It does not, in other words, exclude change. We might indeed take the argument further and say that, without the ability to change, a city would die, and, by analogy with politics, agree with Edmund Burke's view that "a state without the means of some change is without the means of its conservation."³

A conservation policy for a particular area must take into account the wider planning issues. It must address itself not only to the problems of historic preservation, but also to new development and therefore to the problems of height and density, and of the infrastructure. It must take into account social and economic factors. It is no use, for example, preserving a historic building and then allowing it to be engulfed by a car park, or overshadowed by a tower block.

A beautiful suburb will cease to be beautiful for its inhabitants if it finds itself on the flight-path of an airport. And to forcibly remove uses which do not comply with modern zoning requirements can suck the very lifeblood out of an historic quarter. Conservation thus becomes an integral part of planning in its widest sense.

Before embarking on a planning policy for a particular area we have to find out as much as possible about its buildings. Knowledge of this kind is fundamental to the planner and conservationist, for without knowledge there can be no theory — and theory is important because it is the systematic statement of principles concerning, in this instance, the action of



A street in a quarter of Jerusalem outside the walls. No single building is of outstanding quality, but together the buildings make up a group which is worthy of protection and conservation.



The importance of spaces between buildings is exemplified by this central point in the Chowk of Lucknow, India, where there is clearly a delightful urban space waiting to be recovered.

keeping a building group or building in being. Sir Bernard Feilden, the eminent English conservation architect, has said that in any architectural problem the first task is survey and analysis; with building conservation it is important to understand both the building and the reasons for its preservation. The more important the building, the more painstaking must be the background work, and the more likely it is that individual decisions will have to be justified. The integrity of a building as Architecture depends on its design and its fabric, full knowledge of which, in their primary and secondary aspects, may require documentary research besides physical examination and “opening up”.⁴ Sir Bernard Feilden goes on to suggest four stages: a general report, a detailed and meticulous inspection, a historical analysis and a structural in-depth investigation.

But such a survey should not be limited to the architectural quality, historical interest and physical condition of buildings. It should certainly include an analysis of the uses to which buildings are put, and of the local economy generally. Even more important, it should identify the inherent dynamics of the place — and by dynamics I mean principally **mix**, both in the sense of mix of people and mix of uses. I also mean movement by people, both on foot and in vehicles. Controlling, stimulating and, if

necessary, changing the inherent dynamics of a place must be a fundamental task of planning, if the conservation of individual buildings and groups of buildings, in the sense of keeping them alive, is to have any meaning.

Assessing Buildings

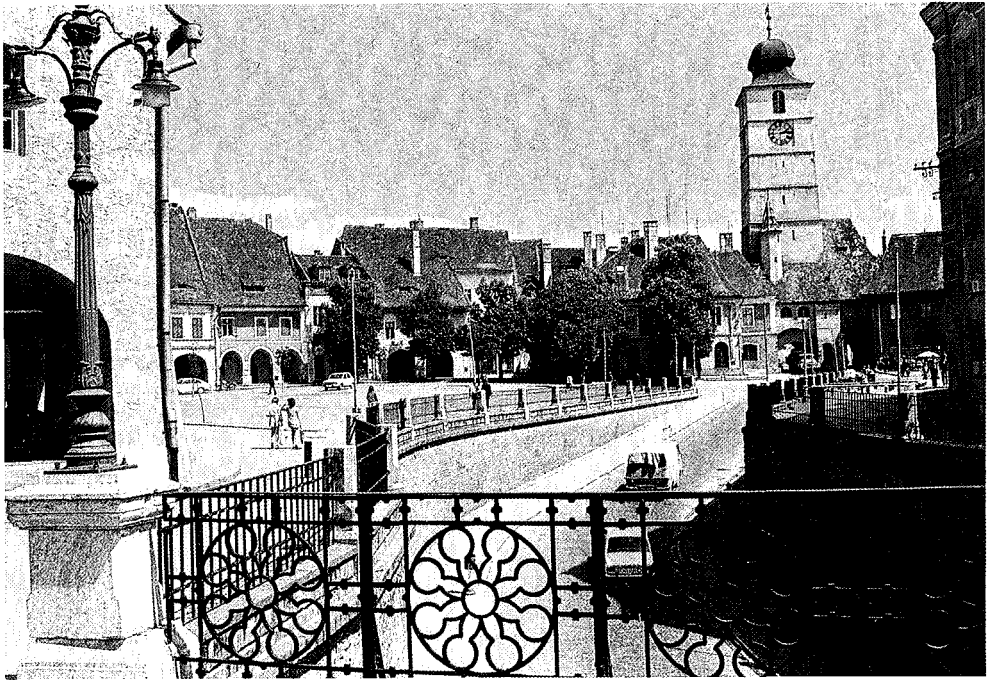
Considering the specific problems of building preservation, the research and documentation which I have described leads to an assessment of the building or group of buildings. To make this assessment there are five questions which have to be answered, four of which have a universal and timeless quality, and the fifth being of a more topical nature.

1. What is the historical value of the building: the circumstances which caused it to be built and any famous people or events associated with the building throughout its history? This question can be answered quite factually, and clearly the more history and the more important the history, the greater the historical value of the building. This is not, therefore, a matter of opinion.

2. What is the architectural value of the building? This can be a very difficult question to answer. Some years ago there was the case in England of a country house threatened with demolition. It was by the architect of the London National Gallery, William Wilkins, and was built around 1830 in the Neo-Classical style. Its dilapidated condition was due in part to the fact that it was built not of stone but of brick covered with a layer of stucco simulating stone. Some authorities called it an unattractive pile of grey stucco, others regarded it as a rare and precious example of country house Neo-Classicism.

Again, a factual approach may help. We can name the architect, the date and the style. We can examine stylistic influences both *on* and *from* the building, or we might note the use of a new material like cast iron or encaustic tiles. Often there is the problem of later additions and alterations. Here I am inclined to lay down a general principle, which is to respect such additions and alterations if they have enough intrinsic quality to merit preservation. They are, after all, part of the history of the building, and it is usually undesirable to restore a building to its original state. But there can be no absolute rule, and every case should be judged on its own merit.

3. What is the significance of the building in the wider context of its street or town — what role does the building play on the urban stage? Is it a building where the main interest lies in the interior space, like the train



The main square in Sibiu, Romania – an example of a “well-preserved” town devoid of life in formerly socialist eastern Europe

shed of a railway station? Is it an isolated building that provides a focal point? Is it a building with a facade that belongs as much to the exterior space of the street or square in front of it, as to the interior accommodation behind? Is it a building that is part of a general whole? Is its significance of urban scale and does it, like so many medieval and Victorian churches, make a vital contribution to the silhouette of the town as a whole?

4. What is the essence of the building? Its spirit? Its very nature? This is of particular importance if the building is to be adapted to a new use. A church or a railway station are essentially single-space structures: a house is essentially cellular. And here I am tempted to lay down another principle: that it is undesirable, in converting a building, to change its essence — to change a single-space structure into a cellular one or vice-versa.

5. To these four questions must be added a somewhat topical question to do with economic and social viability: what are the economic and social needs of a particular area, and how can these needs be best met by the introduction of new uses and by the increase or reduction of existing uses? A good mix is often the answer.

An example of the social and economic failure of a conservation policy is the “well-preserved” town in Socialist Eastern Europe, where the



The rehabilitated piazza in Covent Garden, London. The Central Market Building is on the right

The Central Market Building in Covent Garden, London has been converted into a centre of small retail units and has proved to be the catalyst for the general revival of the area

planning policies have generally been to house people in new satellites on the periphery. The old centres of some of these towns survive intact but no new development has been allowed within them. Restoration is carried out to boost tourism, but apart from a restaurant and a shop or two, and a few elderly people living in the houses, the places reflect the dead hand of conservation. An extreme example of this tendency is Suzdal near Moscow, which was turned into a museum town by the authorities and in which only museum staff now live.

There have, of course, always been specialised zones in cities, but these have traditionally been associated with trade or industry. Perhaps the most famous example is the Arsenal in Venice, which developed when the many boatbuilders scattered all over the city were no longer capable of producing and maintaining the ships needed to defend the Republic. The Arsenal is now redundant and remains one of the city's major problems. But because the mix in Venice is so good, it would not probably matter if the Arsenal were converted into another specialised area — a museum zone or a crafts centre.

It would have been a disaster, on the other hand, if Covent Garden in London — another specialised zone where many of the buildings were

given over to wholesale market activities until 1974 — had undergone the kind of redevelopment which the Greater London Council had originally intended. Unlike the Arsenal in Venice the area was in fact far from being in the hands of a single user. The Greater London Council must be given the credit for having undertaken a thorough survey. There were tiny industries like violin makers and theatrical costumers. There were 34 bookshops, 26 stamp dealers and 124 publishers, printers and engravers, not to mention the Royal Opera House and 17 other theatres. Commendably, all were to be retained and a programme to re-house and augment the indigenous population was to be undertaken. But a less felicitous part of the programme was the construction of a relief road between the Strand and the Piazza and the extensive demolition of warehouses and Victorian tenements. The voice of the conservationists won the day. The road was stopped and many of the buildings were “listed” and so protected against demolition.

The result of the conversions to new uses and judicious infill of new buildings is in my view little short of a miracle. The central market building, converted into public spaces surrounded by small shops, bars and cafés, is at the heart of this miracle. Not only the central market buildings but all the streets around are now buzzing with activity, the result of a rich mix of people and uses, which is itself the result of a creative planning policy. But this very success is also sowing the seeds of destruction. The commercial success of the area has raised rental values which in turn is driving out the traditional industries and essential shops, leaving only the inessential trivia promoted by tourism. Covent Garden is now in danger of becoming a place of specialized and irrelevant activities.

Policies for Re-Use and Preservation

Returning to the wider context of adaptive re-use and historic preservation, I shall attempt to outline a policy and a structure.

Adaptive re-use and historic preservation is an integral part of planning, and I argue for a strong planning authority, without which no policy, however excellent, can be implemented. Preservation policy itself must be basic and adaptable to the different conditions of different countries. There are, I think, five parts to this policy.

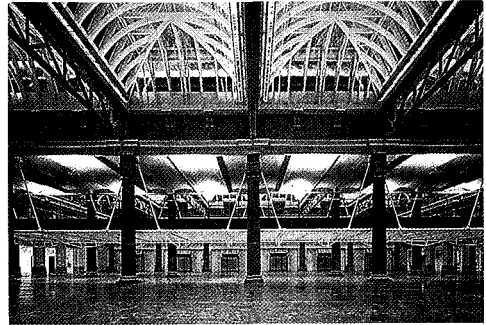
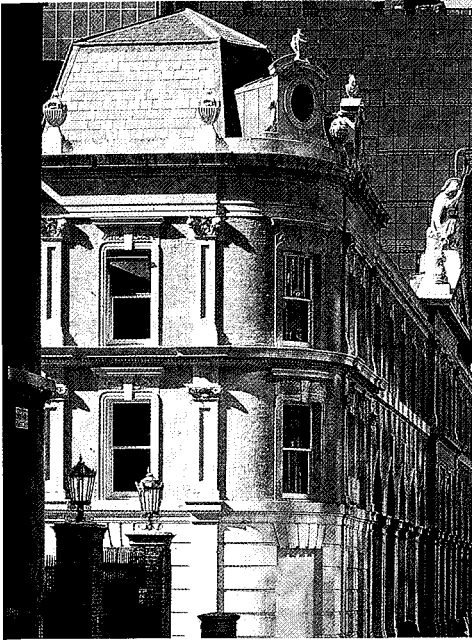
First, as I have already mentioned, there must be an inventory of the building stock. Without this fundamental information no meaningful action is possible. As a result of this survey and analysis the condition of every building would be recorded and it would become possible to build a maintenance plan into a conservation programme. William Morris once said



An older example of a good space between buildings in Mount Zion, Jerusalem

“stave off decay by daily care”. Such daily care or maintenance of buildings is a neglected subject, yet it uses about one-third of the resources of the building industry in the west and deserves far more consideration. In fact, maintenance plans written into not only the rehabilitation of old buildings but also the construction of new buildings, would ensure that the cost of conservation on the scale that it exists in Europe and America today would never occur again.

The second and third stages, which become possible only once the inventory exists, consist of identifying and ‘listing’ specific buildings or specific groups of buildings for protection, and identifying and declaring conservation areas. Of course it is very difficult to start protecting historic buildings in a city where market forces have always determined the pattern of development. A building is threatened when the value of the site is greater than the value of the building on it, and since historic buildings are usually found in historic city centres, there cannot be many for which this is not the case. In these circumstances it becomes necessary for the planning authority to do a deal : “Since you have to preserve this building and therefore cannot exploit the commercial potential of the site”, they might say to the building owner, “we will help you make your money somewhere else.” The concept of conservation areas, or area conservation, is an important one because it helps to make conservation part of planning policy. It is important too, because it discourages the treatment of buildings as separate monuments, and directs attention to spaces between buildings



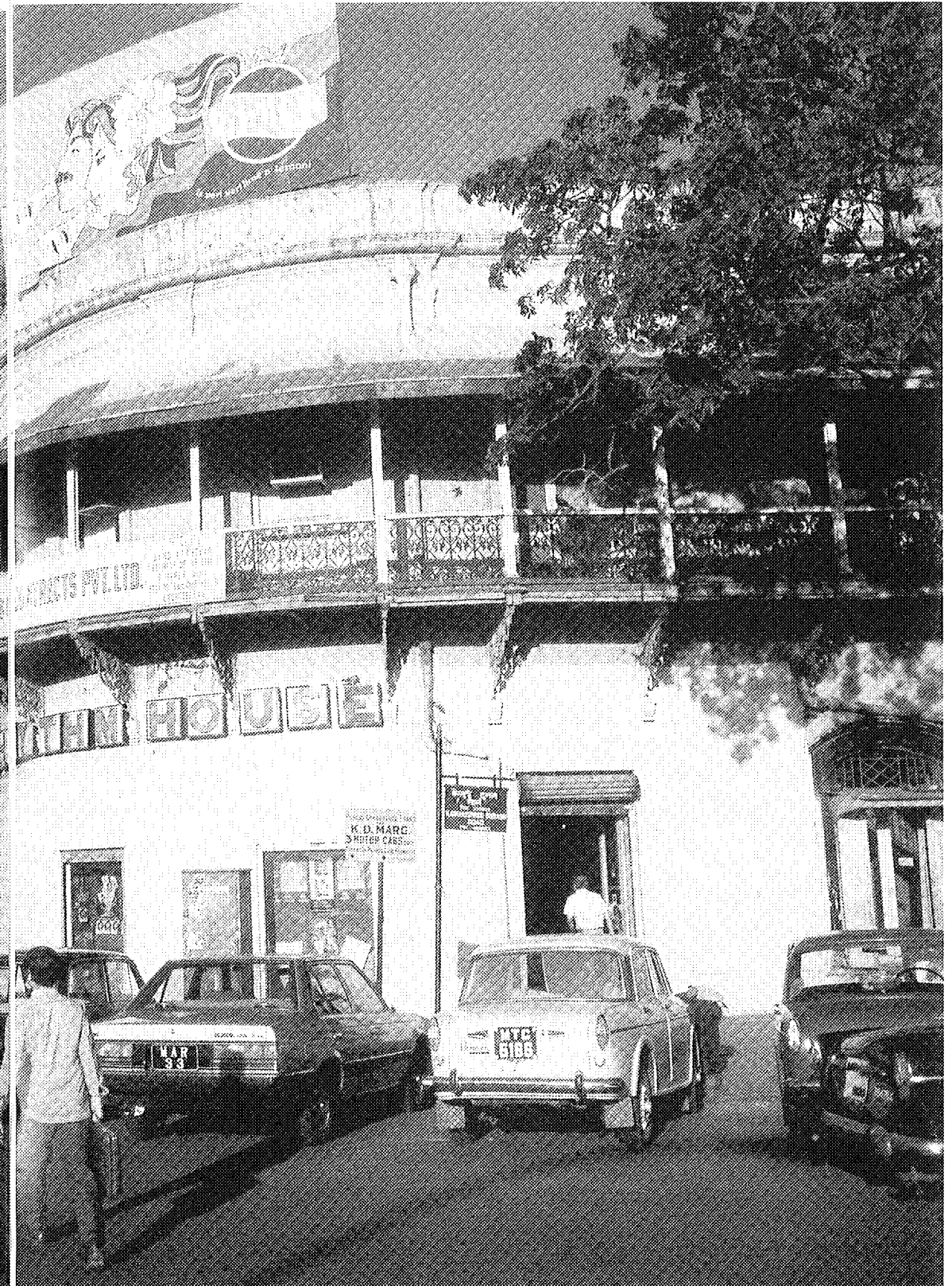
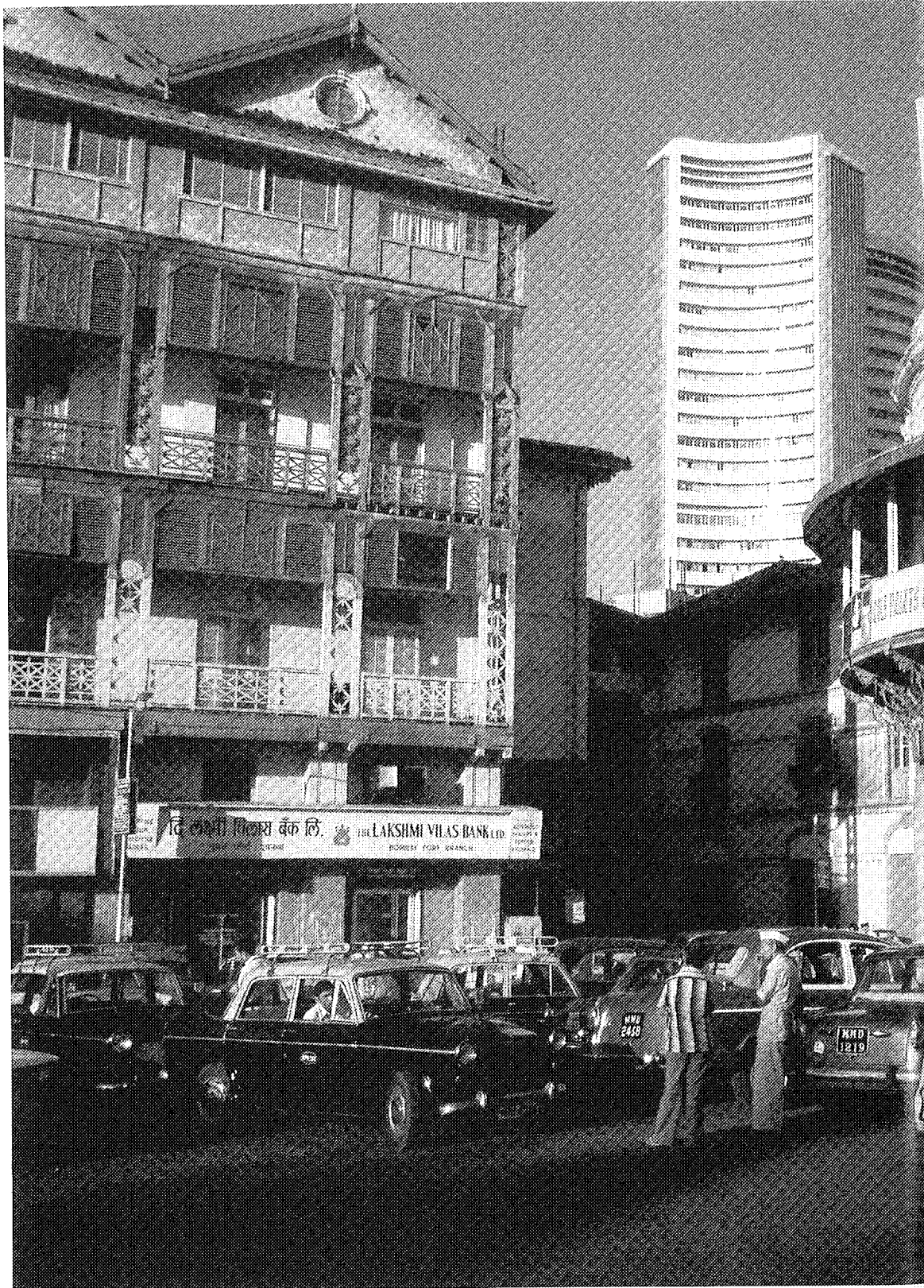
Billingsgate Fishmarket in London, converted into an office building by Richard Rogers and Partners. The conversion was not just a matter of maintaining the fabric of the old building, but of introducing new environmental standards and services

and to relationships generally.

The fourth stage is to provide financial encouragement in the form of grants, subsidies and tax relief. There are as many ways of doing this as there are circumstances that cry out for it ; one must simply find a way in which it will work.

Lastly, and not so much a stage as a fundamental part of any conservation policy, is the setting up of voluntary amenity societies, both at national and at local level. This is the grass roots element which more than anything else will convince governments with democratic aspirations that conservation is important.

None of this policy is any use unless there are effective ways of implementing it. To do this there must be strong planning authority and, to avoid abuse, an appeals system to the responsible Minister. A strong planning authority implies three things : a sound administrative structure, a sufficient number of properly qualified people and legislation which is capable of being applied. It is over the last two that difficulties often arise. Many countries just do not have enough qualified people. Many countries also enact laws and then find they cannot apply them. In England, for example, there is a law which enables a local planning authority to force the owner of a neglected 'listed' building to undertake the necessary repairs, but it has proved very difficult to apply this in practice. In Syria the setting



The entry to Forbes Street, Bombay, a potential conservation area, but already overshadowed by the skyscraper of the Stock Exchange

of a monument is protected, but if the local mullah decides to extend his mosque which happens to be part of this setting, he cannot be stopped or directed to carry out the work in a particular way, or indeed be made to pull down the offending part. In many countries (India and Turkey come to mind) the rights of the individual are so strong that they are often upheld in a court of law to the detriment of the greater good of the community as a whole. It is relatively straight-forward to enact legislation which enabled a planning authority to “list” buildings, declare conservation areas and give financial aid, but quite another matter to include in this legislation punitive measures which have to be upheld — as often as not — by the courts.

It is often said in political circles that if a country is to progress and improve, the old needs give way to the new. In conclusion, I want to question this view by suggesting that the old usually gives way to the new, not in the name of genuine progress or even improvement, but to enable someone to make a lot of money by replacing a six-storey building with a sixty-storey one. If we remove this element of speculation, the economic argument for recycling existing buildings becomes a powerful one, for recycling is not a matter of merely maintaining the fabric of an old building, but of introducing completely new environmental standards and services. I will leave you with the thought that genuine progress and improvement does not lie in the image of the skyscraper or high-tech assembly, but in these new environmental standards which can transform existing buildings and the quality of life inside them.

Footnotes

1) “Why Conservation?” Lecture by Professor Sir Ernest Gombrich delivered at the First International Congress on Architectural Conservation at the University of Basle, March 1983

2) “It is no question of expedience or feeling whether we shall preserve the buildings of past time or not We have no right whatever to touch them They are not ours They belong partly to those who built them and partly to all the generations of mankind who are to follow us” *The Seven Lamps of Architecture*, 1849

3) *Reflections on the Revolution in France*, Edmund Burke, 1790, re-published by UNESCO, Paris

4) *Introduction to Conservation*, Sir Bernard M. Feilden, UNESCO, 1979

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THE MEANING OF CULTURAL CONSERVATION IN MUSLIM SOCIETIES

Mohammed Arkoun

Cultural conservation in Muslim societies is related to nationalist movements, just as it is in western societies. Each society is proud of its past and seeks to show off the glorious performances of its ancestors. The display is not limited to architectural monuments, but includes all cultural legacies like manuscripts, furniture, jewelry, poetry, painting, musical instruments, and weaving.

In European western societies, the concern for cultural rehabilitation, restoration and conservation is based on a historical methodology dating from the 16th Century when the humanist movement looked back to Greek and Roman legacies. Architecture, urban planning, sculpture, painting, law, philosophy, sciences, literature — all Greco-Roman civilisation became the object of learning, imitation and conservation.

Muslim societies, however, started to look back to the past immediately after the death of the Prophet. The companions of the Prophet Mohammed were the living memories of the Quranic revelation and his teachings of Mohammad (the future *hadith*). The Caliphates in Medina and Damascus wanted to run the new Muslim state according to the rules given in the Quran and the practical behaviour of the Prophet during his mission. This means that conservation has been since the very beginning of Islamic history the primary concern of successive generations. Continuous endeavour led to the conservation of the Quran, the biography of the Prophet (*Sira*), his teachings, and the teachings of the companions (*Sahaba*). Thus historiography became an important literary activity: to write down all the facts related to the inauguration of the new religion became important not only for Muslims, but for all human kind, from the perspective of religious salvation.

There is a big difference between the Muslim concern for the religious past and the European humanists' interest in the Greco-Roman legacy: in the first case the perspective is theological and mainly mythical, in the second case, it is historical, based on the evidence of written or material documents.

This is an important psychological and intellectual difference. Historical methodology has been developed in Europe in the scientific spirit to form our modern conceptions about the past. This positive historical knowledge has affected more and more the process of identification, restoration, and conservation of ancient monuments or cultural legacies. The museum culture is the result of this evolution; Western culture came to generate what André Malraux called "le musée imaginaire". The romantic movement in the 19th Century increased interest in discovery and conservation not only of the western cultural legacy, but also that of other civilisations. In 1800, Napoleon went to Egypt with soldiers, archeologists and scientists; Egyptology soon became a scientific discipline as well as Assyriology and biblical studies.

On the Muslim side, the evolution of the interest for the past has been, on the contrary, more and more religious, scholasticist and mythological. Even the historical material collected by historians during the first three centuries of Hijra (7th-9th C.) has been forgotten, or lost, because the conservation of manuscripts had not yet been carefully developed. The discovery of Muslim classical heritage and the efforts for its conservation started to be a scientific enterprise only during the 19th Century with the development of orientalism in the larger contexts of the romantic movement and colonial domination.

It is important to have in mind all these historical facts if we want to approach all the problems of conservation in contemporary Muslim societies with an objective, scientific attitude. It is not an easy task. Many precious parts of the vast cultural patrimony in Muslim world have been damaged, lost, or dispersed, and a large part of our architectural legacy has deteriorated or been destroyed, especially in the last forty years under the impact of the modern economy and its technology.

For all these reasons, we need new conceptual tools to address correctly the question of conservation in Muslim societies. Before considering restoration and conservation in its technical or historical aspects, we need to elaborate an adequate terminology in the perspective of cultural *semiology* [the science dealing with signs as fundamental elements of all cultural systems]. In cultural history, working concepts, carefully defined and used, are as important as slides are to architects visualising space. We have to visualise mental space as well if we want to understand all the delicate mental mechanisms and collective forces operating in conservation as a cultural activity.

A semiological approach

Semiology is not yet well established as a discipline, although it touches the three basic tools of any cultural expression. Semiology deals with *signs*, but also *symbols* and *signals*. The main system of signs is language¹.

Words in language do not refer directly to objects or to the substance of beings; they are signs heard (sounds) or seen (written units); each sign refers to a mental image related to physical objects in our environment, or to concepts shaping our representations. Signs are thus flexible, not rigid; they convey various images according to our experience and training in different levels of language. Without actually seeing the mountain, the sea, the elephant, we have mental images with various colorations, or connotations of the physically existing referees; we can never see God or the angels, we shall never see again Abraham, Nebuchadnezzar or Harûn-al-Rashîd ... but we have through these names (signs) an unlimited range of representations.

The same mental operations are generated by all other semiological systems — music, dance, cooking, painting, rituals, buildings, and gardens. Signs always refer to many possible meanings. Symbols used in these semiological systems are richer than signs; symbols are persons, events, or physical objects currently used in social communication to convey high spiritual, ethical, or aesthetic values shared by the social group whose identity is precisely structured by all the values projected in the symbols. Abraham, for example, is represented in the Quran not as an historical individualised agent, but as the symbolic religious figure of the ideal relation between God, the creator, and man, the creature.

Creating links between material beings and mental representations is a permanent dynamic function of humankind who generate meanings through signs and symbols. The new cognitive attitude introduced by semiology is that symbols and signs are never intangible, static tools referring to permanent, and substantial meanings; they are subject to change, because the human mind is itself continuously exposed to new experiences. Symbols and signs can be deteriorated, weakened, or rigidified to become mere *signals*. A signal has only one interpretation, such as the green and red lights in a traffic light conveying only one meaning in that context; however, colours (like green for Muslims, red for communist revolutions) can be used as symbols, signs or signals.

The general disintegration of traditional cultural systems which played an important role in cultural integration prior to the industrial revolution is expressed in the substitution of a *populist* sub-culture for *popular* culture, which has differentiated itself over a long period of time from the *written*

learned culture. These three levels of culture are to be found in all contemporary third world societies. In Muslim areas, we have to focus particularly on the growth of *populist* culture.

Sociologically, a populist culture is produced by several combined factors, the most important being the tremendous, unprecedented rate of demographic increase. Around 60% of the population of Muslim societies is less than 20 years old. In many countries, agricultural politics and industrialisation have uprooted the peasants and the nomadic population, obliging them to move to traditional urban centres where written learned culture and classical architecture are concentrated.

When we discuss Islamic culture and civilisation, we aim at this urban elite who wrote and thought in the Arabic language, and who created the urban cities during the classical ages (1st-6th and 7th-12th C.). The division between written learned culture and oral popular culture has long been expressed in the opposition of the Arabic words *Khâssa* and *‘Āmma* : the elite and the masses. Actually, the Quran itself introduced this division with the opposition between pagan ignorant society (*Jabiliyya*) and illuminated learned community (*‘ilm*) or believers. Although oral cultures with their vernacular architecture have been marginalised by official, learned culture, they remain alive with a strong integrative function as long as the rural populations have not been uprooted. The nationalist state, the generalisation of elementary school training, the deterioration of craft guilds, and the industrial system of production are the main new forces which have transformed popular culture into fragmented, scattered, uprooted populist culture.

Populist culture is characterised by the predominance of signals, and the concurrent inability to read or use the symbols and signs which have been invested in all traditional forms of culture. If we study the mosques built during the last thirty years in Muslim societies, the theology taught in schools, the individual and collective behaviour, the aesthetic values in furniture, clothes, and natural environment, the political relation to the state and the authorities, the roles played by the *‘ulama*, we discover in each level the disintegration of symbols and signs into signals, slogans, and rigid aggressive expressions cut off from traditional legacies. The semiological universe is invaded by plastic objects, by deteriorated gadgets and machines, and by meaningless expressions that make little sense as far as poor, marginalised social groups are concerned; rich bourgeois elites are also cut off from this universe and are dominated by western models of culture.

The built environment reflects perfectly this new semiological, cultural structure in all Muslim societies: Californian villas, modern buildings, business centres, low cost housing, and slums translate the semiological

divorce and the disintegrative forces at work. Cities are mostly artificial, conformist, rigid reproductions of a conventional, desymbolised environment, instead of the rich, integrated, functional surroundings in the classical Muslim City.

This is the semiological context in which restoration and conservation are to be undertaken, not as a specialised activity of learned archeologists or historians for the pleasure of an elite, but essentially as a complex activity aiming at revitalisation, reuse, and reinsertion in the general development of the society. Conservation is a radical enterprise to *rethink* the whole historical process of semiological disintegration and the required conditions of reintegration in the new context created by material and intellectual modernity. In this perspective, one has to ask if the semiological disaster already reached in many societies leaves any chance for conservation as a wholistic process for development.

Conservation as a developmental issue

Conservation is a cultural enterprise which needs to be evaluated in the perspective of: (i) a given cultural tradition; (ii) a given society expressing itself as a nation or a community; (iii) a universal concern for aesthetic messages delivered by monuments, masterpieces, or landscapes which are part of the world's patrimony. Beauty has an emotional, metaphysical, and spiritual function; it enhances the transcendental experience described as poetic, religious, absolute, divine, or sacred. It is a permanent force for the emancipation of the human condition from its limitations.

Conserving a monument — or any piece of artistic creation — is a part of this universal aspiration to reach all expressions of beauty, to participate in the various forms, styles, and inspirations used in different cultures to produce artistic masterpieces.

In this perspective, conservation cannot be only a national responsibility; that is why UNESCO initiated in 1972 a convention for the protection of world patrimony. Linked to UNESCO, the International Council for Monuments and Sites (ICOMOS) and the International Center for Restoration and Conservation of Monuments (ICCROM) were also founded. Up to June, 1988, 102 nations have become members of ICOMOS, and 288 monuments and sites in 65 countries have been listed as masterpieces by UNESCO².

The Aga Khan Award for Architecture founded in 1976 and more recently, the Aga Khan Trust for Culture (1988) have the same universal goals, although they consider only Muslim cultural spaces to empower a Muslim modern humanism.

The main result achieved by these international organisations is the

awareness of the rapid deterioration of the cultural patrimony in all societies and consequently, the necessity to rethink the problems of cultural development on a world scale. We are beyond the romantic and nationalist interest for exotic cultural expressions, or interest in political glory such as that shown by the Shah of Iran when he decided to restore Persepolis.

The universal approach to conservation as a developmental process is particularly needed in Muslim societies for two major reasons — material and ideological.

In any Muslim society, the architectural legacy is very rich and diversified; at the same time, as I have indicated above, the semiological degradation is so rapid and radical that interventions for restoration and conservation are more urgent than elsewhere. But these operations are very expensive and cannot be achieved with local resources. Restoring one monument located in a populist area — as is very often the case — is nonsense, if it is not prepared by a social, economic, and cultural upgrading of the whole quarter. Many examples can be seen in Cairo, Lahore, Dhaka, Fez, and Aleppo. Nothing on this scale can be done without an active international solidarity. Unfortunately, we know that lack of local assistance, underground speculation, and corruption can end the good will of international organisations. The Casbah in Algiers and the Medina in Fez are illuminating examples of the obstacles and even the impossibilities related to the conservation of whole urban tissues.

The ideological reason for conservation is not less important. All Muslim states emerging from colonial wars have stressed the priority of Muslim heritage; this means that other heritages, like the Roman in North Africa, and the Hindu, Buddhist, Malaysian, and Indonesian heritages going back long before Islam came, may be neglected from a strict nationalist viewpoint. The debate is stronger since “Islam” became the unique political reference for the state seeking legitimacy, or for an opposition arguing for a “true” Islamic regime. The universal perspective opened by UNESCO and other international organisations seems to be the best approach, stressing the ultimate meaning of any cultural conservation for the national personality as well as for the world community.

An example is presented in Bangladesh by Painam Village near Dhaka. The village was built in the 19th Century by rich Hindu merchants; the architecture is totally dependent on British models during the colonial period. From an ideological viewpoint, this now very deteriorated village would not deserve any consideration for rehabilitation and reuse. But young architects trained in Dhaka rightly objected that very original solutions had been found by the architects who designed the village and the houses and that these solutions are still valid for the environment; while

recent buildings and houses built in Bangladesh are pure imported models, not adapted to the needs of the population and the ecological necessities.

Other examples can be found in Zanzibar, Tanzania, and Kenya, along the East African coast long occupied by rich Arab merchants who practised the slave trade. After the independence of these countries, many Arabs had to leave their sumptuous houses.

What should one do with this legacy, symbolically linked to the slave economy? A monument, a house, a public building, an urban design cannot be separated from the social and cultural context in which it has been created to fulfil specific functions. The restoration and the conservation of such buildings or urban areas will depend on the integration of the past by the collective contemporary conscious. This brings up the difficult and central problem of teaching history in formerly colonized countries in general, whoever the colonist, whatever the period.

For the moment, history is almost exclusively an ideological nationalist tool; it is constantly and systematically manipulated to justify the official will for national unity. National pride may help save some monuments which are declared relevant to national glory; but others will be destroyed for this same reason. This has happened and is happening.

Michael Parent, President of ICOMOS, has a nice formula: We need to "sacralise the essential". But how to identify the *essential* in each national heritage? And if we succeed in identifying it, how to persuade Muslims that there is some aspect *essential* in a Buddhist temple or a Christian church? Or how to persuade a Sikh, a Buddhist, or a Christian to respect buildings which are not relevant to their faith?

This is the mission of history as a central cultural discipline. In Muslim countries, history of arts is taught badly, wrongly, or not at all. In western schools and universities, history of Islamic arts has a very marginal place. This situation is not going to improve very soon, because few specialists are trained and departments of history are not willing to rethink the whole curriculum of historical studies. History of religions given in an open, *anthropological* perspective would certainly help to create a new spirit for the conservation of the essential in all cultural traditions. But this discipline is as badly taught and represented as is history of arts. I do not minimise the existence of great scholars in both disciplines; I want to make the point that these two disciplines must have a higher place in historical studies.

One need not await the establishment of such teaching to look for urgent cases of sites, monuments, urban quarters, and palaces which deserve to be saved. The conservation of the built environment is not only intended to save cultural messages from the past; it is a social and economic *integrating* activity because it involves skills, knowledge, crafts, techniques,

and materials which would otherwise disappear totally. This means that our present is articulated to our past in very concrete, active, living ways, in the involvement of experts and workers on all levels. Thus, conservation cannot be conservatism or a luxurious exercise for tourists or rich amateurs.

In third world countries, there are so many competing demands on very scarce or wrongly used resources. Politically, it is essential to conceive and to present conservation as a vital part of social and cultural development. This is not yet the case, because many levels of society are not motivated to participate in or even to understand operations decided by officials for ideological purposes, not to mention the populist phenomenon which is the most dangerous threat to each Muslim country's cultural tradition. Populist pressure has already imposed a style of mosques dominated by the seeking of prestige, responding to demagogic demands, using stereotyped, dead tradition, ignoring totally the need for resymbolisation in a desymbolised environment. Similarly, there is a conformist international so-called Muslim style imposed on public buildings, private houses, and urban design, disregarding the lessons which could be taken from the authentic, integrating operation of conservation as we described it.

This is the most important function of conservation in the present historical situation of all Muslim societies. "Islam", as we know, is largely, overwhelmingly used as a political, demagogic weapon. It is and it will be for a while the one ideological resource adapted to the spreading populist "Culture"; it is going to be over-used by all social forces competing for power and for the control of what sociologists call the symbolic capital. Social and political scientists are not yet intellectually or scientifically equipped to deconstruct the complex socio-cultural-political process leading to the total disintegration of Islam as a spiritual, *symbolic capital*, transformed into a pure ideological, contingent, precarious tool. This process does not affect only ideals and beliefs; it is concretely written in the built environment, in the way of life, in the broken social solidarities, in the destroyed links to the land, in the general desymbolisation, depersonalisation, and deculturation of daily existence.

This is not a pessimistic view of the present evolution in Muslim societies; rather it is a pressing invitation to self-criticism, an urgent awareness about the human price we are paying for a wrong, dangerous so-called development. Approaching these problems through architecture, urbanism, and conservation gives a better insight, and a more relevant diagnosis of all the social diseases and all the cultural and semantic disorder in which we are embroiled.

Let us dream for a while: would it be possible that the many architects, experts, historians, artists, writers, scholars in all fields of

research; the amount of knowledge and cultural resources accumulated in each country; the powerful technology available for improving human existence; the rich range of human experience and skills; the huge demographic capital at our disposal ... would it be possible that all these values be invested to produce a shared, mastered, emancipating history for humankind?

This would be an integrating, dynamic cultural conservation of human patrimony in the perspective of a richer, continued creativity.

Footnotes

- 1) Language is a system of signs, according to the definition given by F de Saussure and further developed by other linguists
- 2) "A Patrimony for All", in *Le Courrier de l'Unesco*, August 1988
- 3) This important concept (*capital symbolique*) is used in anthropological analysis of cultural values as P Bourdieu did in *Le sens pratique*, ed Minuit 1980

CONSERVATION IN PRACTICE

Ronald B. 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-storeyed buildings, and their minarets are hidden among the skyscrapers.

The clash between the aims of cultural preservation and the desire for modernization has become a serious issue in light of the steadily diminishing residues of heritage, particularly in urban areas, and an increasing rejection of traditional values and the architecture that went with them by many classes of society. The effects of these clashes are now at their most severe in Africa and Asia, where until recently the pace of modernization was slow and the strength of conservation high. The last decade has seen a marked change in that situation, a change I have been particularly concerned with as a consultant in architectural and urban conservation and rehabilitation in the Islamic countries of the Middle East.

Contemporary city administrators and regional and urban planners are loathe to become involved in cultural preservation or the adaptive reuse of old buildings, neighbourhoods, or city centres; the administrators because the patterns of land ownership, rehousing, fixed rents, and the political ramifications among the people are often daunting; the architects and planners because almost all their training is in the provision of new buildings, new suburbs or new towns on virgin sites — they have practically no training in ways of improving existing buildings or urban fabrics of old types. Indeed the gulf between the utopian ideologies of the new planners and the practical common-sense old fabrics is extreme. Most architects and planners simply do not know how to make the adjustment; they are unable to perceive, or unwilling to admit, the very real values inherent in traditional patterns.

On a practical level, both the politicians and the planners would generally prefer to clear an area in order to begin anew without all the attendant problems, complexities, and unfamiliarities that urban and building conservation involve.

But total clearing of an area itself entails political repercussions. Sometimes, to avoid these, the politicians and the planners are content with road widening, or even worse, with driving wide roads through traditional areas. Where individual buildings are thought to be of particular value they may be moved out of the way in their entirety (for example, the beautiful fourteenth-century mosque opposite Bab Zuwayla in Cairo); more often the building is truncated so that a range of its rooms simply disappears completely, and the facade is rebuilt near the centre of its original plan. Where repairs are done at all to the monuments, public buildings, or houses affected by the road widening, the facades are moved back — or worse, inferior makeshift facades replace the original ones.

The effect of such wide roads on the traditional fabric is generally catastrophic. The intimacy of the spaces in old cities was a reflection of the ease of interaction among its people, something which is unthinkable, let alone practicable, across wide roads filled with fast-moving traffic or through areas of parked cars. Furthermore, the relatively narrow streets of that they were in shade for a large part of each day, and therefore neither the people nor the buildings were exposed to the sun. Narrow side-streets provided scheduled, semi-private access spaces to neighbourhoods, which facilitated a sense of community and the enjoyment of life. With the intrusion of the motorcar, these lanes have become blocked, impassable and alien. Widening them, or knocking down buildings to provide parking spaces off them, does nothing to restore the communal seclusion and cohesion.

In such developments, monuments become isolated instead of part of a continuous urban fabric. Indeed one of the characteristics of modernization is the practice of deliberately or accidentally isolating monuments that are not meant to be seen in isolation. The sea of parked cars around them is often the *coup de grâce* to their original character.

There are also technical problems introduced by modernization. Apart from pollution from noxious gases produced by industry and vehicle exhausts, which accelerate the decay of building surfaces at an extraordinarily rapid rate, there are other alarming effects introduced by modernization of the urban environment.



Bahrain – High water table emerging as ground water

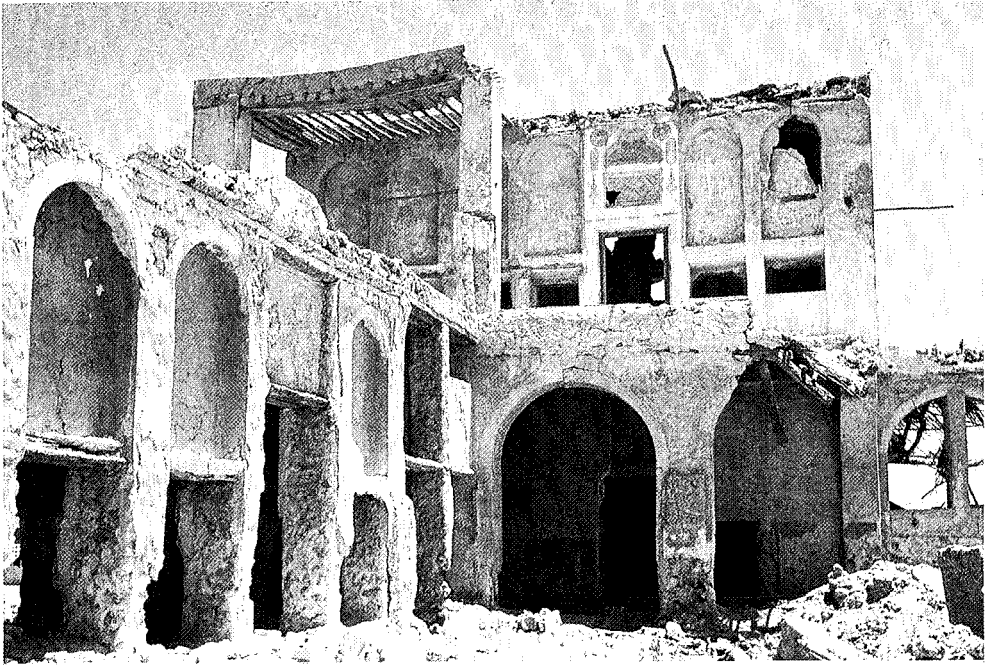
Serious Urban Problems

One of the most visible of the technical problems, as well as one of the most serious, is the extent to which *dampness* is rising to unprecedented levels in the buildings. The reason for this development can be stated very simply; in each rapidly growing city, as the population density has gone up, water has been made available to more people in much greater quantities than ever before; but the infrastructure for draining that water out of the area of the city has usually not been supplied, or, if it has, it has not been adequate in size or standard.

The water draining into the ground seems to be lifting the water table up to the point at which it causes damage to the buildings. In many cases the water table is actually equal to ground level, as the pools continually lying in the streets testify.

Water rising in the walls causes tremendous damage, of course; the fact that it is polluted water increases the problems. This is clearly, then, a major problem that must be solved in conserving buildings or rehabilitating an old area, because the cost of rectifying it represents something like a quarter to a third of the total cost of any conservation or rehabilitation program.

Shibam in Democratic Yemen has the highest mud buildings that we know of in the world; some of its houses are over a hundred feet high. But



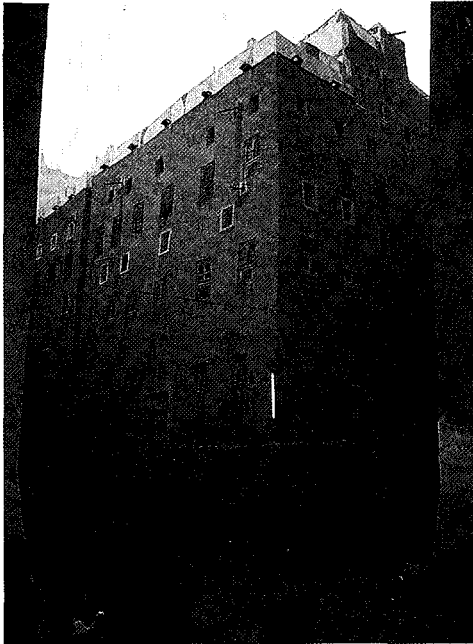
Babrain – Attack by ground water at the lower levels of the buildings combined with decay in the roof structures lead to the eventual collapse of palaces such as these

the very inadequate drainage systems are bringing the sewage down into the streets and straight into the ground. Again the water in the ground has produced extraordinary problems. Cracking may begin in one corner of a building at the bottom, and by the time it reaches the sixth floor it runs through the whole structure in every direction — these are major cracks, an inch and a half or two inches across.

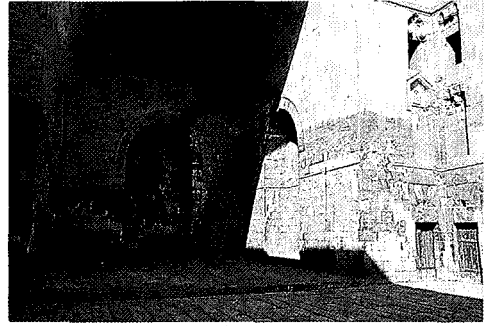
Sanaa has high buildings, too, and the introduction of a piped water supply has caused more problems than it has resolved. As in the case of many Third World cities, the piped water system was introduced without any complementary piped drainage system — the old city of Sanaa still has no communal drains. The Minister of Water told me that in one period of eighteen months he paid just under a million US dollars in compensation for about forty collapsed houses in the old city.

Electricity is another kind of modern convenience that is ruining the appearance of old cities and buildings in a number of ways. The wires are simply festooned across the walls or form spiderwebs at the tops of leaning poles in the narrow streets.

Another problem is *traffic circulation*. By now the number of motorized vehicles has so increased and so tyrannized pedestrians that the market streets have become unpleasant indeed. Cars and trucks are parked everywhere and block the passages. This raises the major issue of whether



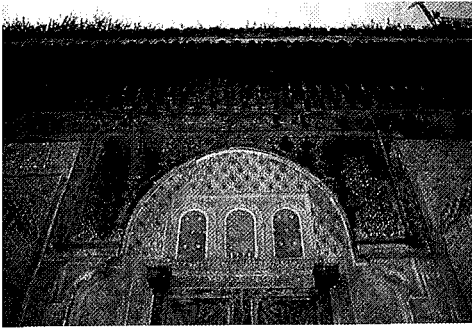
Shibam, Wadi Hadramaut, People's Democratic of Yemen – a 400 year old house is undermined by leaking street water pipes broken by a passing vehicle



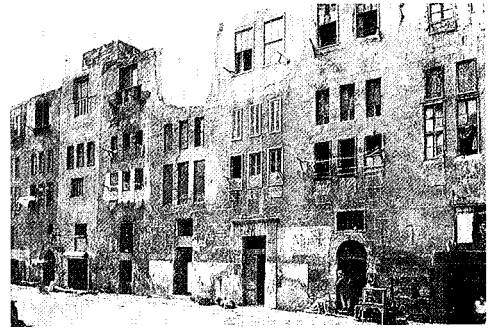
Cairo – typical ground water rising by capillary attraction to heights of over 20 feet in the monuments. Clearly visible is florescence caused by nitrates and chlorides in the water attacking the stone

one can allow such a situation to continue. Is it logical to allow modernization to take place so that one can insist on segregation? The municipality in Sanaa is agonizing over this question at the moment. They have tentatively decided to restrict traffic to a very limited number of streets in the old city, to segregate pedestrians from motorized traffic, and to limit the access of vehicles to restricted times at night. But whether these policies are enforceable is another matter.

Deterioration from *lack of maintenance* is yet another major concern. Buildings constructed in the traditional ways in the Islamic world were meant to be maintained. It was an accepted part of life that, after the rains, repainting and replastering would be needed to repair any water damage, for if this was not done every year deterioration was extraordinarily rapid. Now annual maintenance is no longer an accepted part of life and the consequences are severe. First the roofs go, then the corners fall off because the walls have been damaged by the rains. In no time at all fairly respectable multi-storeyed buildings have become ruined single-storied structures. They are left as single-storey buildings and not allowed to collapse entirely because shopkeepers and craftspersons occupy the ground floor, and the rent they pay in most traditional societies, whether rent-controlled or not, represents the bulk of the profit on a building investment.



Fez – Neglect of roofs and failure to remove grass and moss lead to major deterioration in the upper levels of important historic monuments



Cairo – Advanced state of decay of a traditional apartment building (raba) caused by the neglect of waterproofing of the roofs

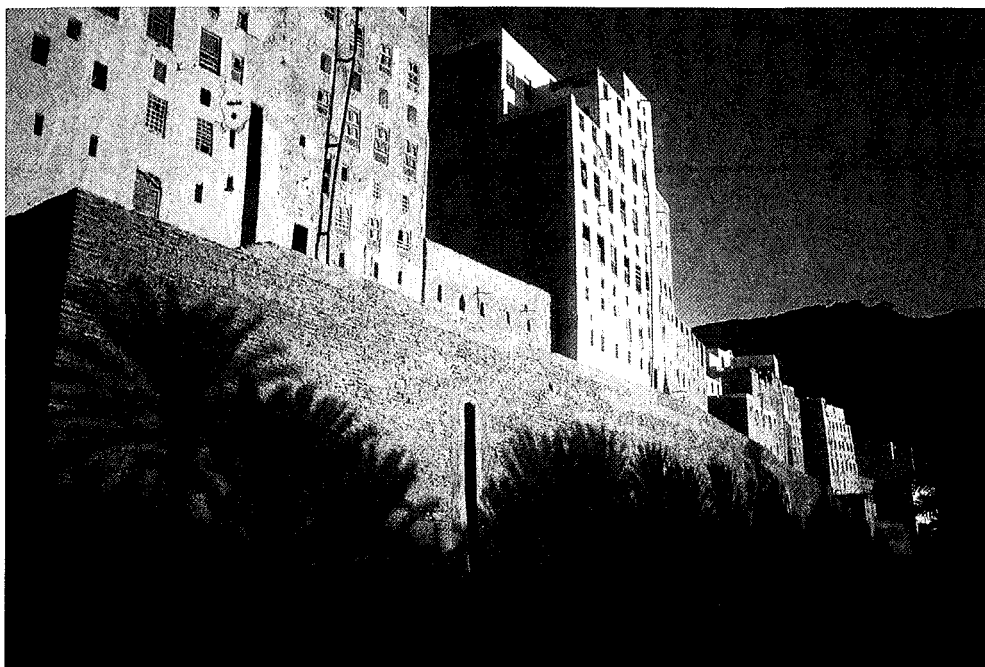
It is therefore in everyone's interest, including the owners', to maintain the ground floors. They waterproof the floors of what were once the first storeys (i.e. the ceilings of the ground floor), and they become the roofs of the buildings.

Nor is this limited to unprofitable rental buildings, where decaying structures can be attributed to the mentality of landlords who allow their buildings to decay because the rents are too low. It is happening to some of the major monuments of Islam. In Cairo probably 30 percent of the *waqf* properties in the old city are shrinking storey by storey; some have already reached the ground floor level, with ghostly walls rising up three or four floors. In one *waqf* property in Cairo, the canvas-makers' suq near the Bab Zuwayla, the upper levels of the suq, once beautifully designed and comfortable *waqf* houses, have all been allowed to decay. Yet this suq has always been regarded by everybody concerned with conservation in Cairo as one of the major monuments. We must come to terms with the principle of annual maintenance if we are going to talk about preserving and upgrading Islamic cities.

Natural disasters also pose more than just the obvious conservation problems: we tend to think only of immediate problems and ignore potential ones. In many areas of the Middle East, for example, flooding is frequent but not usually very serious; it can be controlled with diversion dams. Once every thirty, fifty, or hundred years, however, a major flood occurs. Everybody knows there will be one because the city has been washed away regularly once or twice a century for a thousand years. Nobody does anything about it, however, and one of the first priorities of any conservation scheme should be to take steps to anticipate the problem. Similarly, although there has not been a major earthquake for a long time, history tells us that major earthquakes are possible all through the Middle



Shibam, Hadramaut – The collapse of the city wall, due to neglect, brought down with it the corner barracks.



Shibam, Hadramaut – Successful repair of the city wall was carried out as part of the UNESCO International Campaign during the years 1988-89



Cairo – Rapid deterioration of the woodwork of a minaret due to neglect

East. Conservation efforts need to anticipate this possibility as well.

In a recent flood in Shibam, not only the city walls but a number of houses behind them collapsed; this raises an allied issue. Land tenure in the Islamic world, as we know, is very different from that in the West. One of the ways it differs is that the people who live immediately behind the city walls were traditionally responsible for the maintenance of the section of wall directly in front of them. Street cleaning was another traditional task of the inhabitants of the abutting houses. These customs have rapidly fallen away in the last twenty years in some places as recently as in the last six or seven years. In Shibam the inhabitants say, “We’re now living in a modern state; we’ve got a powerful central government; why should we pay for repairing the town wall?”

Inadequate material for repair produces another problem. A marvelous Islamic material, which most people have forgotten exists, is called by different names in different places. It is a very hard lime plaster made by pounding as many as five, six or seven layers one after another. This extraordinary technique can also be used for decoration, although it takes considerable skill. The material has an amazing life: traditional builders say it lasts for two hundred years, but it is possible to date existing surfaces back much further. Those who have been to archaeological sites in the Islamic world will have seen it on cisterns, both recently excavated and long exposed to weather, and sometimes demonstrably more than a thousand years old. The material is extraordinarily strong. Even though it is very



Saywun, Hadramaut – In the ex-Sultan's palace, the design of the new flooring at the top of the original staircase is incongruous

hard, it does not crack, because lime expands and contracts with the weather. It has only one drawback: cement cannot be put against it because cement will attack its small gypsum content until it disintegrates. The point illustrates the grave dangers inherent in not understanding the technology one is working with if one is repairing or maintaining traditional buildings.

Another aspect of the annual maintenance problem is that repair of traditional building materials involves techniques requiring a high degree of skill. Building a house of earth nearly a hundred feet high requires a great deal of knowledge about the techniques of mud-brick building. Layered earth is another elaborate technique that involves, among other things, hammering the mud into place with a heavy block of wood for about an hour for each square meter. Given current rates for construction workers in the Middle East, this becomes very costly, and what looks like a cheap material turns out to an expensive one.

Using traditional materials has all sorts of other ramifications. The hundred-foot-high buildings in Shibam were built with apparently crude bricks of mud with straw reinforcement in them. In the opinion of all the best builders, this mud has to come from around the roots of a healthy, strong date palm. If it does not come from the best arable land, then the building will not be strong. Chemical analysis shows why; the continual irrigation by flood waters increases the amount of fine clay in arable land, leaving a higher percentage of pure clay in this earth than in that taken from

a non-agricultural or a desert area. It is also relatively free of salt, since continual watering allows the salt to sink down to a very low level. But removing arable land for building material comes into direct conflict with attempts to improve agriculture and is now forbidden by law. What building materials should be used for maintenance if the traditional sources are forbidden? Obviously there is a need to look for alternative sources for building materials.

In addition to the problem of annual maintenance, there is, of course, the question of repair after damage. It can be done, but architects cannot easily tackle it. It too is a very specialized and skilled business. A layer of mud added onto mud bricks or a layered mud wall will simply fall off again unless the laborious techniques of experienced master masons are used to fuse it with the old wall. In some cases we have yet to find alternative techniques to repair these buildings that could be employed fairly cheaply. In short the traditional buildings of much of the Islamic world may have been economical to build and maintain until seven or eight years ago, but they are rapidly becoming expensive, mainly because of all the manual work required.

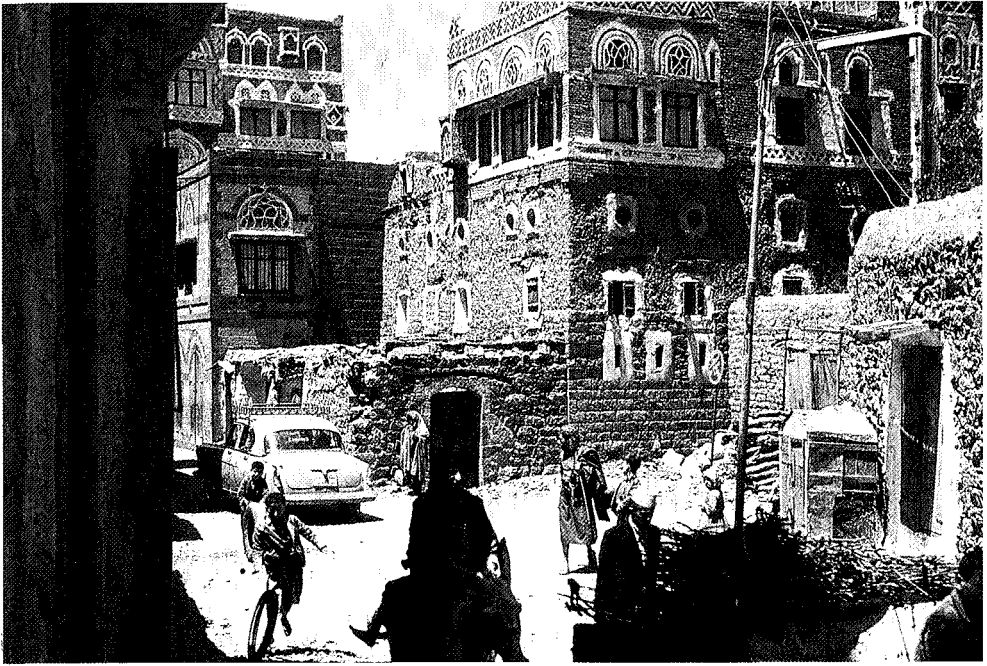
Possible Solutions

Are there any viable solutions to the problems raised here? To take one example, the waterproofing of existing thick walls in an area where underground, highly corrosive damp is causing major damage to structures can be approached by using a skin on the outside of the walls. The skin can be made of any number of materials that seal in a waterproofing agent, but the technique presumes there is a solid stone foundation underneath the building. In most of the buildings we have been working with, the large foundation stones would hold in the bulk of any fluid.

Liquid silicone or stearate can then be gravity-injected to prevent damp from rising into the wall. Membranes have to be introduced on the sides to stop the stearate or the silicone from running out into the soil because the surfaces of these traditional walls are often very porous.

Traditional construction in most Islamic buildings has an outer skin, an inner skin, and a much softer central core. This core is usually a very soft stone that has become pulverized, rather like clay, and it reacts badly with water. It also spills out like a pile of sand if one tries to cut through a wall, making it virtually impossible to put a solid sheet of damp-proofing material through the wall. This necessitates the sort of alternative technique discussed above.

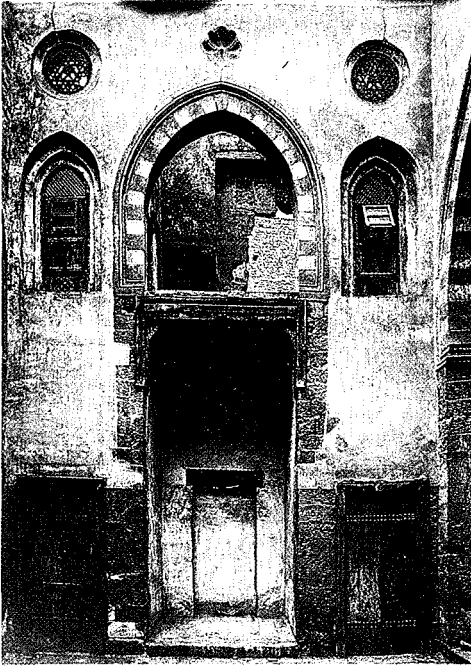
The advanced decay menacing the architectural urban fabric of these



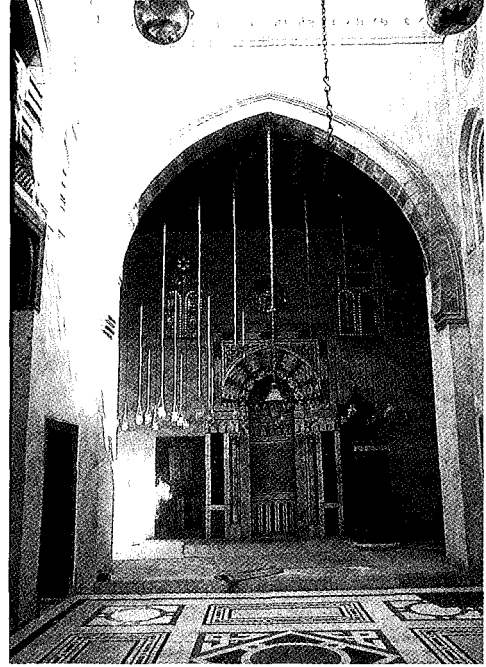
Sana'a, Yemen – Old mud house with brick upper storeys has been kept standing for at least 600 years as a result of regular re-plastering and roof protection

cities is of tremendous concern to everyone who admires the extraordinary expression of human achievement represented by Islamic traditional architecture. The situation is symptomatic of that being experienced in every part of the world, in Asia, in India, in China, in Africa, and in Central and South America. The issues are similar and the conflicts and problems are often duplicated. Enormous efforts — marked by clarity of purpose, determination, and the development of specialized technical skills — will be necessary if a significant proportion of the physical cultural wealth is to be preserved for the education and enjoyment of future generations.

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 people or between built environments — at the expense of the expressions of our personality, whether as individuals, groups, regional inhabitants or as nations. The 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



Cairo – One of the buildings in the Darb Qirmiz quarter, the madrassa, is shown before restoration.



Cairo – The same building after restoration. The enterprise of the German government in collaboration with the Egyptian Archeological Department in restoring the buildings of this quarter was recognized by an Aga Khan Award for Architecture in 1983.

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.

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 marble 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.

THE ECONOMICS OF CONSERVATION

Alfred P. Van Huyck

A few years ago, I was flying out of Lima, Peru feeling disappointed with my mission. I had been working with the Peruvian government on an upgrading program for the poverty level populations living in and around Lima. It was not going well. Inflation was over 100 percent. Real incomes were declining. Unemployment was high. There were serious health problems. And the government agencies were overwhelmed and not coping well with the problems.

As I settled into the flight, my seat companion started discussing his work. He, too, was frustrated. It seems that he was the world's foremost expert on a certain kind of fish which lived only in the jungles of Peru. He said this fish was endangered and he had been trying to convince the Peruvian government of the importance of investing \$20 million in a special program to preserve the habitat of this fish.

As we talked, it became obvious that he was oblivious to all of the development problems and the horrible state of the economy. His vision was focused only on the fish. I asked him why the government should be concerned about this fish when there was so much poverty and human misery to be addressed. He replied at length, pointing out the importance to human well-being of the biological diversity of flora and fauna. He stated that many species have never been studied and that potential medical and scientific discoveries would be lost forever if they are not protected. He expanded on the potentially adverse impact to the overall environment if mankind did not better conserve the global resources with which we have been endowed.

He made a strong case that human development had to incorporate a vision much greater than the immediate and short-term requirements of the economy and poverty alleviation.

Like the fish, architectural conservation on the surface might appear difficult to justify. The benefit to the community and the nation indeed, the world — is long term. It is unquantifiable, at a time when all investment

is subject to cost-benefit analysis.

But the more we allow the physical heritage of the past to be decimated, the less likely it will be that future generations will feel the link with their cultural and historical roots. Lose that, and people may lose their sense of identity, their national pride and self-esteem, and their will to build a better future for their children.

Nonetheless, while we can recognize and appreciate the importance of the preservation of our architectural heritage, we must also address the practical questions of capital resource scarcity, the overwhelming problems of poverty, the essential priority of maintaining national economic growth, and the very real limits of management and technical human resources. All such issues are made all the more urgent in low-income countries such as Bangladesh.

The key questions to be addressed are how to develop our concern for architectural conservation within the broader context of national economic and social development. How can we save our past heritage and still build for the future? How can we stimulate pride in our history and culture while meeting today's needs for basic shelter, food, health, and education?

An Approach to Architectural Conservation in Low-Income Countries

It should be recognized, at the outset, that significant public sector capital resources will not be available to meet the needs for architectural conservation in low-income countries. This cannot be justified. However, this should not mean that nothing can be done.

A comprehensive, cost-effective approach can be developed based on three essential principles :

1. Build a strong *Knowledge Base*

It does not cost much to build a knowledge base of the nation's architecturally significant resources. Conservation starts with understanding what is architecturally important. A realistic typology is needed which will identify places of architectural importance.

Are there structures which are of worldwide significance? For those, international support can be mobilized. Which structures have national, regional or local significance?

It is of great importance that the assessment be complete, practical, and realistic. Only then can one set true priorities upon which to build an effective program. The tendency to include everything of value must be resisted so that things of maximum value will receive the priority they

require. To accomplish this, an investment must be made in training a cadre of architects with sufficient knowledge and skills to make the critical judgments and to act on the critical issues.

Let me digress briefly here to mention the importance of linking domestic expertise with the international movement of architectural conservation. There is an International Council on Monuments and Sites (ICOMOS) which was established by UNESCO in 1965. This group has national committees in 68 countries which bring together professionals and lay persons concerned with the issues. I note with dismay that Bangladesh does not yet have a national committee working within this structure. Consideration might be given to correcting this oversight.

2. Build *Awareness* among all *Development Institutions*

There is an important need to train the development planners and implementors in the basics of architectural conservation — not to make them experts, but to ensure that they recognize the importance of architectural conservation and the need to factor it into their spatial and sectoral plans. Our common architectural heritage has been unnecessarily damaged because of the inability of planners and engineers to recognize the importance of that which they would destroy in the name of progress. For example, in Morocco, traffic engineers had developed plans to relieve traffic congestion in Fez by tearing down many of the historic homes in order to improve circulation of vehicles. The seriousness of this pending disaster in so famous a place created widespread outcry, but, in other places, the damage is done silently.

Thus there must be advanced training and information transfer to ensure that those with other objectives and purposes in development are nonetheless aware of the architectural environment within which they are working. One specific step in this direction is to ensure that the scopes of work for major development projects, both sectoral and spatial, include a specific task to assess the needs for architectural conservation and preservation.

In reviewing terms of reference for various development work in Bangladesh over the years, I have never seen such a task included. Yet, such a minimal step would do much for broadening the base of awareness in the wider development effort.

3. Build *Architectural Pride* in the Community

The most important trend in development planning today is the recognition that the government and public sector have real limits and constraints on what they can do for the economy and for the people.

Bangladesh is no exception and has made major reforms in developing a new approach to public/private partnerships in the economy and in the provision of shelter and social services.

The simple fact is that development needs have outrun the government's ability to cope alone. The full mobilization of the private sector, both formal and informal, will be required to meet the needs for job generation, shelter, food, and social services. The potentials are being actively explored to expand the role of private voluntary groups and community associations in all aspects of the development process.

The critical role for the public sector will be to meet the major requirements for infrastructure and provide efficient public sector management of government and public enterprises, and to facilitate the mobilization of investment and initiative in the private sector, community, and non-governmental organizations.

While government can protect and care for a very limited number of significant architectural monuments, it cannot preserve the architectural history and tradition of a country. The task is too large. Only through the education of the total community can this be achieved.

The lack of awareness can be costly. In Karachi, Pakistan, in the 1970s, several of the historic structures were demolished stone-by-stone by the local people in order to obtain building materials for informal housing.

I do not believe that you can legislate the protection of monuments alone and be successful. There must be a public education process as well to build respect for the structures and to understand their importance to the culture and community.

The Economics of Investments in Knowledge

What I am advocating here is a strong investment in knowledge formation in support of architectural conservation. In low-income countries, the development of knowledge and awareness may have the highest pay-off in terms of the investment of available low levels of scarce capital in the process.

There are many parallels in other development sectors where similar "hard trade-offs" need to be made. For example, there is a growing awareness in the health sector that preventive health care, family planning, nutrition and mother/child education will have a much higher pay-off per dollar spent than investment in "curative health care," hospitals, and imported equipment.

In the education sector, there is awareness that the investment in primary education and literacy will have a more cost-effective impact on

economic and social growth than in university education.

I suspect the same will be true in the much more restricted area of architectural preservation. However, this will take the initiative and commitment of the architects and professionals in the field. All too often it is the professional class that puts the capital intensive solution ahead of the labor intensive, the high standard solution ahead of the affordable solution, the modern ahead of the functional traditional, the imported ahead of the domestic.

In the process of nation building, this must stop. We must be seeking those solutions that achieve the end purposes of development at least cost which is to increase the economic, social, and cultural opportunities of the people, whether or not it caters to our professional egos and desires.

Converting Knowledge into Action: the Mobilization of Resources

Even if we accept the argument that building the knowledge base conducive to architectural conservation is of the highest priority, we must still mobilize financial resources, no matter how limited, to support an action program.

Next, we need to view the main instruments available to implement an action program, including just two of them in detail. As given, we have *renovation, restoration and maintenance*.

Then there is *protection* : When it is not possible to take other actions, it still may be important to ensure that fundamental deterioration does not occur. This may be the simple prevention of vandalism, or the prevention of water damage, or prevention of premature exposure (for example, in Egypt and Jordan, there are known sites of archeological interest which are kept covered with earth rather than risk premature exposure without financial resources to complete the work).

However, mere "legislated" protection doesn't work. Just recently in Washington, DC, there were four historic townhouses which one of the preservation groups wanted preserved. One morning, they awoke to discover the facades of the townhouses had been demolished. The owner was fined merely \$500 for demolition without a permit.

Protection to be successful must be built on sound economic incentives rather than negative constraints. There has been some success with the selling of development rights, for example, in order to allow persons to preserve historic architecture by allowing other areas to develop to higher densities. Innovative, sound economic concepts should be brought forward for the protection of valued neighborhoods and places.

Historical preservation groups and agencies would be well advised to have real estate and land economists on their staff, as well as architects, if they want to influence the development outcomes.

Adaptation

Historically significant structures can be adapted to new uses through either modernization or conversion to a new function. There is an obvious price to be paid in the adaptation of historic buildings in terms of their historic value, form and function. For example, few would recommend that the Taj Mahal be converted into office space. But adaptation in many cases of lesser structures may offer the only practical way to maintain any of their historic and cultural significance.

In the United States, the architectural facades of entire streets have been preserved to maintain the historic street environment, even though the structures themselves have been replaced completely. A compromise, to be sure, but, nonetheless, at least some recognition of history in face of overwhelming land economics.

The Action Matrix

If we combine our typology of worldwide, national, regional, and local categories of architecturally significant areas and structures with our typology of actions — renovation, restoration, maintenance, protection, and adaptation — we form a matrix for decision-making.

For each of the elements of the matrix, it is possible to identify the cost implications and, therefore, the trade-offs to be considered given limited budgets, technical skills, and community support.

For example, a structure of worldwide importance requiring renovation is likely to be beyond the available resources of a low-income country, but may attract international financial and professional support. UNESCO and other important international groups have undertaken such projects. Borobudur, in Indonesia, comes to mind.

Bangladesh has two entries on the World Heritage List — the Historic Mosque City of Bagerhat, and the ruins of the Buddhist Vihara at Paharpur.

By definition, a monument, structure, or community of worldwide architectural significance is likely to be economically justified on tourism grounds. In fact, entire economic industries are built on these major components of world history and culture, because they stimulate hotels, services, and even local manufacture of support items. There is no doubt that it is in the national interest and a high priority to preserve them on both

cultural and pragmatic economic grounds.

As one moves down the typology in importance, it becomes harder to justify the use of public funding sources. Public funds are fungible and that investment which goes into renovation or restoration cannot be used to grow food, educate children, or build essential roads.

Other sources of funding must be sought outside the public sector. Several possibilities can be explored. Major private sector enterprises might be approached to take on a specific place as an expression of their good will to the community and for the favorable publicity it can generate.

In a somewhat different format, this technique has been used in some Indian cities to maintain parks by assigning the responsibility for maintenance to a volunteer private sector enterprise that receives public recognition for its contribution.

This type of public/private partnership is well within the spirit of accepting the limits of government. The community itself offers tremendous potential through private voluntary organizations.

One, now famous, example has been the conservation program in Mostar Old Town in Yugoslavia. This townwide effort is also a public/private partnership. A private voluntary organization was formed to undertake the work and, in turn, has developed some financial support from the assignment of certain local revenues. Here, the effort sought to bring back the entire fabric, both social and economic, of the old town, largely through the efforts of the inhabitants themselves. A critical lesson learned was that the people must participate in the decision process.

How often we have heard this in the context of settlement upgrading and planning programs. Yet, still the lesson is often ignored by professionals with the government organization.

In the end, however, the largest mobilization of resources for architectural conservation in low-income countries will come not for the specific architectural projects, but from the broader development efforts in infrastructure, shelter, and economic development.

This is why the knowledge base is so important. We must maximize the opportunities created by other investments to stimulate community action and private enterprise investment in architectural conservation.

If neighborhood water supply and roads are being improved, the economic environment for architectural conservation is also being improved. Where the housing market is strong, there is an opportunity at rehabilitating residential building within the area. Where economic growth is taking place, the economies of scale are created whereby architectural conservation can also contribute to and benefit by the economic activity.

However, these by-products of overall economic and social develop-

ment will not be mobilized in the cause of architectural conservation without the guidance and attention of those explicitly concerned.

It is up to the architects and experts to broaden their own thinking and to scan the horizon of a broader development context for the opportunities to influence the development groups to contribute to the architectural conservation objectives we all share.

To be successful, they need to set forth a practical agenda of action, based on sound economic reality, capable of action by the community, enterprise or group concerned, and affordable to the sponsors and to the nation.

It is difficult to justify investment in the preservation of empty, isolated, architectural relics of the past, even when of historical value, given the massive poverty of the people and their urgent need for food, shelter, and jobs for survival now.

On the other hand, a wisely conceived plan of architectural conservation which reinforces the community fabric, adds historical depth and meaning to the built environment of the future, and is integrated into the economic realities of the time, offers a tremendous potential for enriching the lives and opportunities of those for whom development is crucial for survival.

CONSERVATION IN A LOCAL CONTEXT

Sherban Cantacuzino

My intention is to provide a guide to the practice of conservation relevant to Bangladesh. In third world countries architectural conservation, in the sense of *area* conservation rather than monument conservation, is not usually high on the list of priorities. Yet area conservation, far from being unaffordable, can actually save money by making sensible use of existing resources. I will discuss six topics: definitions; legislation; criteria; survey and analysis; listing and designating; and establishing the necessary mechanisms.

Definitions

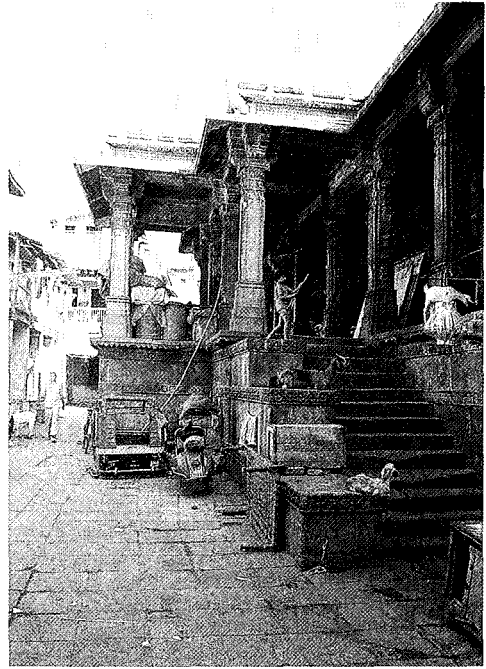
Area conservation is an integral part of town and country planning policy and must therefore come under the direction of the authority which exercises planning control. The government organisation looking after monuments tends to have neither the interest nor the expertise to administer an area conservation programme.

Area conservation consists of:

1. Establishing criteria for listing buildings and designating conservation areas, and surveying buildings and areas.
2. Listing individual buildings or groups of buildings to ensure their preservation and protect their setting.
3. Designating conservation areas to maintain and enhance their character and integrity.
4. Establishing the implications of listing buildings and designating conservation areas:
 - i) designing controls and guidelines;



The Banganga Tank area in Bombay, with its charming small houses and temples surrounding a famous pond, should certainly be designated a conservation area. But it is already overshadowed by high-rise buildings which were allowed to creep up too close.



The fifteenth-century Queen's Tomb at Ahmedabad, India, is overrun at its edges by commercial activities which detract visually from the monument. To remove them, however, may suck the very lifeblood out of the historic quarter.

- ii) setting financial and other incentives;
- iii) training building craftsmen.

5. Establishing the mechanisms for operating an area conservation programme:

- i) establishing an advisory body as part of the city or regional authority;
- ii) training planners, architects and urban administrators in conservation.

Legislation

The necessary legislation often exists but is not implemented properly, or is even disregarded because there is insufficient commitment to conservation. In India there is federal, and in many cases state, legislation which enables governments to list buildings of historical and architectural significance and designate conservation areas. There are also by-laws which provide the basis for design controls and the opportunity for design



Kashan in Iran, with its wonderful roofscape, is highly vulnerable to inappropriate development, especially to development which rises above the present roof line

guidelines. There is no obligation however, and not enough will to actually list buildings, designate conservation areas, or exercise design control. In Britain, under the Civic Amenities Act (1967) and under successive Town and Country Planning Acts the Department of the Environment was obliged to designate conservation areas by a specified date. In Britain also design control of new buildings and alterations to existing buildings is exercised by the local planning authority and is part of overall planning and development control.

Criteria

Before surveying buildings and areas to identify candidates for conservation, it is necessary to establish the criteria for listing buildings and designating conservation areas. These criteria are threefold:

1. Historical - the history of the building or area and its significance;
2. Physical - the architecture of the building or area, stylistic integrity, group value, uniformity of character, quality.
3. Social and economic - use, way of life, commercial viability.

Survey and Analysis

Four stages are suggested for survey and analysis: a general report, a detailed and meticulous inspection, an historical analysis and a structural investigation in depth.

There is undoubtedly a lack of planners and architects in the third world with the conservation expertise to handle this kind of survey and analysis. And those experts who do exist are not to be found in development authorities or public works departments. So a fundamental necessity is to set up courses at universities to train architects, planners and engineers in conservation.

Listing and Designating

This section of my presentation, the longest, is in three parts: listing buildings, designating conservation areas and the implications of listing and designating.

The importance of *listing individual buildings* or groups of buildings, and of designating conservation areas cannot be overestimated. In many instances it is possible to do these things under existing legislation and requires only the will. It is important as a formal step which draws attention to the importance of the building or area and gives protection, because a listed building or a building in a conservation area cannot be demolished without permission.

Listing buildings and designating conservation areas should be done by the local planning authority (if necessary by making use of private consultants) because it gives the municipal or regional authority the opportunity of showing that it is proud of, and cares about, its heritage. In some instances local or national amenity societies can help with the listing. In India INTACH is doing this with good effect.

Listing should distinguish buildings whose exterior only is valuable, from buildings which also have good interiors.

Listing must protect the setting of the building as well as the building itself.

In *designating conservation areas*, three kinds of areas should be identified:

1. Conservation areas for special protection for which a few well-defined ground rules must be laid down to control alterations and new development;

2. Areas adjacent to conservation areas in which the height of new development would be controlled to protect the conservation areas and monuments of the city from intrusion;

3. Areas beyond and far enough away to allow any development which complies with the building regulations.

Conservation area and listed building status provide protection largely through negative control. A planning authority can indicate the kind of development which is not acceptable, and the general form and bulk of development which might be acceptable. Any alterations to the exterior of listed buildings or buildings in conservation areas must be subject to permission by the planning authority.

The *implications of listing buildings and designating conservation areas* are: design control and guidelines; financial incentives and training building craftsmen.

1. Design control involves four things:

- i) No demolition, alteration or addition without permission from the municipal or regional planning authority;
- ii) An obligation for the owner of a listed building or building in a conservation area to repair and maintain the building. The local authority should publish guidelines on how to repair and maintain old buildings;
- iii) Control over height to protect the skyline of the area; control over bulk by reducing the Floor Area Ratio (FAR); control over the number of floors within a given height; and preservation of the existing street line.

To make these requirements fully understandable, they should be illustrated with diagrammatic drawings as guidelines, prepared by a qualified architect sensitive to, and fully acquainted with, the local building traditions and practices.

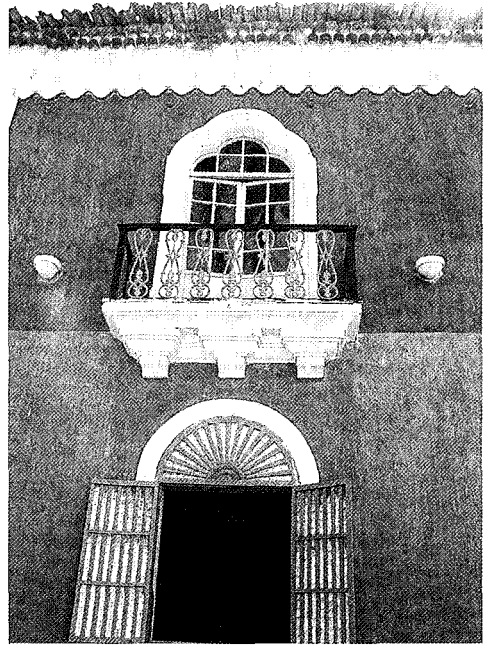
Control over height is important not only to maintain the overall silhouette of an area, but also to prevent overlooking and intruding on other people's privacy.

The existing FAR (floor area ratio) is often too high. There are instances in India where it has been reduced dramatically from 3.5:1 to 1:1.

Controlling the number of floors within a given height would



This house in Colaba, Bombay, has characteristic balconies with sun canopies which need protection and control



In a conservation area there must be control over the design of key building elements. In Candolin, Goa, characteristic elements of the house include the oyster-shell windows

prevent a developer from inserting the maximum number of floors and so having minimum ceiling heights on every floor. It would encourage him to continue having higher ceilings on the lower floors, which produce a more attractive elevation and a better climate inside the building.

Often existing building regulations mitigate against the preservation of the original street line, forcing the developer to create an intrusive set-back and encouraging him to put on top what he cannot put on the ground. Such regulations must be revised for conservation areas.

iv) Control over the design of key building elements.

In a conservation area a variety of traditional architectural elements will be prevalent, the disappearance of which would greatly impoverish the area. To maintain harmony when any rebuilding or alteration becomes necessary, or when a new building is to be erected, the local planning authority should have recourse to a series of illustrated studies of separate architectural features showing how these may be designed, if necessary with modern or alternative materials which might be more easily

available and more economical. For example: pitched roofs and their eaves and gables, verandahs, balconies, exterior stairways, balustrades and parapets, window openings and door openings and their surrounds.

There might also be a series of drawings and photographs showing how these elements should *not* be designed. Design controls and guidelines must be kept simple. They are useless unless they can be enforced. They apply usually to all building owners and developers, whether private or government authorities.

2. Financial and other incentives.

There must be incentives to help the owner of a listed building or building in a conservation area to fulfil his obligations. The more incentives there are, the better. The following are the principal incentives which have been tried with varying success:

- i) Direct grant to the building owner from central or local government: grant for preservation (architecture), grant for improvement (water, WC, etc.), grant to convert part of the building for the use of tourists.

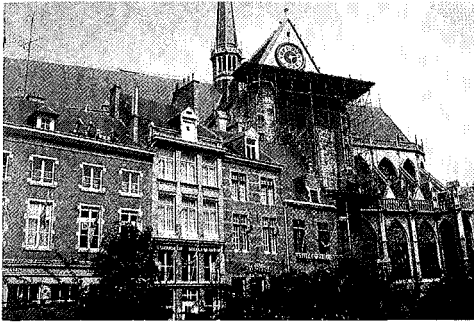
A modest yearly sum, distributed judiciously, can have considerable impact. In Britain there are outright grants which have the minimum of conditions attached such as carrying out the work to standards demanded by the grant-giving body and sometimes making the building accessible in a limited way to the public. Grants are spread thinly and the yearly sum allocated is modest (English Heritage spent 56 million in grants in the 1987-88 financial year). Individual grants are never more than 50 percent of the cost of the works and often much less, the building owner having to find the balance.

Grants for preservation are best administered by central or state governments; grants for improvement by local governments; and grants to convert part of the building for the use of tourists by the Tourist Board or Ministry of Tourism.

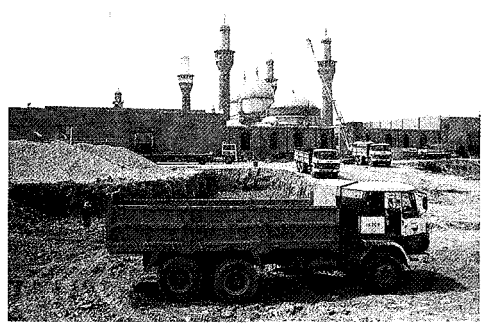
- ii) Tax relief: exemption for owners of listed buildings or buildings in conservation areas from property tax and value added tax (VAT).



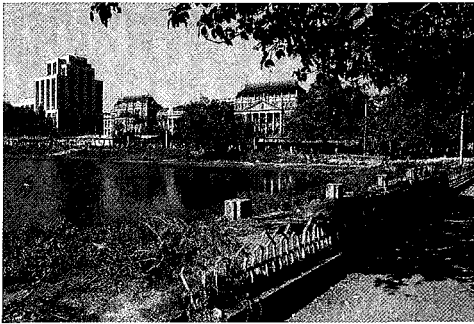
The importance of the setting of a whole city is well illustrated by Jerusalem. Jerusalem on one side has been insufficiently protected with the result that several tower blocks now menace the city



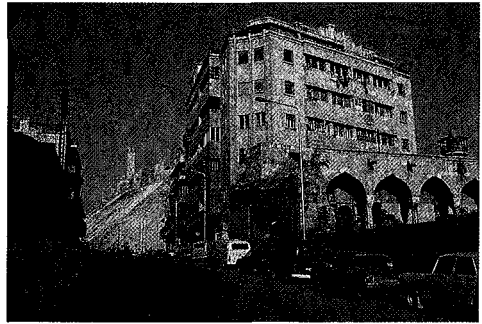
Removing lesser buildings around a monument is often regarded as a way of improving the setting of that monument. Here the old houses built right up against Louvain Cathedral in Belgium have been rightly preserved.



In Islamic cities mosques are traditionally surrounded by commercial and residential buildings which become part of the setting of the mosque. The buildings around the great Kadhimiyeh Mosque in Baghdad were all demolished some years ago in the belief that exposing the mosque to views from all sides will improve its setting. A new bazaar, which is partly restoring the mosque's traditional setting, is now under construction.



It is too late for Dalhousie Square in Calcutta, where the Reserve Bank of India has built a bulky ziggurat in the place of the old Custom House.



In Aleppo the sixteenth century Khan al Wazir was partly demolished to make way for the road and then overshadowed by a large building.

-
- iii) Taxing the beneficiaries: making available for conservation part of a sales tax or VAT obtained from airlines, travel agents, congress organisers, hotels, shops and other services benefitting from tourism.

A different type of beneficiary is the tenant reaping the benefits of rent control. The Federal Government in India is considering enacting model legislation to be followed by state legislation, which would enable state governments to collect additional taxes from tenants who are benefitting from rent control, and to spend these on the repair and maintenance of the buildings which have suffered from neglect as a result of rent control.

- iv) Help in kind: labour and materials for the maintenance and repair of listed buildings provided by the local authority and financed by municipal taxes.
- v) Transference of development rights: if a building owner loses his FAR because his building is listed or becomes part of a conservation area, he may have it transferred to a development area. Transference of development rights, however, must be properly controlled by a town planning policy.
- vi) Giving the building owner access to credit on easy terms.
- vii) Cross-subsidy: a successful example of cross-subsidy is the second phase of the Hafsia redevelopment in the Medina of Tunis. The principle is that the sale of some of the houses to people in the upper level income groups should subsidise housing for the poor by keeping rents low even after rehabilitation in the case of old buildings, or reconstruction to reasonable living standards in the case of new work.
- viii) Direct action by the local authority: through upgrading the infrastructure through the acquisition, restoration and maintenance of key buildings.

3. Training building craftsmen.

A nation-wide programme to train building craftsmen should be initiated on the principle of "learning by doing". Such a programme would best be organised by the historic monuments organisation or the archeological survey which in most cases already exists and has the necessary experience to do this. It is essential, however, that the craftsmen are made available to building conservation work generally and not just to work on monuments or archeological sites.

Establishing the Mechanisms

The implication has so far been that the local, municipal or regional authority would provide the mechanisms for pursuing and administering an area conservation policy, that being an integral part of town and country planning and therefore needing to come under the direction of the local planning authority. Municipal and regional authorities, on the other hand,



Despite the near conservation area status that Fountain has in Panjim, Goa, this block of flats was allowed in an area which is mainly one- and two-storeys high



Baldock, Hertfordshire, England: an example of the old and largely discredited practice of setting a new building back from the traditional street frontage in anticipation of overall road widening as the other properties are demolished and rebuilt



After the second World War a small town square was created in the bombed city of Canterbury, England to open up views of the Cathedral. The development around the square, however, was of inappropriate form and is now being rebuilt.

tend to have neither the expertise nor the political will. It is therefore suggested that these local authorities should each establish an advisory commission for conservation, which would be incorporated in the statutes at the highest level. The Commission, which would deal directly with the Chief Secretary of the Authority, would probably not require a parliamentary bill, since it would not have statutory independence or statutory powers. Most local authorities have powers to issue directions under existing legislation, pending the framing of new rules and the passing of new legislation. (In Bombay the Maharashtra State Government has in fact been considering setting up such a Commission, funded by municipal taxes and donations.)

Such a Commission would consist of seven or at most nine members including historians, architects, engineers and laymen. They would be unpaid, but served by a small paid secretariat. Appointments would be on a yearly basis, but members could expect to be reappointed to serve at least five years consecutively. Such a commission would have to be funded to enable it to commission surveys, draw on professional expertise to prepare lists of buildings and designate conservation areas, establish the necessary controls and incentives, initiate and supervise restoration, conversion, repair and maintenance, and generally pursue and administer the area conservation policies of their city or region.

PLANNING TOOLS FOR ARCHITECTURAL CONSERVATION

Khairul Enam
Khaleda Rashid

Conservation is still a relatively new concept in Bangladesh, often taken to mean only the preservation of historic buildings and structures, usually under the aegis of the Department of Archeology. But conservation cannot be confined to such narrow limits. We cannot be content at conserving a few old buildings or structures of cultural and historic interest. This reduces conservation into a specialized activity outside the development stream. But conservation involves

“maintaining the presence of the past in the present. That involves preserving, restoring and/or adapting old buildings; designing new ones that respect their neighbours and the continuity of history; weaving old and new together in an urban fabric of variety and richness”.¹

This concept can be extended from buildings to areas, cultures and even lifestyles.

The older areas of our cities are in some ways the best examples of what is loosely termed as culture — the customs and mannerisms; the way one decorates one’s doorway, the street vendors in the narrow lanes, childrens’ play areas, the carving on the posts and above all the physical character of the spaces. It is not built-form alone, but also the left-out spaces, the randomly built-in chaos, the gaiety and colour of human activities which confer specific characters to specific areas.

These inner city areas, mostly inhabited by the poor, are as much a part of our heritage as monuments and palaces. We owe it to the present and the future to maintain a continuity with this part and build into the future without disrupting the community or destroying its character.

But how do we conserve and revitalize an area and control it sufficiently without destroying the character and the community such intervention seeks to conserve? This is the basic theme of this paper.

Problems of Conservation

Old parts of cities and towns in Bangladesh and much of the region are marked by small irregular parcels, traffic congestion, structural and functional obsolescence, congestion of occupancy in all types of premises and inadequate services. But despite the poverty of the people living in these areas and physical decay all around, old parts of cities in Bangladesh serve vital economic and social functions. Most of the places of historic interest are located in the old parts of the cities and towns. They have a physical and social character that singles them out from the rest of the city.

But such areas are in a continual flux of change, readjusting to the changing demands of economy and related activities. With or without government intervention changes in uses, rebuilding and renovation are taking place. This is both encouraging and unfortunate. It is encouraging because private initiative and capital are being used in physical transformation, and unfortunate because the changes are often for the worse. The rebuilding or development taking place has no reference to any plan or context. These developments are changing the basic character of historical areas. Buildings of significant cultural import are being destroyed and communities and activities that lend character to the areas are being disrupted. (For instance, the former State Bank Building, perhaps the oldest of British buildings in Dhaka, was vandalised and then auctioned for demolition.)

We have old parts of cities/towns that are:

1. inhabited by the poor, but nevertheless economically vital to the city.
2. experiencing continual changes both due to economic forces and rebuilding activities.
3. plagued by a deteriorating environment and inadequate services.
4. replete with buildings of exquisite craftsmanship, style and character.

As for monuments, common problems arise:

1. when the old monuments lose their original use.
2. when people in the course of development destroy the immediate surroundings to monuments.

Monuments which lose their original function are often considered useless and unnecessary. They become derelict, misused or even left to the mercy of the general public. Monuments in remote areas are usually not

taken care of. Encroachment on the sites of monuments is a common practice, as is the use of building materials from a monument site by local people.

Motivation and Legislation

That man's cultural heritage should be conserved is *not* a thought shared by all. There is a need for motivation and raising the general awareness towards conserving old buildings, monuments and historical districts, but the philosophy of conservation has to be politically and socially acceptable. Conservation is a *process of development* rather than a step backward. Like land-use conservation, it has political connotations as it carries with it the improvement of the living conditions of ordinary people. Conservation, like planning, cannot be effective unless tied to political power and legislative support.

Orderly planning and conservation of buildings and areas are difficult where the directions of development depend on decisions taken by numerous individuals separately, on the basis of immediate needs, without reference to a plan, policy or what others are doing. The urban form that evolves in the absence of regulations or controls does not respect culture, environment, public health or safety. Without adequate legislation, the deterioration of historic areas will continue unabated and it will be difficult to stem the tide of what is conceived of as 'progress and internationalism'.

Legislation relating to building and land-use controls in Bangladesh exists in the form of East-Bengal Building Construction Act (EBBC) of 1952, the Pourashava Act of 1977 and the Building Construction Regulation of 1984. In cities having Development Authorities such as Dhaka, Chittagong, Khulna and Rajshahi, the Town Improvement Act (TIA) of 1953 prevails in addition to the EBBC Act. In all this legislation there is not even a passing reference to conservation.

'Preservation' is dealt within some detail in Clauses 5, 10, and 12 of the Antiquities Ordinance of 1976. The regulatory framework leaves much to be desired. There is a need to expand building regulations and land use controls both in scope and intent to include conservation of not only buildings, but also areas of historical and cultural significance.

But it is not axiomatic that enforcement of laws will follow enactment. Even the existing elementary rules and regulations on buildings and land use controls have seldom been used by municipalities other than Dhaka, Chittagong, Khulna and Rajshahi. This is partly because of lack of trained personnel and partly because municipalities are presently ill-equipped to enforce these rules.

Recommendations

Recommendations, whether legislative or otherwise, have to be seen against the backdrop of socio-economic conditions. There will be a continuing need to balance scarce resources between development and maintenance of existing rural and urban areas. Financial resources for conservation will remain severely limited; maximum use must therefore be made of existing levels of commitment, and we must devise tools that are economical in the use of resources but nevertheless create the necessary impact. In this spirit the following general recommendations are offered.

1. Formulate criteria for designation of preservation areas after careful study of representative areas in different towns. Create zoning laws to ensure their survival.
2. Write rules and regulations pertaining to preservation of facades and building envelopes, in order that new buildings in historic districts may be in sympathy in scale, architectural character, detail and colour.
3. Spell out clearly the procedure for listing historic buildings or structures of cultural/social significance. A building to be worthy of preservation need not be very old. The criteria for inclusion should be historic or cultural importance. Such a listing should exclude financial compensation to the owner for being placed on the list.
4. Enact protective legislation at the national level to prevent local powerful elites from changing regulations to suit their interests.
5. Establish the legal basis to invite interested private and public bodies to share some responsibilities in the protection of monuments and antiquities, especially the 229 Government-listed antiquities.
6. Support conservation legislation by careful planning policies. Uses in historic buildings require restriction of those uses in new buildings. For instance, laws to convert historic palaces to museums should restrict the setting up of museums in new buildings.
7. Provide for re-housing any original occupants forced out by conservation. In a developing country dislocation of people is a serious problem.
8. Encourage citizen participation as a step to the revitalization of the

community, another goal of conservation. This will inculcate a sense of belonging to the conserved area.

9. Create incentives rather than proscriptive regulations, which tend to stifle creativity and result in banal, lifeless communities. Performance bonuses may also prove to be an important tool.

10. Improve infrastructure and social services in old areas. Attention to small things coupled with imagination can help enhance the viability of old areas and structures without necessitating huge capital outlays. Low-cost measures cannot of course take the place of needed infrastructure, but high investment alone cannot ensure the quality of life. A series of low-cost improvements may bring greater benefit to the people in terms of increased well-being than a few projects of spectacularly high investment.

11. Promulgate national standards on conservation with regards to materials, use, craftsmanship, colour and form.

The importance of conservation “... is not limited to maintaining the forms of historical buildings for posterity; conservation is also the mechanism for the carry over of the old traditions, from the conceptual as well as the functional view points”.²

The scarcity of the financial and human resources, the lack of awareness of the need of conservation, and the absence of political commitment make conservation a difficult proposition both socially and politically. We have many constraints, but the irreversible damage to our historical environment and buildings cannot be condoned. Conservation cannot wait till a point in time when resources may be available or the political climate may change. The recommendations outlined do not make large demands on capital, but nevertheless will serve the cause of conservation.

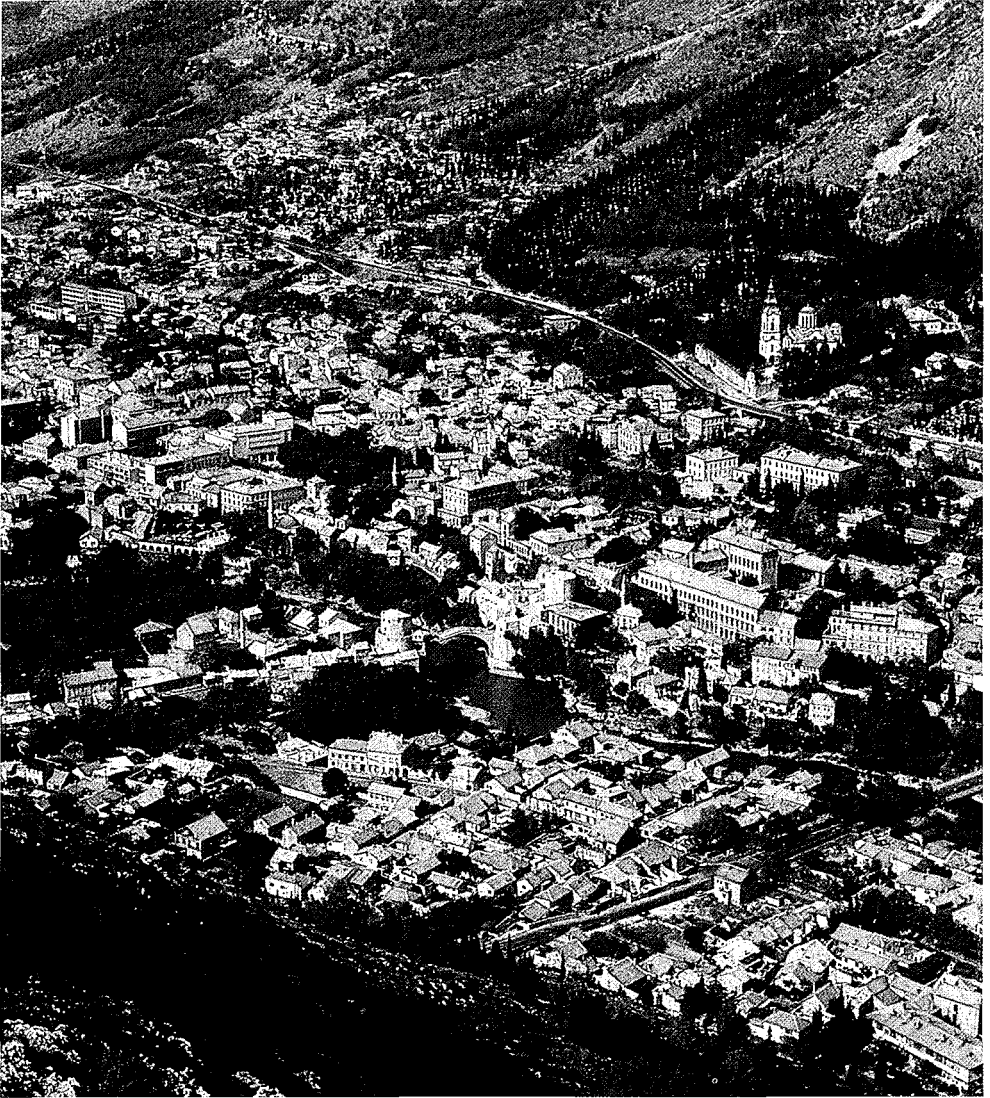
Footnotes

1) *Architecture*, Nov 1986, p 37

2) An intervention by Hassan Fathy in a seminar published as *Conservation as Cultural Survival*; The Aga Khan Award for Architecture, Sept 1978, p 103

PART II

CASE STUDIES



URBAN CONSERVATION IN PAKISTAN: A CASE STUDY OF THE WALLED CITY OF LAHORE

Reza H. Ali

Generally speaking, we in the Third World have not adequately studied and analysed our historic heritage. Our knowledge of our own art and architecture and theories regarding its origins and development are based mainly on western works and on research being carried out in academic institutions of the west. In fact, we do not even fully know what our nations have, let alone recognise its value. In the meantime some elements have disappeared, many others have deteriorated due to pressure from man and nature, to say nothing of damage due to thoughtless repair, rectification or grand attempts at restoration. Today's technology makes available the tools to combat nature but damage due to human activity may be a one-way process. In order to retrieve the situation to every possible extent, a serious effort must be made to identify, inventory, measure, document, classify, record, and to conserve or restore, where necessary, the elements of value.

It is important to learn from our own experience in this respect, and from the efforts and experiences of each other. We must, therefore, create our own repositories of knowledge and our own information exchange mechanisms, in Dhaka, in Sanaa, in Ispahan, in Damascus, in Istanbul, in Cairo, and in the other cities of the Third World.

While the legislative, regulatory and institutional frameworks for conservation are lacking, the essential pre-requisite is political commitment, backed by public pressure and involvement.

Programmes with the power to disrupt or change lives can only succeed when they have strong popular support. Actual physical interventions need to be preceded by a massive public-relations drive to create a realisation of the desirability of the task. A people proud of its heritage - architectural, historical and cultural - will back conservation measures.

Urban Conservation in Pakistan: An Overview

In Pakistan, the protection and maintenance of historical monuments and sites is the responsibility of the Archeology Department, while the maintenance of mosques, shrines and other Muslim religious places is the responsibility of the provincial Auqaf Departments. The Punjab Auqaf Department, for example, was responsible for the work on the Tomb of Shah Rukn-i-'Alam which won an Aga Khan Award for Architecture in 1983. But with the pressure of urban growth as well as the legislative changes increasing the agencies' responsibilities, it is becoming difficult for them to deal with the situation. Although their responsibilities are limited to particular buildings and sites, outside pressures and lack of financial and technical resources are making even this task almost impossible.

There is increasing awareness that buildings of the colonial period as well as of the pre-colonial period, are part of our historical heritage and need to be protected. Public agencies have taken the lead, followed by private owners, in adapting for institutional re-use a number of major colonial buildings which would not fall in the category of "historically significant"; for example, the main post office building and old public parks and gardens are currently being restored.

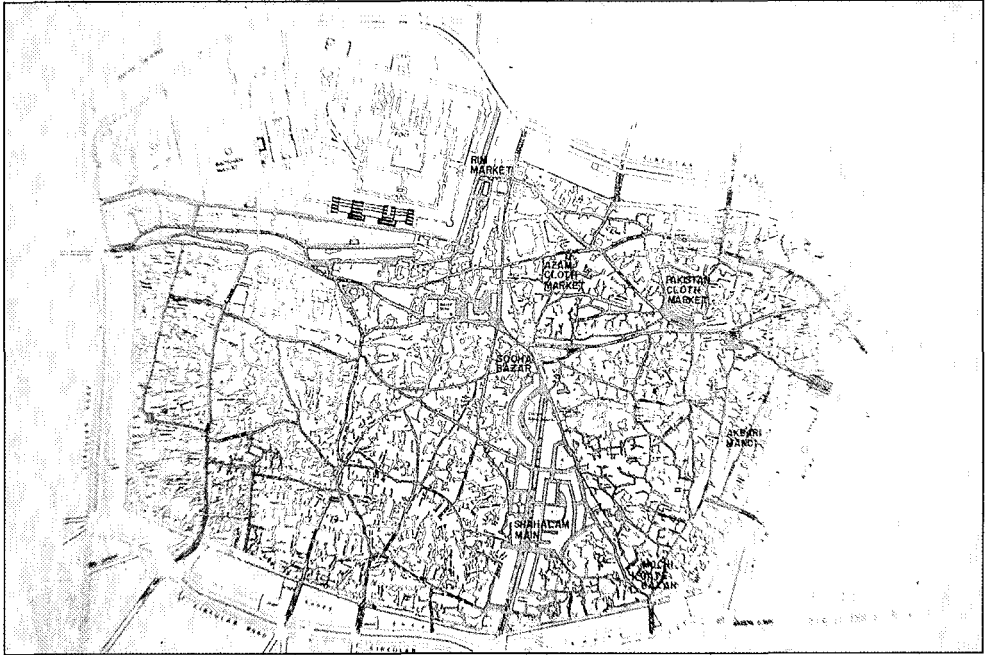
Lahore's efforts are being noticed throughout Pakistan. Following the major urban conservation planning work for the Walled City of Lahore, a preliminary study is being undertaken in Hyderabad, Sind; an initial survey to prepare an inventory of elements of value is being undertaken in the Walled City of Multan; and an assessment of conservation and upgrading needs is being conducted in old Peshawar.

While conservation work is in its infancy, having started in the last ten years and gaining momentum only in the last few years, a positive aspect which it has in common with some other successful conservation efforts elsewhere in the Third World is that it has been a *totally* local effort in terms of financial resources and technical expertise. However, international cooperation may be forthcoming for Lahore where major projects are already underway.

Conservation Planning in the Walled City of Lahore

1. *The Physical Context*

Lahore, the second largest city of Pakistan with a population of 4 million, is a provincial capital and the national centre of culture and the arts. The historical core of metropolitan Lahore is the Walled City, a dense



Plan showing the principal street system in the Walled City.

settlement about 2,000 years old covering an area of 2.5 square kilometers and holding a population of nearly 200,000. It is situated in Lahore's northwestern part on a historical mound, about one and a half kilometers from the river Ravi. A circular road on its periphery links the Walled City with the urban road system. Its historic walls, destroyed in 1849 at the time of the British annexation, made way for a Circular Garden, which exists today only in parts. The city is endowed with world-class historic monuments and thousands of private buildings of architectural and historic importance. Of its nearly 18,000 buildings, 1,400 are considered worthy of protection and another 4,000 are of architectural merit. Its ancient urban form is matched by a traditional life-style which still survives to a considerable degree.

2. The Conservation Dimension

In recent years the Walled City has been subject to functional pressures it is not inherently capable of confronting. The growth of the larger city of Lahore, 20 times the population and about 200 times the area of the original Walled City, has involved basic political and social transformations. The people, who lived within the walls 150 years ago included the rulers and the affluent, while the current residents are the urban poor and some middle or lower-middle income people. There has been a severe



View of a typical street: fine examples of architecture are often neglected

siphoning-off of financial resources needed for the upkeep and renewal of the Walled City to the newer areas and a growing incapacity of social and administrative institutions to regulate the processes that accompany this urban transformation.

The result has been widespread dilapidation of the building stock. A significant physical shock suffered by the Walled City was the destruction of large areas of it by fire in 1947. This had a pronounced impact on its functions, as many regional markets are located in new constructions built on the sites of the 1947 destruction (these include the Azam Cloth Market, Pakistan Cloth Market and the Shah Alami Bazaar).

Functional changes have also occurred along with disintegrating social structure, including a major new function of housing the urban poor. The main economic activities serve regional and national markets and are scarcely linked to the resident population except by virtue of the cheap labour force provided. This results in speculative demolition of historic buildings and streets to make way for shopping arcades with no residential or other mixed use. Buildings are abused for manufacturing purposes, especially the newly-arisen sector of shoe-making. These processes, continuing at an alarming rate, together with simple neglect, threaten the Walled City's heritage.

3. Present Conditions

The population is declining in the Walled City, as statistics show. Population emigration is related to the shift towards non-residential activities but such changes are not uniform throughout the different wards. Western wards show no net emigration, while the eastern wards where there is a conspicuous concentration of warehouses have experienced a sharp population decline. Wards retaining a residential character tend to have lower levels of dereliction. Population movement is also related to the historical trend of people seeking the "bungalow" life-style outside the Walled City.

Despite the significance of planned commercial redevelopment in the early fifties by the then Lahore Improvement Trust, the bulk of commercial growth has been organic and incremental. An explanation for the surprising growth of wholesale activity (with heavy transport demand) in narrow traditional streets can be found in the intense communications required in traditional transaction modes and in the possibility of avoiding formal documents with taxation implications.

The Walled City has multiple and complex links with surrounding metropolitan commerce: supplying manpower, processing goods and providing storage space, resulting in considerable inter-zonal pedestrian,

handcart and vehicular traffic.

The two major assets of the Walled City, namely (i) its business centrality and high land values and (ii) building stock partly of high historic significance, deteriorated but nonetheless potentially immensely valuable for the social and cultural environment, need to be reconciled in order to avoid eventual total submersion of the second to the first.

To rehabilitate this unique “city within a city” is a challenging opportunity.

The Conservation Plan

1. *Background*

From 1979-1981 a major urban study was undertaken in Lahore, the Lahore Urban Development and Traffic Study. While looking at Lahore in a long-term perspective, the Study concentrated on the infrastructure and land development aspects of the growth of metropolitan Lahore, with emphasis for 1981-86 on land, basic housing, social infrastructure and utilities. Of these, the proposals pertaining to the Walled City were a set of immediate action projects for building rehabilitation, repair and renewal. These proposals were modified in the first Lahore Urban Development Project, when the emphasis shifted almost exclusively to utility services upgrading. The study recommended preparation of a Conservation Plan for the Walled City so that a framework could be available to conserve the architectural and historical legacy while accommodating the life style, economic processes and dynamics of change. The preparation of this Conservation Plan was made a condition of the first World Bank credit for Lahore but the credit was not taken up for many years. In 1986 a local public-sector architectural firm was commissioned and began work on the Conservation Plan. The Consultant team, headed by Masood Ahmad Khan, worked for nearly two years on surveys and studies, prepared an inventory of buildings of architectural, historical and cultural value and documented selected elements in the form of monographs and measured drawings. They made recommendations which include the classification of 1,400 buildings as worthy of protection; specific policy measures; further studies and planning activities; and identification of possible projects. Some of the recommended projects were later given complete project documentation for implementation as pilot projects.

This discussion of the Conservation Plan is taken from the work conducted by the Masood Khan team.

2. The Conservation Strategy

The Masood Khan team proposed a wider “active” strategy with a single goal: to preserve the Walled City’s manifold assets by re-establishing its *interior balance* as a *living community* in a distinct urban district of national significance with high historic and environmental qualities.

This strategy demands much greater attention towards the Walled City on the part of the authorities. More sophisticated planning and greater control are necessitated than for other parts of the city. To achieve the *interior balance*, commercial activities must be controlled. To re-establish a *living community*, a better-functioning social network, improved living conditions, and the attraction of middle and higher income residents is necessary. A clear distinction must be made between activities compatible with the area’s historic and environmental qualities and those that are not.

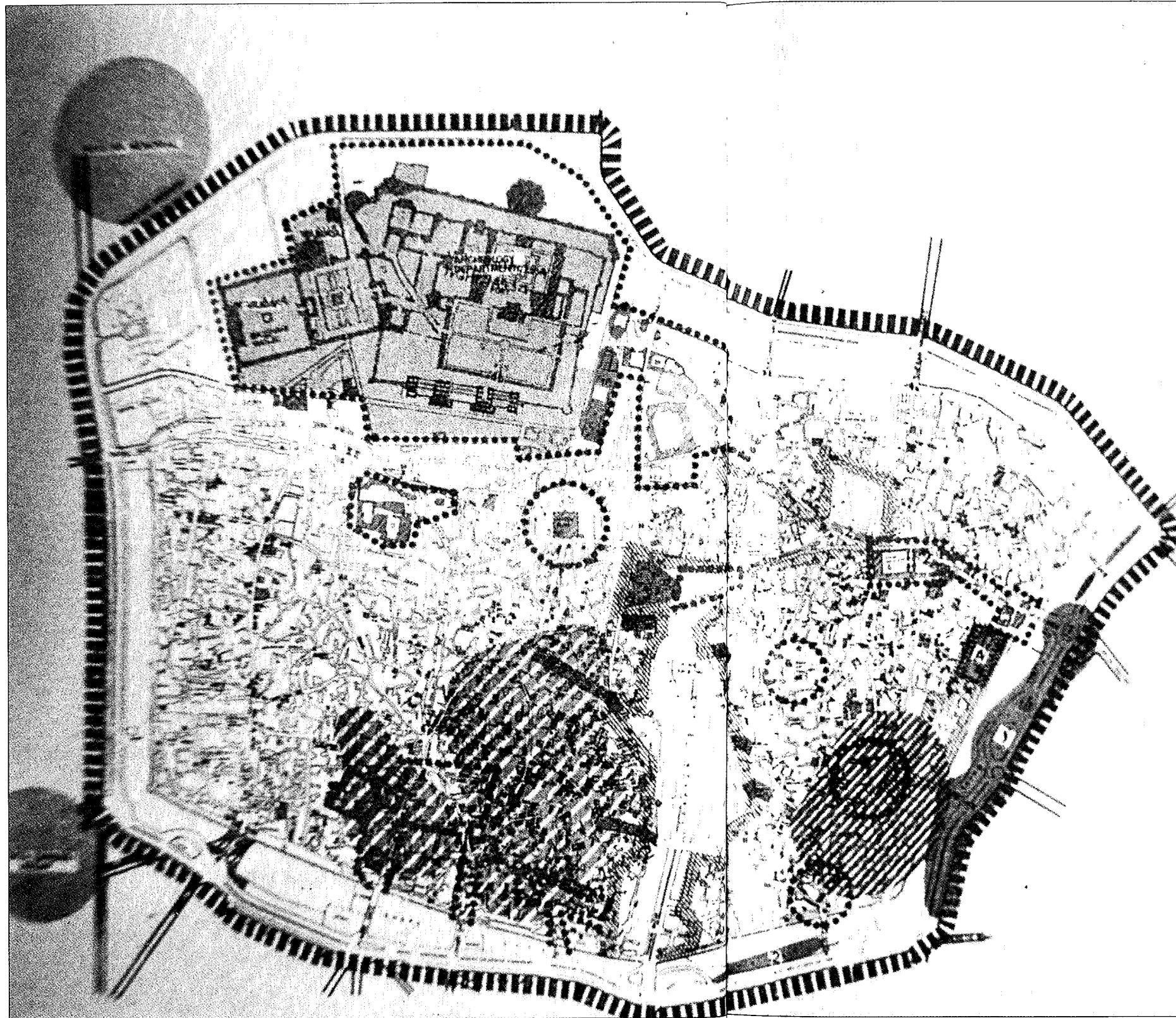
3. Primary Policies

The Conservation Plan recommended a *policy framework* consisting of three inter-related action levels, and at each level made a number of specific recommendations for concrete interventions.

The aim of the First Policy Level is “to reduce and rechannel outside pressures on the Walled City in order to ease interior reorganisation and protect weaker functions from being over-powered by more aggressive forces”. This action involves planning and coordination at the city governmental level and refers mainly to demographic, commercial and traffic pressures which may threaten or disturb the re-generation of a stable residential community in the Walled City.

The Second Policy Level aims “to conserve and enhance the urban fabric as a whole by a combined conservation and renewal effort with due consideration of social and economic driving forces”. This addresses physical improvement within the Walled City. It relies on a series of selective but widespread initial injections of public funds and financial assistance, combined with steering and coordination of the private initiatives thereby generated.

The Third and final Policy Level aims “to highlight specially important historic areas and buildings in the Walled City by a concentrated conservation effort”. This action allows a more intensive conservation effort in places of special significance or in areas with a high density of historic buildings.



Conservation Plan for the Walled City – proposed policy actions

4. Sectoral Policies

The primary policy aims were developed into specific guidelines for sectoral policies on the basis of detailed discussions between the Masood Khan team, residents, and other local interest groups. These sectoral guidelines are summarised below:

Community Development

- Redesign local council wards to conform with territorial space found in the traditional urban form.
- Encourage existing residential communities to serve as the foundation of future community - based conservation bodies.
- Conserve bazaars and urban spaces with the active cooperation of the associations of shopkeepers of the areas.
- Encourage new interest groups sympathetic to conservation as channels of addressing issues and problems and as a means of counter-acting unsympathetic forces.
- Mobilise public opinion through information and education campaigns carried out with government as well as private resources.

Employment and Incomes

- Offer training programmes aimed at improvement of skills and of general education, with particular emphasis on the needs of women, to improve the present low skill/marginal employment that exists in many areas.
- Coordinate future area redevelopment in the Walled City and elsewhere in Lahore to guide employment trends in desired directions.

Physical Fabric

- Define "physical fabric" to be conserved as the aggregate of all urban elements including gates, bazaars, *gali-koochas* (alleys), *chowks* (crossroads), and squares.
- Document the physical fabric systematically and maintain an

inventory of all buildings.

- Require approval to demolish any building and require new buildings to conform to designated uses. Simplify and decentralise approval procedures.
- Offer a system of financial incentives to avoid undue loss of buildings and to protect buildings of cultural or historical value.
- Offer technical assistance to owners and builders through voluntary, cooperative or government sponsorship.
- Define a clear physical framework for each urban element indicating existing conditions and the limits of future change.
- Survey systematically the structural safety of buildings and intervene immediately where necessary.
- Deal with all listed “special premises” on a one-off basis. Specify in proposals whether acquisition is necessary, and whether the building is to continue in the previous use or is to be recycled.

Housing

As the aim is to revitalise the Walled City, housing policies need to reflect a concern for higher levels of environmental adequacy and income. No change in residential land use should be allowed. Although squatting is not widespread, it should be prevented, and community development projects should be carried out only in those squatter areas where proprietary rights are being awarded. Only those squatters should be resettled outside who reside in buildings of high historic value or in areas of high redevelopment potential.

Commerce and Production

Whether a certain commercial or industrial unit is to be transferred away from the Walled City should be judged according to compatibility criteria based on turnover, volume and size of individual unit, extent of traffic generated, any solid waste or other environmental pollutant produced, etc. Regional-scale commerce should be restricted to its present locations and levels. The current system of licensing commercial and production establishments should be reviewed. A conversion fee for any allowable land and building conversion should be levied.



A typical street in the old city



A narrow street with new brick paving, open drains and water pipes on the surface

Traffic and Transport

Freight traffic should be regulated, as direct delivery needs to be decentralised and freight stations relocated. The public transport network in Northern Lahore should be improved, while along the Circular Road the traffic improvement programme (already prepared) should be implemented. Within the Walled City, pedestrianisation of all bazaars is proposed, eliminating through vehicular traffic wherever possible.

Social Facilities

Social facilities should be provided to answer community needs with priority to the needs of women, children and youth. Centres should not be incompatible with historic environments, and as far as possible should be located in an old building of public ownership. Community centres should be encouraged to support policies on housing, income and employment.

Infrastructure and Utilities

In general, these policies aim at integrating infrastructural upgrading operations with those relating to street facades and the conservation of individual buildings.

Planning Proposals

The Conservation Plan proposals are based on the need for an unwavering commitment to rehabilitate the Walled City and to reinstate it as a national symbol. The policy framework and guidelines are developed to comprise eight categories of recommendations in an ascending order of specificity:

1. Strategic policies and actions to be taken outside the Walled City;
2. Planning activities and studies for both the central area and the Walled City;
3. Institutional development including the full utilisation of existing resources reinforced with an active training programme, and the application of the legislative resources that already exist;
4. Urban management and controls to include production of a "Manual for Conservation and Building Renewal" and improved maintenance practices;

5. Traffic improvement and management programme;
6. Upgrading and enhancing the physical fabric and the urban environment through upgrading the building stock (rescue, repair, rehabilitation, renewal) and through upgrading urban services;
7. Redevelopment with concern for conformity with the scale, height, densities and building typologies traditionally characteristic of the Walled City to be demonstrated through projects undertaken by public authorities on state land and through regulated private sector activity;
8. Conservation of individual listed special premises or elements.

To move towards realisation of the objectives of the Plan, the Masood Khan team prepared an Action Programme for a six-year period. The principal physical intervention is proposed through integrated urban upgrading and conservation projects.

A pilot project for implementation in the Delhi Gate area of the Walled City has been prepared in detail.

On the basis of experience in Lahore and other Pakistani cities, it can be said that conservation forms part of the complex political and economic issues in our society, in particular issues of development to which it is inseparably linked. For urban conservation to be meaningful, the dynamics of development and change should be realistically addressed. Conservation *must* be recognised as part of a broad front against deprivation and poverty. This is the critical issue and here lies the real challenge.

THE PRESERVATION OF THE BUILT HERITAGE IN MOSTAR, YUGOSLAVIA

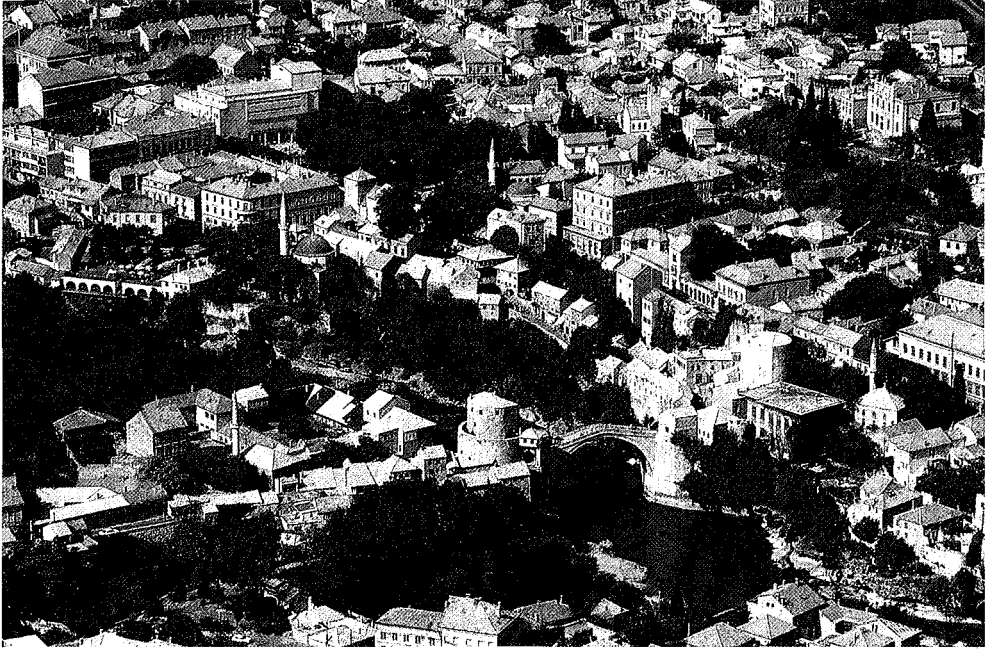
Dzihad Pačić

The Preservation Organization

For the last twelve years our work unit "Stari Grad Mostar" (Old Town Mostar) has been charged with the conservation of the town's architectural heritage, both the historical city core and outside single structures and complexes. Our authorization and our funding comes from the city, its citizens, and other work units. Our organization undertakes all parts of the process necessary to realize economically feasible projects.

The economic base of the preservation process is established on income from the historical core (rental fees, taxes for building permits, and community taxes) as well as on fees for preparing project documentation for third persons, consulting, and the contributions from users of the structures. Year by year this base grows. We divide our work into administration and management, financial and technical areas. To find solutions to specific tasks, we engage experts from all over Yugoslavia and abroad. Exceptional attention is paid to the education of new experts through student traineeships, compilation of degree essays, MA essays, and assigned work on designs and projects. Thus more than 50 people were involved in our preservation work during the past five years. We also place great importance on our collaboration with the department of graduate studies for building heritage of the School of Architecture, University of Zagreb, located in Split.

Our proposed programs and judicial/administrative acts, before being enacted, must be submitted for public approval, with debates and public inquiries, expositions, press releases, and in general the active participation of the citizens of Mostar and of the Republic of Bosnia and Hercegovina. This fits into the democratic system of self-management in Yugoslavia.



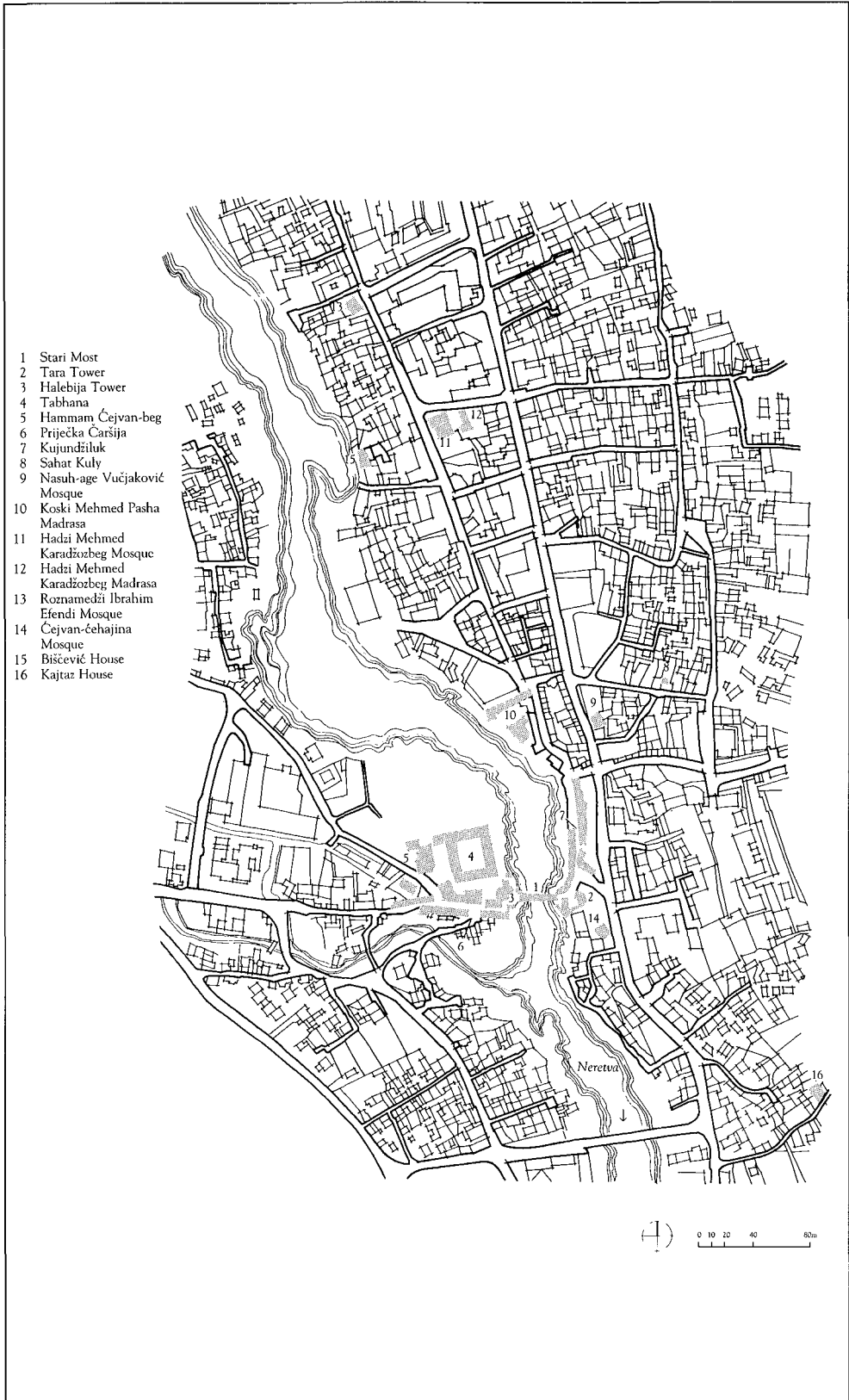
General view of Mostar

The Historical City Core

The *Old Bridge* of Mostar, the work in 1566 of the brilliant *Mimar* Khaireddin, is a masterpiece of architectural design, building technology, and construction. The Bridge, built within a fortification system, is the point of departure of the town; together with the nearby bazaar, it constitutes the historical city core — one which still provides the functions of a modern downtown in its many well-preserved original structures.

The *walled bazaar* was developed beginning with the Ottoman Turkish administration up until the middle of the 19th century and was the centre of crafts, trade, traffic, and the whole of public life. In Old Town Mostar, in addition to public structures such as the Bridge, fortresses, mosques, inns, and public baths, there were also modest structures for trade and crafts. These were of rarely more than one storey, built in row-house fashion of stone and lumber. The storehouses (*magaza*) were constructed at a later period in a more solid and safe style; their construction was influenced by buildings in Dobrovnik and Dalmatia. The urban fabric thus consisted of these low buildings punctuated by beautifully modulated minarets and by the Bridge.

The people lived outside the bazaar, one family to a compound, about forty compounds to a *maballa* (housing neighbourhood). Each neighbourhood was oriented to its own services including a mosque with a *madrassa*



Site plan of Mostar Old Town The restored buildings are shaded



The Old Bridge, Mostar, built in 1566, is the focal point of the town



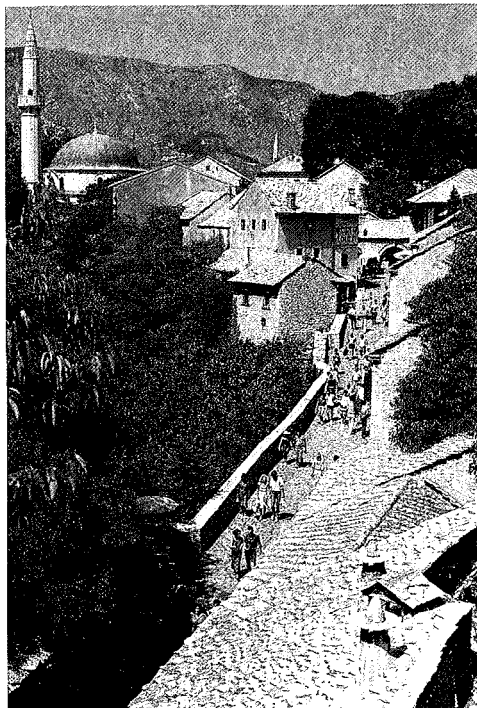
The approach looking towards the Halebija Tower, to the Old Bridge

school, a graveyard, a fountain, a bakery, and food shops. The *maballa* grew up slowly over a long period of time, with judicious choices made over the most favorable plots from the point of view of security, sunshine, and proximity to the water. The inhabitants living side by side in these neighbourhoods and working together in the bazaar were organized socially more by a system of guilds rather than by religious or national affiliations.

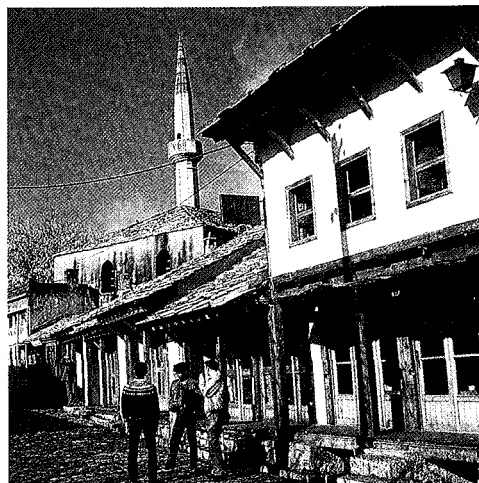
The Austro-Hungarian occupation (from 1878 to 1918) brought only small changes to the historical core, because the new economic centre was placed on the other side of town close to the railroad. The town spread slowly into the new spaces and the bazaar was left to benign neglect. This happily had the effect of conserving many of the original structures until they began to be formally protected about forty years ago. The basic elements of the urban scheme which were developed during the Turkish period, of the bazaar plus more than thirty *maballa* neighbourhoods, can be recognized even today. The built environment is a synthesis of indigenous, oriental and mediterranean influences; it is still today in the process of change, but it follows the building patterns developed by many generations belonging to different economic and cultural groups.

The Documentation Base

In 1978, immediately upon the founding of our "Stari Grad" work unit, we began to prepare programs, plans and projected activities. We began with documentation done in the previous period assembled from institutes, archives and museums. Our basic document, created from 1979 to 1982, is the "Plan for the Preservation of the Historical City Core of Mostar," which lists more than 300 structures, and which while open to new realizations and ideas, preserves the basic features of the bazaar. The additional space developed under the Austro-Hungarian Empire, having very important



Mostar Old Town a street in the walled bazaar left bank with the Hadzi Karadzobeg Mosque and Madrasa in the distance



A scene showing the typical construction of stone and timber in the Old Town

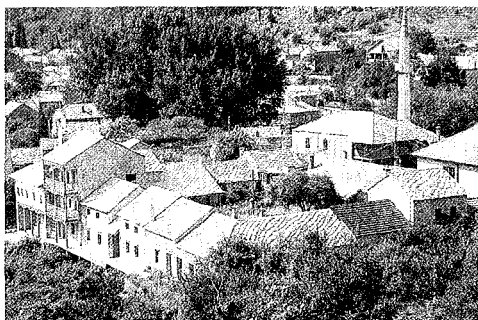
municipal functions even today in management, administration and trade, figured in an enlarged urban plan to include 650 structures. All other individual structures and ensembles of monumental character outside of the Old Town and its adjacent areas were listed with the commune of Mostar.

Realizations

Of the more than 300 projects, about 200 have been realized to date, with the current preparation of an additional 6500 m² in the Old Town and 6000 m² in the adjacent areas. There have been 162 activities realized in the historical city core. Our most important projects have been the Old Bridge, the Mosque of Karadžobey, the Madrassa of Koski Mehmed Paša, and the Priječka and Tabhana quarters.

The Approach to Preservation

The theory of preservation of building heritage is a process in a permanent state of flux, subject to influences of social and economic factors, and subject to current trends. A modern approach to the historical city core of



The tannery viewed from the north



Mostar Old Town: re-roofing a building with the traditional stone

Mostar is characterized by an exceptionally complete analysis of all influencing factors. One of our basic conclusions is that the Mostar historical city core becomes important because of its *urban plan* and the ensuing environment, not because of its structures of monumental character.

From the origin of the town to the present, an important fact of our building heritage is that the economic structures, the rows of shops and storehouses in the bazaar, have always undergone transformation, due to social and economic changes or simply by fire and flood. The transformations always reflected the adaptation to a modern degree of building technology development and economic conditions.

Building activities in the last forty years have worked towards the preservation of the city core and have kept the basic features, but have also created a large number of new elements. Construction and spatial solutions have had more or less success, but builders have paid attention to the environment, thanks to our preservation program. They have used basic proportional relations to the existing volume of structures, application of the same materials (stone and lumber), and application of the same architectural elements.

Urban planning trends, however, differ now from previous centuries in a tendency to open the bazaar toward the rivers, with both communication and visual links of structures with the river Niretva, a solution which we believe responds to the wishes of many generations of Mostar's inhabitants.

In the renovation and re-use of structures, we apply modern construction and spatial solutions to answer modern needs for use of the structures. In addition we must respect valid regulations for protection and safety of the users, such as considerations for seismology, fire, thermodynamics, hygiene and engineering. Depending on the specific solution alongside traditional elements, the modern supplements remain discrete, but easily noticeable. However, utilization of the structures gives them life, which is the final aim of the renewal and the preservation of a building heritage.

There is a permanent effort made to revive and encourage the old crafts which have always been centered in the bazaar. Modern economic forms also operate in the historical city core, satisfying needs of inhabitants and providing a great touristic interest, along with the formerly “dying” crafts.

The Old Bridge area is the most important historically and aesthetically of the old town, possessing a value deserving its place in the world cultural heritage. Thus, we give the highest priority to preserving the Old Bridge, and the intensity of the preservation activity in the historical core increases as one approaches the Bridge. In a schema of valuation, historical Mostar is divided into three areas of decreasing importance, using factors such as location near the Old Bridge, the kind of utilization, natural and created borders, and the extent of previous changes or interventions:

1. The Old Bridge with its narrower vicinity between the gates.
2. The narrow historical core, or the space within the former walls of the bazaar
3. The wider historical core covering 6 km² determined partially by old borders and partially by the state of preservation of architecture and urban planning, which corresponds to the space between Marshal Tito Bridge and Luchky Bridge.

Difficulties and Recognitions

Preservation work in Yugoslavia faces the same difficulties as elsewhere – economic, real estate and legal problems, melding new and old technology of construction, and a lack of a skilled labour force.

We work intensively to overcome some of these difficulties through national and international institutions and work with Yugoslav and foreign experts. We find each dialogue (or monologue), when connected with the essence of a problem, a contribution to building preservation work. However, fault-finding exercises by those not really connected with the work are less helpful. Evaluation should proceed calmly on the basis of facts and in the existing system of values if it is to result in more realistic conclusions.

Besides local recognition through publicity, exhibitions, and discussions with visiting delegations, “Stari Grad Mostar” received the Aga Khan Award for Architecture in 1986 for “... the remarkably conceived and realized conservation of the entire sixteenth-century centre of this historic



The Mostar restoration work included several 16 c houses of exceptional charm, such as the Kajtak House which has been converted into a museum

town.” “Stari Grad Mostar” was also awarded a recognition by the 13th Architectural Exhibition in February, 1987, in Belgrade. “Stari Grad” has also been admitted as a joint member of ICCROM, Rome.

BANGLADESH'S EXPERIENCE IN ARCHITECTURAL CONSERVATION: FIVE PROJECTS

Shah Alam Zahiruddin

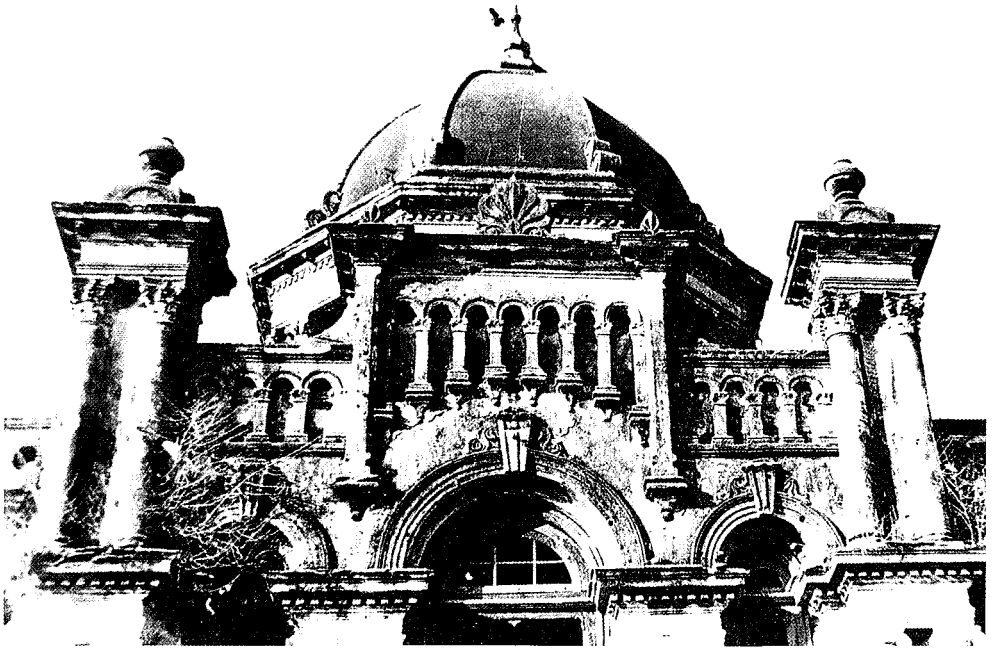
The importance of preserving our architectural heritage and passing it to future generations through conservation is a universally accepted matter, but in reality it is a neglected issue. Budgetary funds required for repair and protection of our architectural heritage receive the lowest priority, while in the name of development, entire sections of our older built heritage are being pulled down or re-developed in a most unsympathetic manner.

The little work on conservation done so far in Bangladesh has been done on Government initiative, under the Archeology Department (Ministry of Culture) or the Department of Architecture (Ministry of Works). The experience of the Department of Architecture has been in both secular and religious buildings, dating from the early Mughal period to the British period. The works of the Department of Architecture have been varied: some on pure conservation; others in restoration and introducing new uses to old structures with some modification; and in others expansion and extension to accommodate the expanding needs of the present use. In all cases the initial effort was to make a faithful documentation of the old heritage, identify what were the most relevant and characteristic features of the building, and prepare plans for restoration/conservation. Before the commencement of the work, the materials to be used and the standard of workmanship to be achieved are established through detailed studies and preparation of samples. Subsequently supervisory control is exercised during the execution of the project.

Some of the most important works undertaken recently, which will be discussed in order, are Ahsan Manzil, the Star Mosque, the Old High Court Building, the Collectorate Building (Jessore), and the Chummary House.

Ahsan Manzil

Ahsan Manzil, the Palace of the Nawabs of Dhaka, was built in 1872 by Nawab Sir Abdul Ghani. He named the Palace after his son Nawab Sir



Absan Manzil built in 1872 View of triple arched portal and dome, seen from river The pre-restoration picture shows growth of vegetation on the crumbling façade



Absan Manzil in 1989, renovated to the 1904 plan Elevation from the river front

Ahsanullah Bahadur. The Palace along with its dome was badly damaged by the tornado of 1888 and was rebuilt as a two-storeyed building on a 4 foot high plinth, crowned with a dome rising to 58 feet. The building faced the river with a width of 183 feet.

City life was then oriented towards the waterfront and there was a fine promenade, called the Buckland Bund, running along the river bank. Ahsan Manzil was the high point of the old city and it dominated the river front.

During the British Raj dignitaries arriving by luxury boats crossed the promenade and the front court, ascended a grand flight of stairs and entered the palace on the second storey. Lord Curzon, Governor General of British India, stayed here as the Guest of Nawab Sir Salimullah Bahadur in 1904. Important decisions regarding the future of the Muslim movements in India were taken here, which culminated in the formation of the All-India Muslim League.

Because of Muslim emotional attachment to the Palace, its prominence on the river front and its exemplary style of Anglo-Indian Architecture, Ahsan Manzil deserved to be conserved; a decision for its restoration and conversion into a period museum was taken by the Government in April, 1985.

The well-to-do and major claimants to the palace had already quit the premises long ago. The building, abused by men and nature alike, was structurally unsafe. It was occupied by the poor descendents of the Nawabs. They had sub-divided all the rooms, and enclosed and partitioned even the verandahs into small holdings maintained in slum conditions. The entire outer compound was similarly occupied by squatters in slum settlements, catering to the needs of the labour class of the river front in restaurants, shops, factories and residences. Both the inmates and the compound's slum dwellers were evicted by 1985 and a systematic documentation work of the palace was started by the Government Architect's Office in close liaison with the Public Works Department and the National Museum Authority.

They found that the site, a French factory, along with the other two-storeyed building in existence on the site, was purchased by Khawaja Allimullah in 1838. The existing building was converted by the Nawabs into their residence ("Andermahal"). Subsequently this was connected to the newly-built main palace by a wooden covered bridge on the upper level. The "Andermahal" has also been included in the conservation work.

Books and references on the buildings were consulted, including some exterior and interior photographs taken during the visit of Lord Curzon in 1904. Older people who had visited the Palace while the Nawabs were on the verge of leaving it were consulted; old photographs in personal collections were viewed; and photographs were taken of the damaged

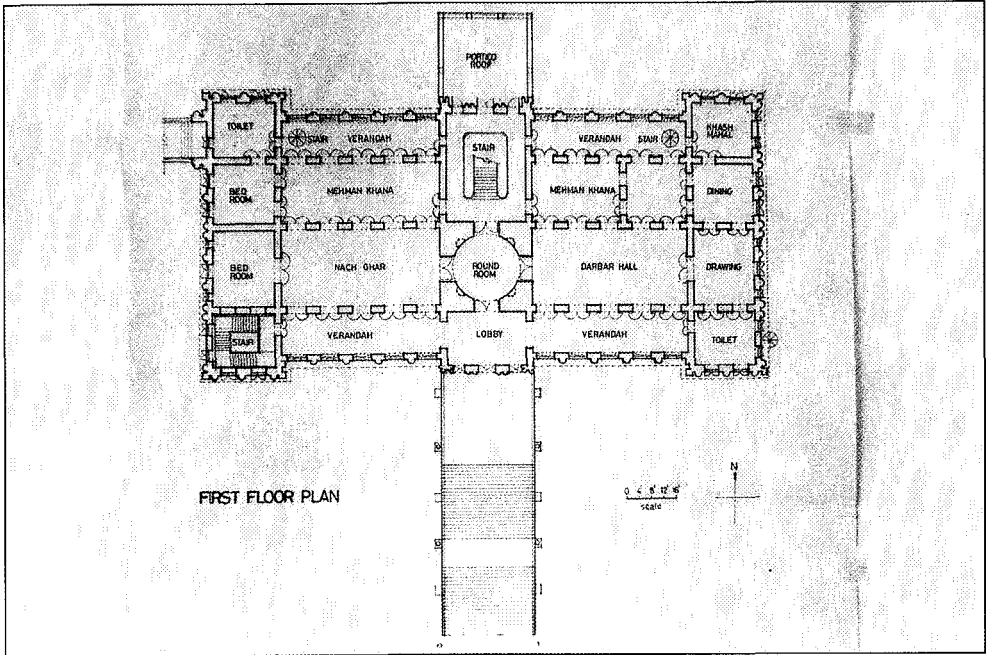
structure still existing. From all these, architectural details, sections and elevations were drawn.

Though the Mughal style of architecture continued in the 18th and 19th centuries in religious buildings, a European influence was introduced into secular buildings. Ahsan Manzil, a grand palace occupying the centre of a large quadrangle, is an example of a building of European style with Indian influence. The grand stair leading to the entry, framed by a triple-arched portal prominently projecting out from the main wall, is an element of Mughal influence, but the pilasters at the lower level have Ionic influence while the capitals on upper level have Corinthian decoration and the semi-circular arch openings have prominent keystones. The shape of the dome and its support on an octagonal drum are all clearly European in origin. Details of the parapet, decorative work in plaster, the kiosks on pillars and corners of parapets are, however, indicative of Indian influence.

The palace, symmetrical in plan, has a round room at the centre on the second storey crowned over at the top by a dome. On the western side of the round room was the wooden-floored ballroom, and on the east a large meeting room; on the sides were the bedrooms and other minor rooms. The end rooms are projected north and south and frame semi-circular arches. Verandahs all along the north and south central part of the north verandah accommodate a grand internal wooden stair leading to the first floor from the north portico. The top of the portico worked as an open terrace on the second storey. The ground floor rooms are again arranged in a similar fashion with a billiard room on the west and the dining hall on the east.

After documentation, experiments were carried out with both materials and craftsmanship. Samples with typical details of woodwork were done in the PWD Wood Workshop, and details of mouldings, column capitals and decorative elements were made as samples on site to test and establish workmanship standards. The decorative elements and the outer finish of the brick masonry structure was in lime plaster. The use of lime plaster was ultimately discarded in favour of sand/cement/lime plaster based on the experience gained earlier on the restoration work undertaken at the Haji Khawaja Shahbaz Mosque, built during the Mughal period in 1679. It was observed there that reddish-pink luster of a newly-done exposed lime plaster is lost within a year and the surface looks dark and dirty. This is ascribed to the torrential monsoon climate of Bangladesh. The original reddish-pink colour of the exterior was attained by colouring the plaster work. This, of course, has to be renewed at intervals of some years.

The 1904 photographs were taken as the base, and all subsequent construction and additions not authenticated by the 1904 photographs were



Plans for renovation of Ahsan Manzil showing new staircase in southwest corner to facilitate circulation of visitors to the planned museum



Pre-renovation view of Ahsan Manzil from the east showing the cast-iron spiral staircase used for service access to toilets.

cleared out. This included a single-storied structure, built awkwardly in the forecourt, known as "Ghanta Ghar" and apparently used by the Naibs of the Nawab. A true copy of the same has, however, been rebuilt and placed near the east entrance gate to act as a souvenir shop for visitors.

Basically a brick masonry structure, the brick work was found to have been extensively damaged by rising dampness. This was thoroughly taken out, sometimes over 20 inches deep into the original work, and redone. The usual course of putting a damp-proof barrier above the ground level by transfusion of silicon solution was not resorted to here. The main reason for this extensive damage was attributed to the perennial waterlogging and unsanitary conditions existing at the site in later years. The rising dampness and associated salt action is not expected to be a major problem in the future as the site has now been well graded. Walls were also damaged because of improper drainage of the roof water. Roof water drainage gargoyles have been manufactured and appropriately placed to carry the roof drainage away from the walls.

Cast-iron work was extensively used, particularly in railings and light posts. Most of it was missing. It was difficult to make authentic drawings. From interviews with elderly people, who could refer to similar works existing in old buildings elsewhere, drawings were prepared. As cast-iron work is not in vogue, it also presented a major problem to have it manufactured, incorporating the fine details. With special efforts some shops were induced to do this special work, and the items were finally manufactured and put in place.

The marble floors were damaged in many places. These were easily replaced locally, and sandstone, used in the verandahs, driveways and the steps of the grand staircase, was imported from Joypur in India. One of the bedroom floors was finished with broken china pieces formed into a mosaic design. This was a local tradition quite frequently used in religious buildings and in the residences of the well-to-do. Local (older) craftsman were identified and the floor was redone.

The floor and roof, with a *kari-barga* system supporting flat burnt clay tiles covered with lime concrete work, was badly damaged in many places. This became a major problem of repair.

In places other than over the ballroom and the drawing room which have decorative false ceilings, the damaged beams were replaced and the floor and ceiling redone with concrete using ceiling stones. In the case of the above two rooms, on the first floor, with extreme care a layer of lime terrace was removed and a thin layer of concrete casting was then done with an admixture of sealotack (obtained from U.K.). The concrete surface was then coated with a sealotack slurry of sand and cement to seal the

pores of concrete and finally the entire surface was treated with sealorend solution and covered over by concrete tiles to prevent any leakage of water. The false decorative ceiling was thus saved intact.

As sewerage systems were not in vogue in 1872, the palace had no toilets with sewer lines. This meant that toilets were emptied by servants at intervals for which task special cast-iron spiral stairs allowed access from the outside. The remains of one such cast-iron spiral stair on the south-east corner were found. It was repaired and kept in place. The remains of two large broken wooden staircases, from the first floor to the roof were found in the two northern verandahs. They occupied most of the space of the verandahs and it was quite obvious, in this strongly symmetrical design, that they were the result of the designer's after-thought to provide access to the roof. The wooden stairs have been replaced by two cast-iron spiral stairs. This cleaned up the otherwise awkward-looking northern elevation and made it an enjoyable verandah space.

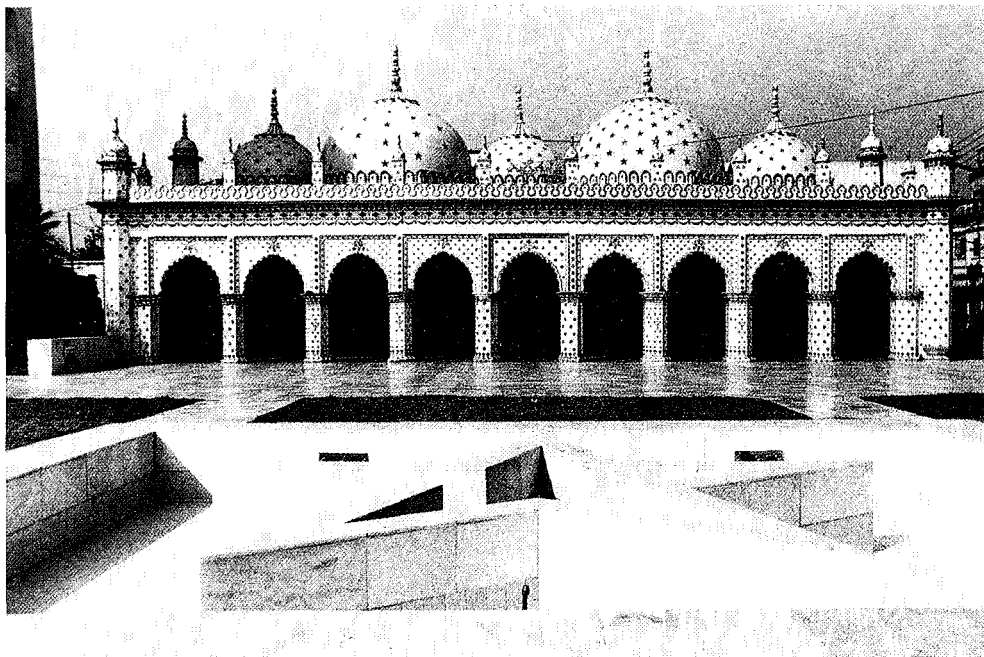
Besides the grand approach from the river, there were two other entrances from the city, one from the north and the other from east. The north entrance was framed by a gateway on the Islampur road. It was at a significant distance from the palace. A roadway led visitors through the gate to the north portico of the palace in horse-drawn carriages and automobiles.

However, a sizable portion of the palace compound in the north had unfortunately been acquired by the Municipal Corporation and a multi-storeyed shopping centre, out of character with the palace, has been built. The road which used to lead to the north portico of the palace has for some time been occupied and closed by hawkers oblique traders. The driveway from the north has, therefore, been eliminated and the area converted into green lawn. The eastern gate has been repaired and renovated and a brick paved road in character has been laid forming the main entrance to the palace from the city. All unauthorised construction on the Buckland Bund, mostly shops obstructing the view of the river, have been cleared.

A lighting plan in character with the old has been worked out for the garden. A scheme has also been worked out with flood lights to wash the surface of the building at night, so that during the night as during the day Ahsan Manzil stands out majestically to the passing traffic of the river, reminding them of Dakha's rich past.

Star Mosque

The Star Mosque is located in Armanitola not far from the river. The area is named after Armenians, pioneers of the jute trade, who settled in the



Star Mosque: shown after expansion and restoration work completed in 1987 Surface decoration of stars was done in 1926



Star Mosque, showing restorer at work and close-up of stars made with broken china pieces

locality in the early part of the 18th century. The three-domed masonry structure with a dominant central dome 29 feet above plinth level is clearly in provincial Mughal style. However, the mosque is famous for its extensive surface decorative work in the form of stars. The stars have been made with a striking mosaic work of broken chinaware pieces, strictly in the local tradition, done at a latter period.

The new decoration from which the Mosque derives its present name was done in 1926 by Ali Jan Bepari, then Mutawalli of the Mosque. He also added an arched verandah to the east, although a verandah in a main mosque was not usual practice in provincial Mughal architecture.

The Mosque is part of a living community which has outgrown it. As a result, a corrugated iron sheet structure completely out of character with the Mosque was added to accommodate the enlarged community when on Friday the Jumma prayer congregation spilled on to the road.

A decision for expansion to accommodate the enlarged congregation was taken in 1984; the Government Architect's Office took up the responsibility.

It was obvious that the corrugated iron sheet structure on the north had to be removed and the Mosque expanded in that direction.

However, the major issue which confronted this sideways expansion was that the Mughal style of architecture has either a single prominent dome or multiple domed roof with a predominant centre dome. The expansion space permitted construction of not three but two additional domes on the side, but then the existing small western dome would become the central dome. The other possibility was expansion eastward by expanding the verandah space with another series of colonnades. The impact of the domes would then have been reduced by the addition in front, and the present front of the Mosque would have to be covered over by a totally new facade. A decision was taken to expand sideways with two additional domes.

The problem was the expansion of the *Shan* only 32 feet in depth, which could not cater for the larger number of devotees who come to Jumma prayers in a congested locality.

The obvious choice was to remove some of the structure on the east and clear the view. Buildings on the east were removed through mutual understanding with the community. A fountain has now been added to the *shan*, which was expanded to a depth of 89 feet and covered over with white marble.

The drawings were completed in March, 1985, and the work completed in December, 1987.

Old High Court Building

Popularly known as Old High Court Building, this two-storeyed attractive building was built in 1905 as residence for the Governor of the newly-created Province of Assam and Bengal. Symmetrical in plan, it is crowned with a dome resting on columns in a circle, and was built opposite Curzon Hall on the road then known as Government House Road. It has been subsequently used as offices, a college, a high court and finally it now houses the Defence Ministry. Built in typical European renaissance style, architectural elements of the classical period have been very skilfully incorporated into the outer facade. Meant to be very impressive to the outsider, the interior is relatively simple. Cast-iron fencing with intermediate masonry pillars allows passersby a glimpse of the prestigious building.

The building had all kinds of extensions and additions both inside and out, some in concrete and others in corrugated iron sheet and timber partitions. Most deplorable were some projecting toilets in the front facade, and just below the triangular central pediment there was a big iron verandah roof, to protect the rooms behind from rain water. The original design in the European style apparently made no consideration for the local climate.

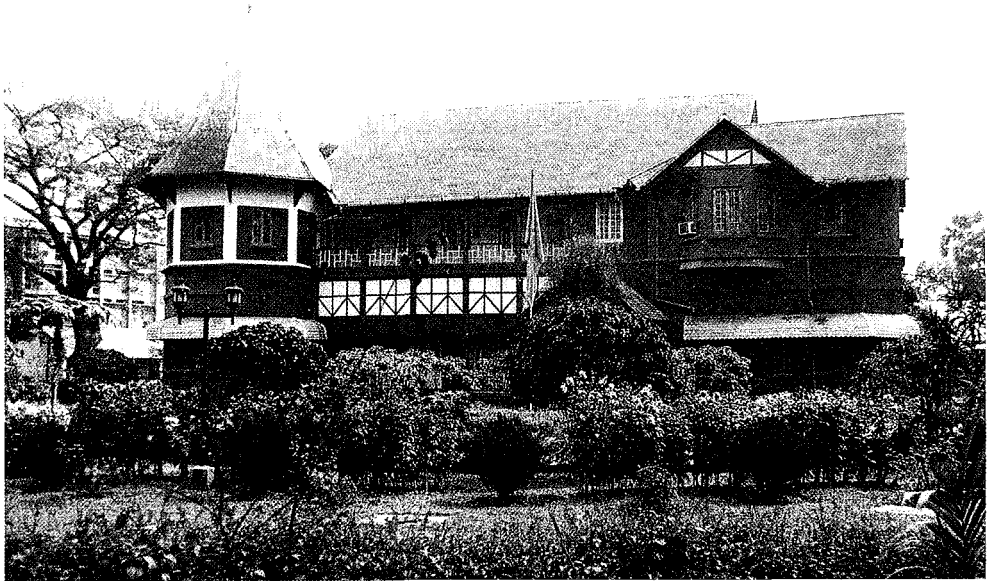
The outer plaster was falling off in many places and it was time to renovate the plaster work and the building. After the usual process of photography and documentation, all additions and changes were dismantled and the work of repair and restoration was taken up.

Climbing the flight of stairs to the first floor on the left there is a big ballroom with a wooden floor and a very interesting mezzanine type gallery, apparently to view the dancing in the hall. The whole ballroom was partitioned into small dark cubicles; even the mezzanine was walled off from the main hall and converted into cubicles. These, however, have all been removed and it now presents a very decent look.

A problem was encountered when the corrugated sheet iron verandah roof over the open terrace on the front was to be removed. There were strong objections that without some covered protection of the doors and windows from rain and sun, the rooms behind could not be used. Finally, in keeping with the climatic requirement and establishing a relationship with the plan and elevation, a partly covered verandah was added to the front terrace. This is the only addition to the otherwise faithful restoration work, completed in 1985.



Old High Court Building, view after restoration. Built in 1905 as a governor's residence



Chummary House: built in 1911 and restored exteriorly in 1985 with the exception of the wood shingle roof, unsuitable to the local climate, which was replaced by specially manufactured asbestos tiles

Collectorate Building, Jessore

The Collectorate Building at Jessore was built on a type plan sometime between 1880 and 1920 to house the office of the Revenue Collector. The single-storeyed building with a jack arched roof was supported by 25 inch thick masonry construction made of burnt clay bricks and lime *surki* mortar, with the exterior pointed brick work coloured red. On a four foot high plinth the main office space has a height of 19 feet with a 12 foot high verandah enveloping it all around. This verandah is a typical response to the local climatic conditions, lacking in the case of the Old High Court Building. The extra height of the rooms made it comfortable even without air conditioners or electric fans.

The architecture is a hybrid of local and European styles, with distinct Greco-Roman visual features. Verandah openings are typical colonial segmental archs with distinct and prominent keystones at the centre. The ground floor, done in sandstone is ventilated beneath the plinth to avoid dampness. The building has three porticos in the front facade.

To provide for the need of increased office space while keeping the building's original character, a vertical expansion proposal to convert the Jessore Collectorate into a double-storeyed building was prepared. To make up the difference in levels between the verandah and the main room, a second reinforced concrete floor was cast over it. The space thus gained is used as storage. The facade is treated with three arches for this extra height in place of a single arch below. The verandah parapet and kiosks on the roof of the ground floor were dismantled and have been repeated again on the roof of the first floor. This sympathetic expansion can be favorably compared with the Khulna Collectorate Building, which was done without respect for the original character.

Chummery House

This two-storeyed British building is an example of vernacular architecture of the late Georgian style. The walls are made of burnt clay brick with mud and lime mortar. The exposed brick work is coloured red, in the style of the day, built around 1911. The sloped and conical-shaped roofs were covered with wood shingles. The roof was subsequently changed to corrugated asbestos sheets. There were large-scale changes to the exterior during the course of maintenance work over 70 years by people who showed little thought for architectural character.

To suit the present user, there has been large-scale change internally, but the outside has been more or less faithfully restored in 1985, except for

the roofing. The wood shingle roof was found to be too expensive and also unsuited to the local climate. Asbestos tiles, specially manufactured, have been used in the same details as the wood shingles, reducing the cost and increasing the longevity of the roof. The completed landscaping has enhanced the beauty of the surrounding area.

Conclusion

The Antiquities Act as amended up to 1976 allows the Archeology Department to declare a monument or site as an Ancient Monument to be preserved under the law, if it is in existence for not less than the preceeding hundred years. If and when a building is declared an Ancient Monument (the total number across the country is only around 200), usually other than posting a sign board that the property is protected under the Antiquities Law, very little work is done to conserve the site or structure. Since most of the structures have been abandoned, the ravages of nature and vandalism on the mostly masonry-built architectural heritage of Bangladesh is thorough and ruthless. Even if the structure is not abandoned and is occupied by rightful descendents of the owners or others, then (perhaps because of lack of knowledge) the abuse is often so great that it totally defaces the building beyond recognition of its original form and character.

In addition, whatever efforts in the name of conservation or restoration have been undertaken have been done in an isolated manner. No area as a whole has yet been conserved; as a result the impact and feeling of the old heritage cannot be perceived in its appropriate environment. In the name of development, particularly in towns and cities, our heritage is being demolished rapidly.

In all our towns, buildings and areas need to be identified as part of our cultural heritage and proper documentation needs be done. Besides merely posting a sign saying that the building is protected under the law, its history and importance should also be included on the sign board to inculcate awareness and pride in the people of the area. The Archeology Department should organise short courses on restoration and conservation to be attended by officers and staff of the Public Works Department, the municipalities and other organisations responsible for repair and maintenance of our public buildings. This will prevent at least some unintentional defacing and destruction of our architectural heritage.

Lastly, through local bodies constituted for the purpose, permission for development in the areas identified as culturally important should be given only after ensuring that the new development is integrated with, or better, is in complete harmony with our heritage.

ARCHITECTURAL CONSERVATION OF PAHARPUR AND BAGERHAT

Nazimuddin Ahmed
A.K.M. Shamsul Alam

The importance of preserving historical buildings is very great, for these are not only the infallible evidence of unrecorded history but they faithfully reflect the cultural attainments of people in different ages. However, their protection and preservation as heirlooms of the past cannot be totally divorced from the immediate environment in which they were built. It is, therefore, equally important to protect the environment of a monument or group of monuments from unplanned development in the area. The environment may be adversely affected by various factors: encroachment by squatters, vendors, beggars and the like, or by atmospheric pollution, industrial developments, and unplanned building activities. The tranquil landscape of an agrarian belt around a monument may be seriously threatened by urban expansion, sometimes with smart highrise buildings, as against construction in the traditional building style.

Legislative Provisions for Protection

The protection of the environment of a monument is not possible without suitable legislation. Ideally this should be done by a type of legislation with the least punitive provisions, which otherwise might give rise to unfriendly, if not hostile, attitudes towards the monuments by the people, which is undesirable. Besides, the increasing modern trend is to encourage the enlistment of sympathy and cooperation of the local people for the protection of an historical monument. The people around must be made to feel that the protected monument is an integral part of their daily life which is still useful and not as an expensive luxury of no good to the common man. However, unfortunately too often it is felt that rigorous punitive provisions in the Antiquities Law are necessary for the monuments' protection, such as the imposition of fines, the power of compulsory acquisition or the power to demolish incongruous structures within the conservation area.

In Bangladesh responsibilities for the protection and preservation of listed monuments, for excavation, survey, control of traffic in movable antiquities, regulating foreign excavation missions and establishing site museums, are entrusted by law to the Department of Archeology and Museums. It has to protect and conserve 229 protected monuments and old sites for which about one million taka is annually allocated. This imbalance between resources and the number of monuments accounts largely for the inattention paid to many monuments and sites. There are a number of legal provisions to guide the Department's activities, such as the Antiquities Act of 1968, the Archeological Works Code of 1938, the Treasure Trove Act of 1878, and the Manual of Conservation of 1922. The pattern is more or less the same in India, Pakistan and Sri Lanka, all introduced in British India about a hundred years ago.

The Archeological Survey of India, of which the Bangladesh Archeological Department is an heir, was established in 1861 and General Cunningham (1861-1883) is regarded as the Father of Archeological Survey in the sub-continent. With the appointment of Sir John Marshall as the Director General of the Archeological Survey of India, a new era dawned in the field of preservation of historical monuments. The broad principles he laid down in 1922, elaborated later in his Manual for the repair and preservation of monuments, is still more or less followed in India, Pakistan, Bangladesh and Sri Lanka. He defined his policy succinctly in the following statement, "The object ... is not to reproduce what has been defaced or destroyed, but to save what is left from further injury or decay, and to preserve it as a heirloom for posterity". Further he insisted that, ... "(i) hypothetical restorations are unwarranted, unless they are essential to the stability of a building; (ii) every original member of a building should be preserved intact, and demolition and reconstruction should be undertaken only if the structure could not be otherwise maintained, (iii) restoration of carved stones, carved wood or plaster moulding should be undertaken only if the artisans are able to attain the excellence of the old; and (iv) in no case should mythological or other scenes be recreated". He established the practice of making detailed documentation (photographs, drawing, conservation notes) of a monument before and after its repair.

Bangladesh is heir to a rich archeological heritage, extending over two thousand years, representing Hindu, Buddhist, Islamic and the British epochs. These are as varied in character as they are historically important.

Topographically, Bangladesh is one of the largest deltas in the world, occupying a landmass of 55,598 square miles. The entire country is criss-crossed by a network of rivers. Their enormous quantities of fertilizing silt carried from upstream enrich the soil but at the same time the rivers cause

untold suffering by devastating floods and by engulfing settlements and monuments in their ever-shifting beds. However, these factors of climate and topography, more than anything else, conditioned the development of the building arts in this land.

Obstacles to Preservation

Natural agencies causing degradation to old buildings are waterlogging, salinity and rank vegetal growth in our semitropical humid climate. Heavy monsoon rains, flooding the countryside for the best part of a year, often form small pools of water against a building causing dampness and damage to its foundation. Rising damp due to a high water table or seasonal inundation and the resultant heavy sulphate or salt attack, recycling themselves through the fabric of the building, cause serious degradation. The growth of lichen and moss not only disfigure the monuments and their decoration but are also responsible for considerable erosion to the brickwork.

Being predominantly an alluvial country without great resources of stone or timber, brick has been the chief building material in Bangladesh through all ages. Most of the pre-Muslim buildings were built with perishable but indigenous materials such as mud, bamboo, reed and wood. (Only the more pretentious buildings were constructed of kiln-burnt brick, laid in mud mortar). Due to heavy monsoon rains, most of these monuments built with fragile and easily perishable materials have crumbled to the ground.

Deliberate destruction by man has also been extensive. Many monuments, which might otherwise have escaped natural destruction, were deliberately pulled down by a new conqueror, either to satisfy his iconoclastic zeal or to secure ready materials for the erection and embellishment of his own edifices. Age-old vandalism to ancient monuments and jungle-clad mounds for treasure-hunting or the illegal extraction of bricks, is a common phenomenon. With the increased building activities in the country after independence, bricks, especially ancient fired bricks, became treasures overnight for their market value. As a result the ancient mounds, which so long remained untouched because of superstition, became targets of wholesale looting.

Bangladesh has one of the highest population densities in the world. With its alarming growth and constant pressure on the extremely limited land, the government faces great difficulty in meeting food requirements. It had to launch the 'Grow More Food' campaign which, although it is an admirable drive, has meant that the fallow infertile mounds which cover

the remains of ancient habitations are reclaimed daily for increased food production.

There is a new growing threat to the monuments of religious character, such as mosques, temples and stupas which are still in use. The leaders of many social and religious groups, often in misguided zeal or motivated by self-advancement, are keen to restore, renovate, enlarge and modernize the 'ugly' old monuments by giving them a smart modern look; they thereby strip them of their original character.

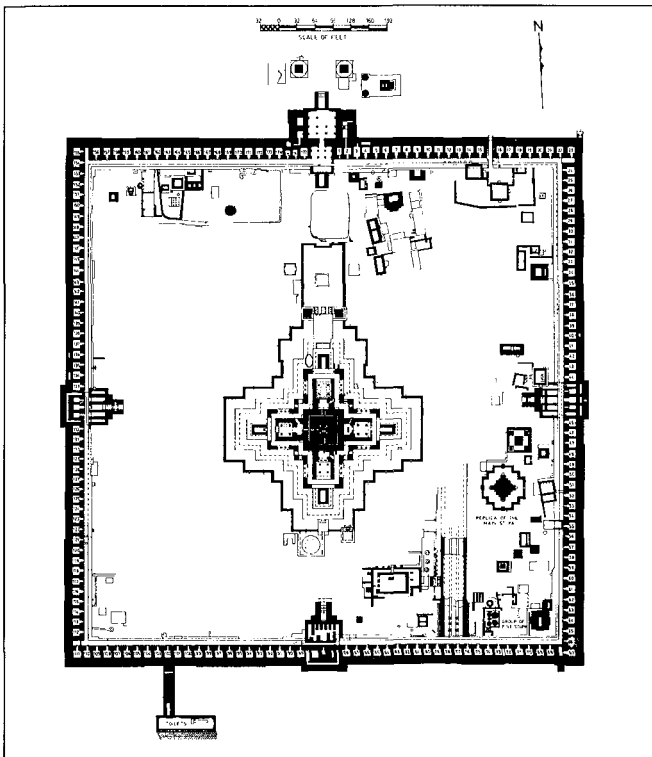
Paharpur

At the Paharpur Buddhist Vihara in north Bengal — the most spectacular pre-Islamic monument of the country (8th century A.D.) and the largest single Buddhist monastery in Asia — waterlogging and salinity are the chief causes of degradation. The vast courtyard of the monastery, enclosed within 16 feet thick walls, is now a rain catchment area, created by the excavation of an enormous quantity of earth accumulated in last one thousand years. In the height of the monsoon the central cruciform temple seems to float in a vast sheet of trapped water which fails to drain outside, for the surrounding level of ground has risen considerably due to centuries of soil formation. This has not only undermined the foundation of the lofty central shrine but has also contributed towards the decay and disfigurement of the terracotta and stone sculptures adorning the base of the monument. As a matter of fact, the present level of the monastery courtyard needs to be lowered a further one and a half metres in order to expose the beautiful stone sculptures now buried under the ground, because these were originally a part of the scheme of decoration of the temple wall. However, if the present ground level is lowered further, the situation is bound to be aggravated during the rainy season from June to September, unless some device is adopted to drain out the trapped rainwater.

After carefully studying the major climatic parameters for the area — relative humidity, evaporation, and rainfall — and monitoring the water level hydrograph, a 5-year drainage scheme was prepared for the site by a UNESCO consultant, funded by the UNDP, and begun in 1987. It consisted of excavating the courtyard to a depth of one and half metres with a gradient toward the south-west where a masonry pool, acting as sump, would receive the rain and ground water discharge. The large volume of runoff water during the monsoon, collected by gravity flow from a network of sub-surface drains, will be pumped out constantly by a submersible pump to the outer perimeter drain which eventually will discharge into a *beel*, located south-east of the monastery. At present the outer perimeter



Paharpur Buddhist Vihara Built in the 8th century AD, it is the largest Buddhist monastery in Asia and Bangladesh's most spectacular pre-Islamic monument UNESCO has funded a drainage scheme to correct waterlogging and salinity affecting this monument



Plan of Buddhist Vihara at Paharpur (Incomplete)

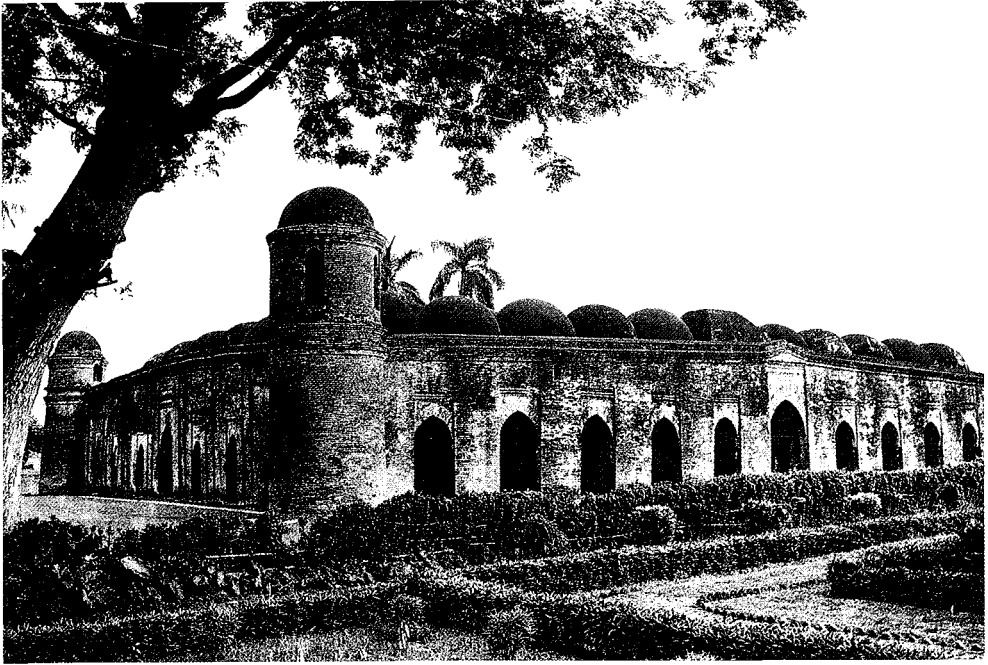
drain has almost been completed. It consists of excavating a strip 46 feet wide along the outer perimeter wall of the monastery on all four sides in different gradients.

Besides these perimeter drainage operations, the huge volumes of excavated debris of 1934 have been removed to a uniform distance of 50 feet away from the monastery wall, to form an earth wall around the site to be developed later as a pedestrian walkway.

During the monsoon season some of the water manages to run off the temple building, but a considerable volume of water percolates through open areas and is absorbed into the main body of the structure. In order to prevent that, a series of 10 inch thick concrete slabs were inserted earlier in the open spaces and the procession paths. These were covered under brick chips and earth with gradients to the corners where earthen pipes, embedded in the masonry, took off the water quickly to the drain around the temple base. All these are now concealed under earth and grass. In the course of time some of these earthen pipes have become clogged and unserviceable. The present proposal therefore is to remove the present capping to the monument and lay a waterproof membrane, encased in concrete, in such a way as to control the collection of rainwater. This waterproof barrier then will be re-capped with random brick and grass cover.

Although it is not advisable to undertake large-scale restoration work of the temple, the original form of whose upper damaged part is unknown, it is certainly necessary to reconstruct, wherever possible, some building features still traceable, such as cornices, string courses, and wall cappings. It is particularly necessary to rebuild certain critical areas of the central temple, such as the entry sections where evidence of a former cornice is still visible, in order to protect them from the copious runoff from the catchment areas above. Similarly on some of the lower parts, capping and cornices can be reconstructed above the rows of terracotta sculptures in order to prevent the collected rainwater from running over them.

One of the main emphases of the restoration and preservation of the Paharpur monastery is to protect its original peaceful rural environment. The Master plan for Paharpur, prepared in 1983, strongly stressed the need to secure a belt of farmland immediately surrounding the monument in order to ensure that the view within the present 'tree-horizon' is maintained as rural landscape. It is all the more imperative in view of the fact that sooner or later the coal and limestone deposits found in the area around Jaipurhat are bound to be exploited.



Bagerhat abandoned city view of the Shait Gumbad Mosque, 15th century Built by Ulugh Khan Jahan in his capital city

Bagerhat

In the inhospitable mangrove forest of the Sundarbans, a prosperous township was systematically laid out in mid-fifteenth century by an obscure warrior-saint, known from his inscription as Ulugh Khan Jahan, at the present site of Bagerhat. This small township sprawls abandoned along the bank of the Bhairab river on an earlier settlement about five hundred years old, then known as the mint town of Khalifatabad. Khan Jahan adorned his capital city with many magnificent mosques, bridges, roads, and other public buildings in an astonishingly short period, the desolate ruins of which may still be seen for miles around, half-hidden in luxuriant coconut and palm groves.

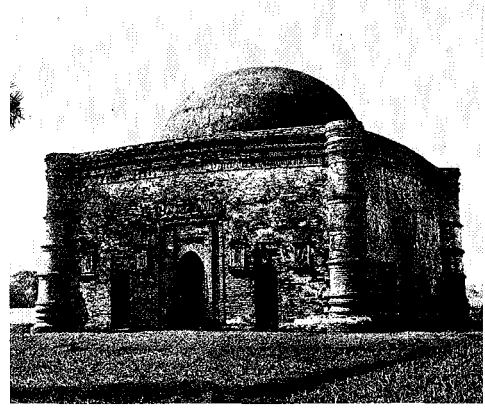
The architectural style introduced by Khan Jahan is an uncommon blending of indigenous elements with the imperial style of Delhi — at a time when the political and cultural life of independent Muslim Bengal clung obstinately to its provincial individuality.

In Bagerhat there are scattered vestiges of many surviving single-domed and multi-domed mosques besides the great Shait-Gumbad Mosque (the largest in Bangladesh) and the mausoleum of Khan Jahan.

This magnificent group of monuments stands distinctly apart from other contemporary monuments in Bangladesh and may fittingly be de-



Bagerhat, Chunakhola Mosque: shown before conservation, this 15th century Mosque is part of the township described as the eastern version of the Tughlag architecture of Delhi



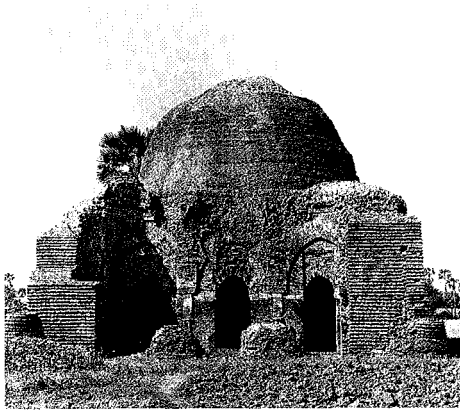
The Chunakhola Mosque after restoration, showing the blending of indigenous elements with the imperial style of Delhi. In Bagerhat as at Lalbagh Fort, rising damp has been counter-acted by the infusion of silicone solution into the lower walls.

scribed as the eastern version of the Tughlaq architecture of Delhi, bearing a particular affinity to the Kalan and Khirki mosques near Delhi, built a century earlier. However, regional elements evolved in Bagerhat, such as the curvilinear cornice and the terracotta adornment, make this group a significant milestone in the history of this particular style of architecture in Bangladesh.

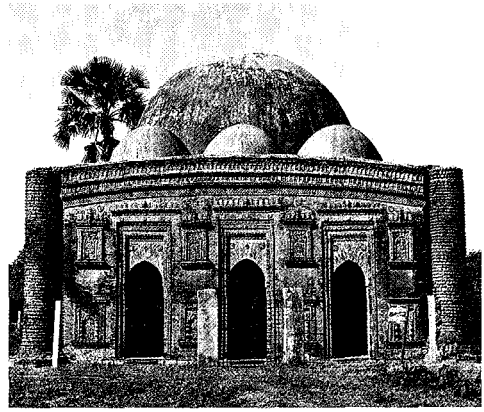
The principal factor responsible for the rapid decay and disintegration of these monuments is the extreme salinity in the area. This low-lying zone close to the sea-coast is subject to regular salt water flooding with the ebb and flow of the sea. In addition, the floor levels of all these monuments are, curiously, built in level with the surrounding low countryside. As a result, the buildings perpetually remain saturated with salt-laden moisture, the corrosive effect of which is very apparent on the brick walls and stone columns which often buckle or cave in.

In order to counteract the corrosive effect of salinity, the Department has successfully carried out a number of simple but effective experiments to arrest the rising damp in the walls of two badly affected monuments in Bagerhat and at the Lalbagh Fort with excellent results. The first method was the transfusion of damp-proof silicone solution which permeates the wall at low level and forms an impenetrable barrier, for the silicone breaks down the process of capillary attraction that causes the dampness to rise.

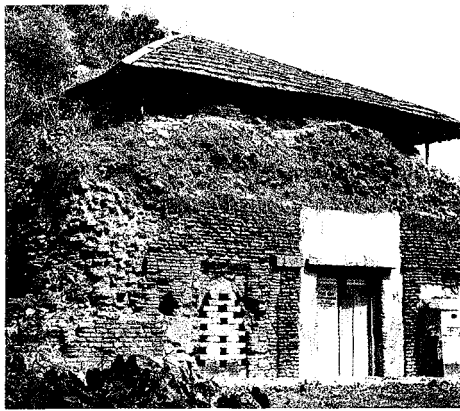
The second test, aimed at preventing the extensive erosion on the brick face caused by the transfer of salts into the new brickwork, was the insertion of heavy duty polythene sheets as an impervious vertical barrier



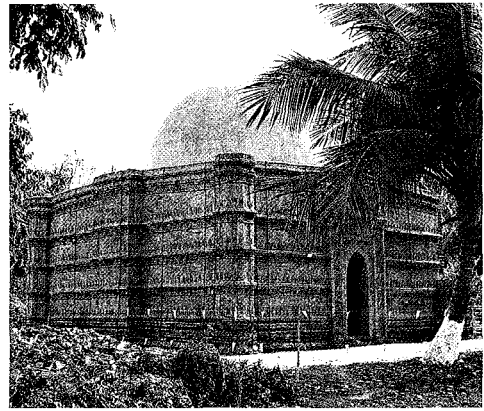
Khania Dighi Mosque, Gaur, 16th century, shown before restoration



Khania Dighi Mosque after restoration under the supervision of the Department of Archeology, Bangladesh



Gorar Mosque, Jessore Built in the 16th century, the view shows the collapsed dome before restoration

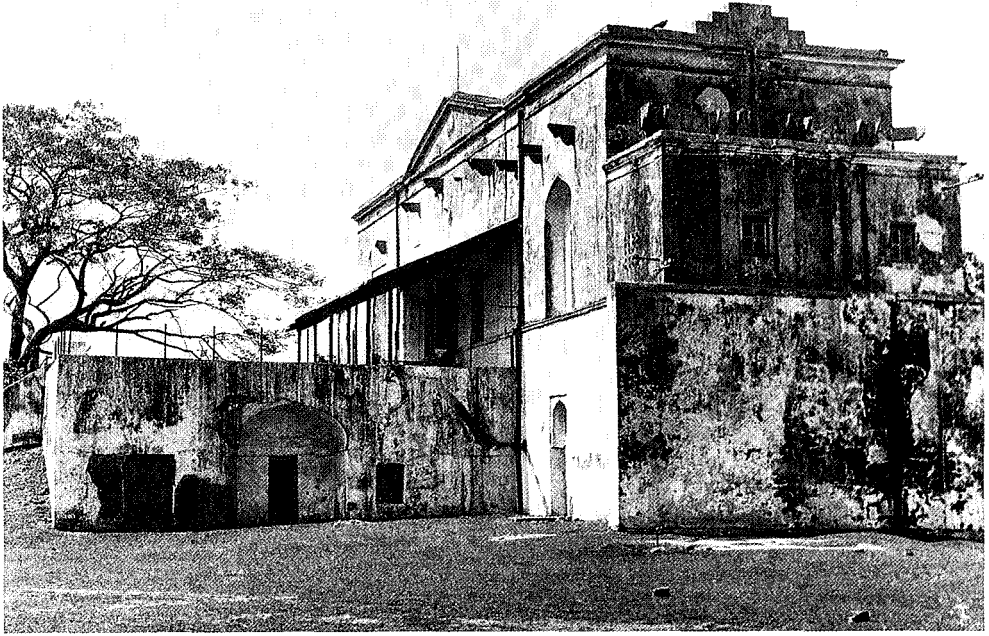


Gorar Mosque after restoration The dome was carefully rebuilt following surviving traces.

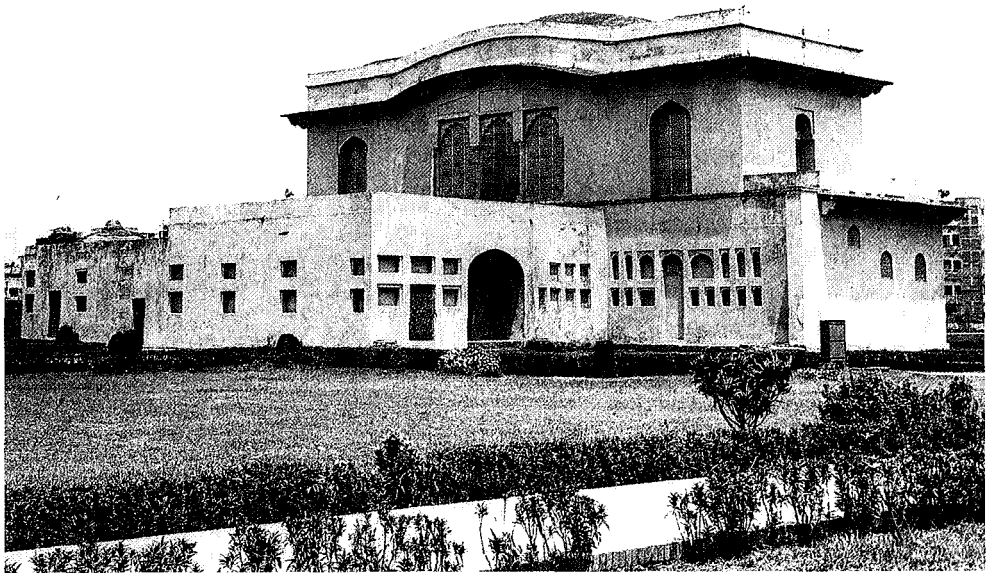
between the old and the new brickwork. It effectively prevents the crystallization cycle of the waterborne salts. The deleterious salts afterwards will need to be leached out of the bricks, and the brickwork consolidated and protected against further sulphate attack.

Other Projects

Conservation efforts of the Department of Archeology have been executed in last few years at the Bagha, Kusumbha and Khania Dighi Mosques in Rajshahi, the Gorar Mosque in Jessore and the Galdi Mosque at Sonargaon, built during the independent Sultanate period (1338-1576). All the collapsed domes of the terracotta-rich Bagha Mosque, Gorar Mosque, Galdi Mosque and the stone-built mosque at Kusumbha were rebuilt carefully, following



Lalbagh Fort, Audience Hall and Hammam (17th c) shown before restoration with its modern additions and changes



Audience Hall and Hammam after careful removal of the encrustations, revealing original windows, arches, and roof details. It has been converted into a Mughal period museum

the surviving traces of their domes. At the Lalbagh Fort, careful removal of the encrustations caused by many years of renovations and modern additions to the Hammam and the Audience Hall revealed a series of multi-cusped arches carried on four sets of ornamental twin stone columns on its east and west faces. All its original features, concealed or partly destroyed, such as eaves and brackets, were restored to their original conditions and converted into a Mughal period museum. At the same time a typical Mughal garden with symmetrical lawns, pathways, fountains and flower beds was relaid after digging up buried vestiges. The preserved monuments within the fort with its recreated original landscape invest these with a glory that had long departed. It also provides a desperately needed "breathing space" in a crowded old city.

Increased awareness of the public to protect and preserve its heritage will greatly help the handicapped Department of Archeology in planning. In addition to the efforts of the national government, the launching of UNESCO's International Campaign in 1986 for the preservation of Paharpur and Bagerhat monuments, for their inclusion in the World Heritage List and for the creation of an International Trust Fund to supplement the national effort was very encouraging. Together with the generous assistance of UNDP in strengthening the Department of Archeology and Museums in its efforts to protect and preserve historical relics, these measures offer a bright prospect of safe-guarding and preserving these priceless legacies of Bangladesh.

SHAKHARI PATTI: A UNIQUE OLD CITY SETTLEMENT, DHAKA

*Abu H. Imamuddin
Shamim Ara Hassan
Wabidul Alam*

Many of the localities of Old Dhaka are named after the specialized trades or crafts for which they were distinguished. Shakhari Patti is noted for the trade and craft of *shakha* ornaments. The shakha ornaments have a specific socio-cultural value, applied only to married Hindu women, which ensures its regular and widespread use in Hindu areas. Shaka is crafted from conch shells by specialized craftsmen known as *shakbaris* who belong to a specific Hindu caste. The inhabitants of Shakhari Patti are still shakbaris and their concentration in that locality for centuries generated a unique settlement pattern.

In the urban context of Dhaka, Shakhari Patti is significant in more than one *way*; culturally the area houses a specific ethnic group; socio-economically it provides trade and business for a very special kind of craft; architecturally it demonstrates a development pattern and morphological characteristics typical to that area. Unfortunately recent observations of Shakhari Patti clearly show an active process of decay and destruction primarily attributed to unplanned growth, random alterations, over-densification and poor maintenance. The following is an objective analysis of Shakhari Patti to identify the area as a case for socio-economic conservation, based on a survey undertaken by the fourth year students of architecture, Bangladesh University of Engineering & Technology (BUET), under the guidance of the authors.

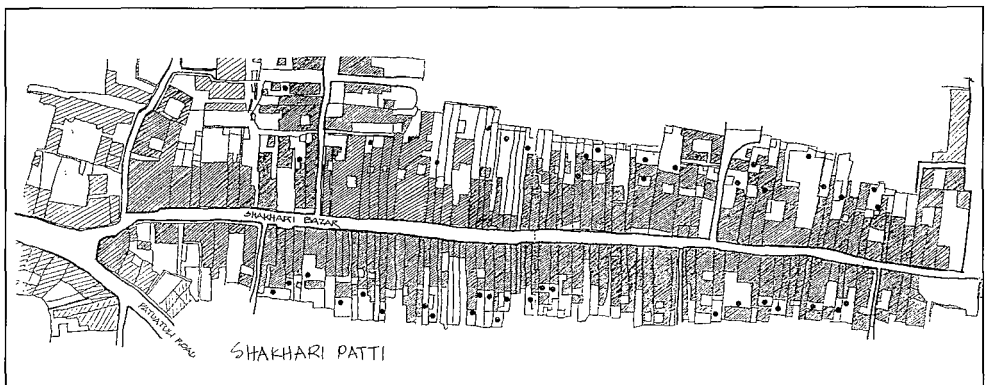
Location and History

Over a span of few centuries the settlement at Shakhari Patti has grown along a narrow road 10 to 12 feet wide connecting Islampur Road with Nawabpur Road, along a distance of about 600 feet. Rows of densely-built houses, of an average width of only 9 to 12 feet but extending to great depths of up to 90 feet flank both sides of the street. The street fronts of the ground floors are used for manufacturing and sale of conch shell items

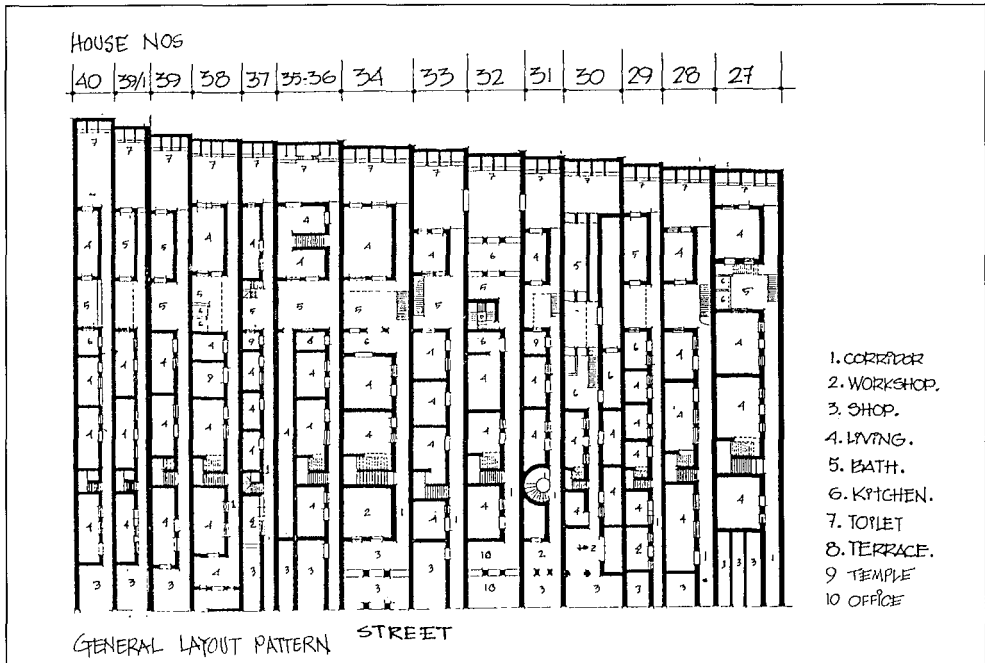
while the rear parts of the ground floors and the upper floors are used for residential accommodation. Typical building features are high plinths, triple arches in ground floor facades, upper-floor balconies overlooking the street, and decorated parapets.

According to history, Shakharis are originally inhabitants of South India who migrated to this region some 800 years ago and settled in Vikrampur. Subsequently they received official patronage from Moghul rulers who brought them to Dhaka, allotted free land in the present Shakhari Patti area and waived taxes and duties to encourage the growth of trade. The trade flourished for few centuries, concentrated within the same area. It experienced its first serious setback after the partition of India when Dhaka became the Provincial Capital with a Muslim majority. A mass migration of Shakharis to India and the continuous infiltration by others into Shakhari Patti changed the traditional homogenous character of the trade and community to a large extent. However, the Hindu population still maintained a majority. The second setback came in 1971 during the liberation war of Bangladesh when numerous houses in Shakhari Patti were destroyed and a second mass exodus of Shakharis to neighbouring countries took place.

With a small group of craftsmen still remaining, business continues in the locality but on a much-reduced scale. Stiff competition, lack of patronage, infiltration of other trades into the area and disinterest and reluctance on the part of the new generation of Shakharis to continue with this trade of seemingly limited prospects have caused a general decline in the practice of the craft.



Shakhari Patti, Dhaka Site plan shows the extreme length and narrowness of the plots, strung along one main bazaar road



Plan showing the general layout pattern of the houses with dispositions of the functions in the various rooms

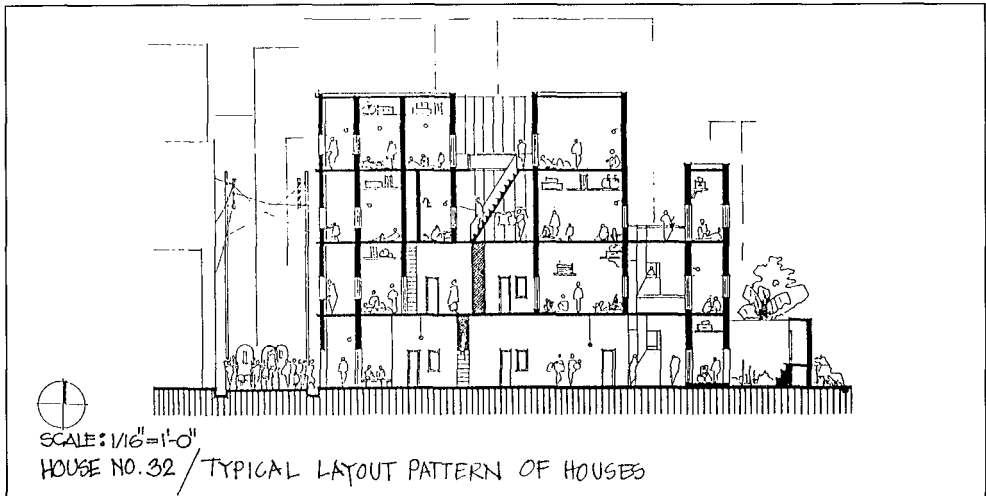
Morphological Development Process

A striking characteristic of the area is the oblong and linear plots with very narrow frontal widths. The following factors may have been responsible for the development of such plot shapes :

1. Each original allottee may have received a plot with street frontage so that living and trading could be practiced together. However, as business flourished, the living quarters could only expand backwards. Such expansions could only proceed up to 70 to 80 feet as similar backward growths from an opposite lane set limits.

2. Security aspects such as threats of burglary or robbery may have encouraged Shakhari to build closely-packed houses along narrow streets whose only two openings could easily be sealed, shutting off the whole area if necessary. Narrow houses approachable only through narrow dark corridors and unexpected stairways were perhaps deliberately designed to confuse intruders.

3. Another reason for narrow plot sizes could be the subsequent divisions among successors each requiring a street frontage. For example



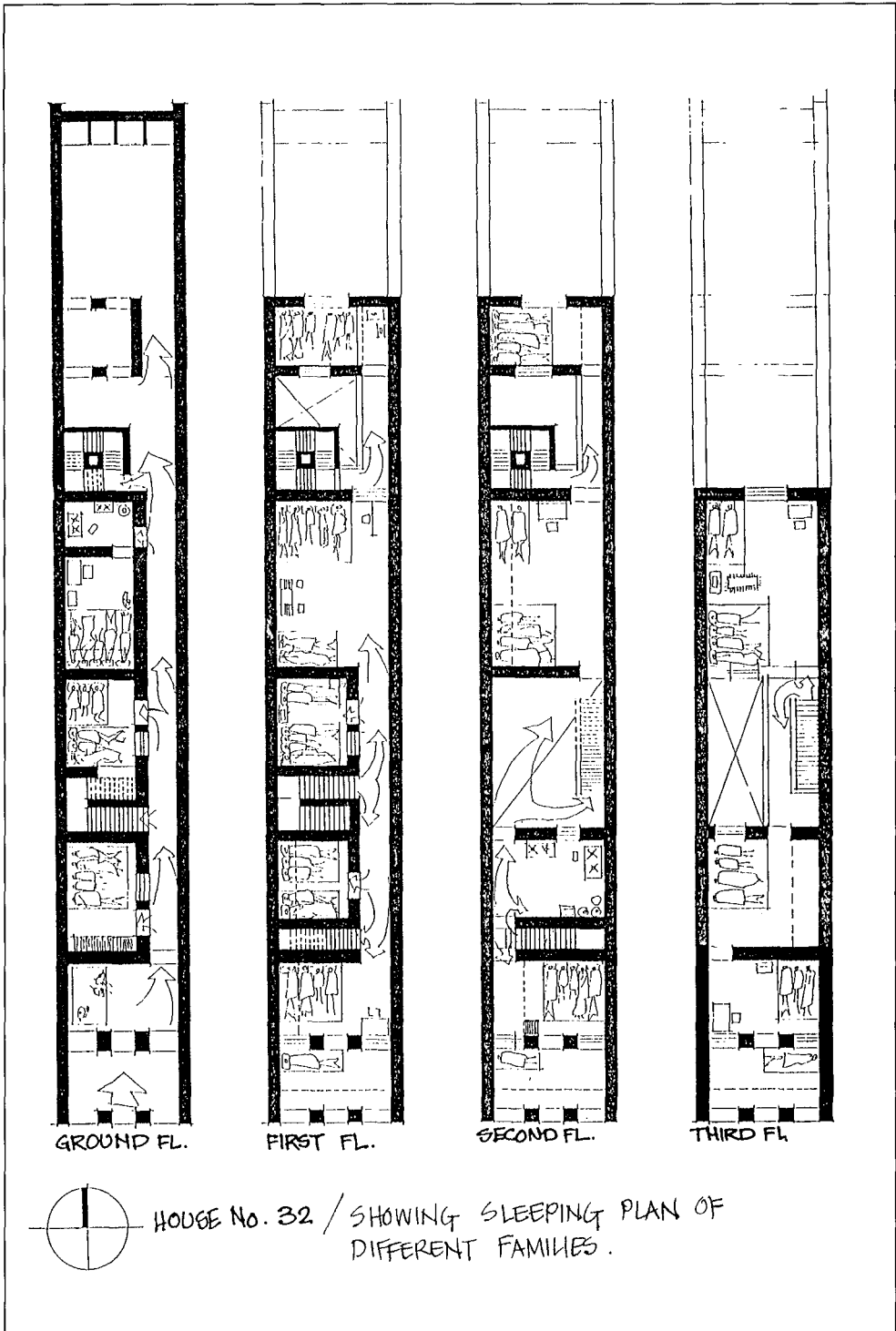
Section through a typical house showing height and disposition of rooms Each house is occupied by many families

the three houses numbered 46, 47 and 47/1 were previously known as "Nach Mohal" and were originally one single house on a plot measuring 60 feet by 90 feet, owned by the landlord of Manikganj, Zamindar Balaram Dhar (1857-1906 A.D.).

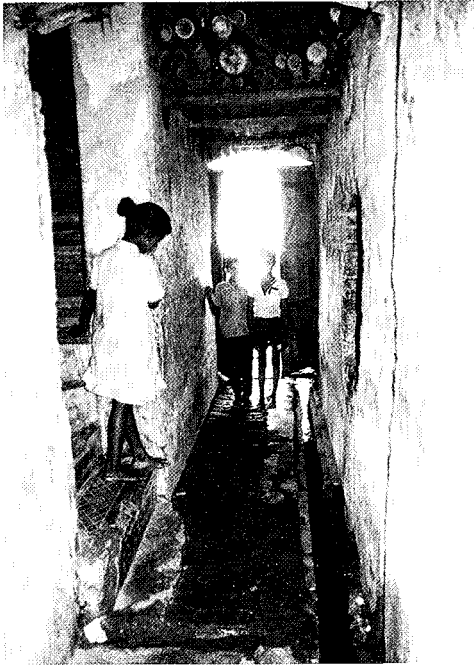
House Patterns and Characteristics

In spite of the piecemeal and sporadic growth of the community over centuries, most buildings in Shakhari Patti exhibit the following common features:

1. Houses are divided into three segments: the commercial part facing the street, the residential area in the middle and the service precinct, consisting of toilets and washing areas, in the open courts at the rear.
2. Access to the inner part of the house is through a corridor placed at the side of the house. Corridors are usually divided by a party wall to provide access to other rooms and to upper floors through stairways. Corridors ultimately terminate to service areas at the rear.
3. Upper floors are mostly used for residential purposes. No separate cooking spaces are provided in buildings; cooking is mostly done within family bedrooms.
4. Rooms are arranged within two parallel party walls along a narrow



Shakbari Patti, Dhaka Plan showing the sleeping arrangements in the tiny rooms



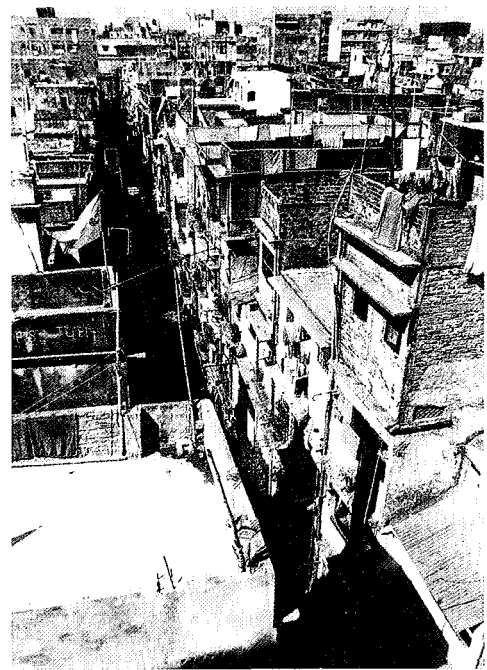
Corridors are narrow but usually provide private access to all of the many families occupying these sub-divided dwellings



A housewife cooking inside Chipa Bari, a house only 5 feet wide



Rooftop view showing the dome of a small mandir or Hindu family temple on the Nach Mahal house The roof top mandir is a typical feature of the Shakhari Patti house though it may not be as elaborate as this one



The narrow street serves the densely-built area

corridor from which two stairways lead to the upper floors.

5. Absence of light-wells in the ground and first floors results in poor lighting and ventilation. Light penetration in these two floors is through the building's front and rear only.

In addition to the above, many houses contain *mandirs* or small temples on the topmost floors and many have balconies on the upper floors overlooking the street. It is interesting to note that a few houses which have been built very recently over old plots follow the same old patterns, as can be seen from house No. 109.

The narrow frontage with extensive depth, the unique characteristic of Shakhari Patti buildings, is found in almost all the houses (for example 115 out of 126 houses in the survey). An extreme example of this is found in *Chipa Bari* meaning "narrow house". It has a frontal width of only five feet and a length of about 70 feet. This was originally known as *Thakur Bari*, a Hindu temple, and was later transformed into a house. A total of twelve families now reside in this house within an area of only 300 sq. feet. Interestingly enough each family area is served by an exclusive staircase thus avoiding interference with other family groups.

However, in general an average house is not far from Chipa Bari's dimensions. For example, house No. 32 measures 14 feet x 85 feet and is located on a plot 105 feet deep. This gives a built-up area of 92%. Sixteen families with a total population of 60 occupy this house.

Narrow plot configurations have imposed so many restrictions on building expansion that the people were left with very limited choices. This typology appears to be a natural outcome of the very socio-physical conditions which created the community.

Shakhari Patti now appears as no more than an inner-city slum inhabited by a poor section of the Hindu community. In the past, however, this area was occupied in general by middle-class people along with some exceptionally rich families. Those houses for the rich were bigger and were laid out in a quite different way from the general typology. Their qualities were comparable to any of the buildings located in the Hindu aristocratic areas like Wari, Narinda and Gandaria. The houses were later sub-divided in such a way that they generated a complicated layout pattern and confused the original intention of use and purpose of spaces within them.

House No. 14 is a typical house built for a rich family. Built between 1890 and 1925, it is strongly influenced by British colonial architecture. It is a three-storeyed building on a plot 32 feet by 100 feet. The building was designed around two courtyards, the front one a public courtyard associated

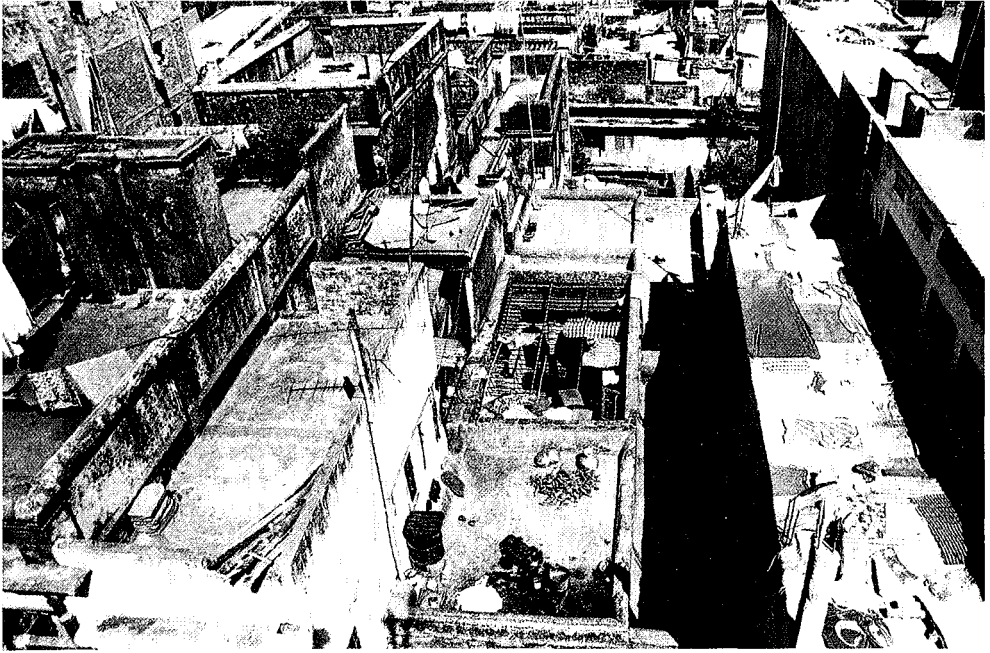
with commercial functions and the inner one serving the purpose of informal domestic chores. The building plan is open and spacious with provisions for ample ventilation and lighting. The house is now occupied by 13 families constituting a total of 73 inhabitants. There are some single-room apartments with the rest occupying two to three rooms. As usual a family temple or *Puja Ghar* exists on the rooftop. This is the only house where provisions for modern sanitary toilets have been made in each floor. Unlike typical Shakhari Patti houses, its street front on the ground level is not occupied by shops.

A tendency to adhere to traditional house patterns can be seen from house No. 123 which has been recently built on an old building site following the original model. Originally built as a two-storeyed building in 1894-95, it was destroyed by fire in 1971. A replacement building was then built in successive phases. This, in a way, can be termed as a conservation work undertaken by the users themselves, incorporating in the process modern and technological amenities as demanded by present day urban living.

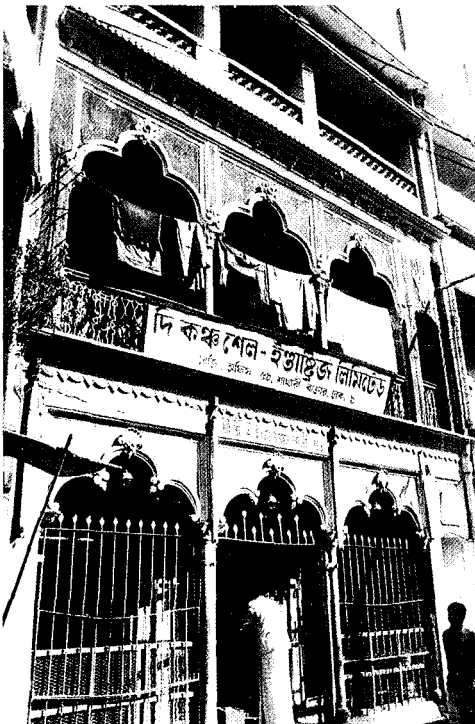
Building Arts, Materials and Techniques

The buildings of Shakhari Patti trace the history and evolution of building crafts, construction and materials of Dhaka for the past few hundred years.

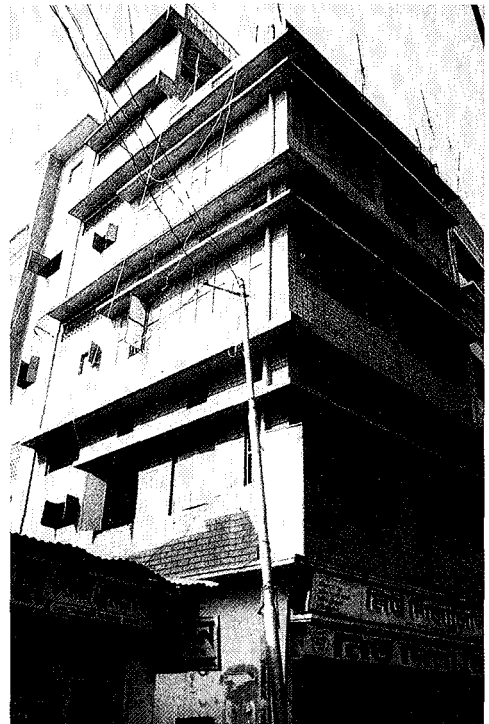
Most of the old buildings were built with load-bearing walls; only the recent buildings follow the post and lintel construction system. The walls of the old buildings are 20 to 24 inches thick and are built with brick, lime and mortar. Brick sizes vary from building to building and in fact are useful means to assess the construction period. The simple rule is, the smaller the brick size, the older the building. In general 1.5 x 4 x 6 inch sizes indicate an early period; 2 x 4 x 8 inch sizes a middle period and 3 x 5 x 10 inch sizes indicate the contemporary period of construction. In old buildings the common practice was to plaster and paint. Arched openings were made over doors and windows and niches were recessed inside the walls to create storage spaces as well as to keep deities and other objects. Various types of columns with ornate capitals were used to decorate facades and inner courts. Some older buildings have vaulted roofs. The rafter and purlin technique for roof construction was commonly found in buildings, for which steel I-beams and wooden beams were equally used. Most buildings have high plinths two to three feet above street level. However, there seems to have been no common agreement regarding ceiling heights as they vary widely from building to building. In some extreme cases even the minimum head room clearance is not provided.



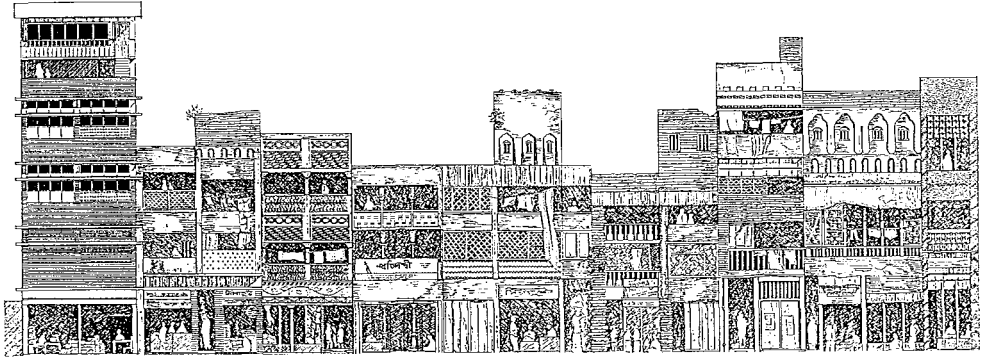
Shakbari Patti, Dhaka. roofs are usually constructed following the rafter and purlin technique.



Shakbari Patti, Dhaka A street facade showing a typical triple arch The signboard says "The Conch Shell Industries Ltd"



A "modern" building in Shakbari Patti clashes with its traditional neighbours



A street elevation shows the highly-decorated facades on the bazaar side, a view impossible to get naturally due to the extreme narrowness of the street

The repetition of common building features and the uniformity in architectural treatment creates an harmony and continuity in the overall development of Shakhari Patti area. For example, in the treatment of ground floor facades, triple arches are common to almost all old buildings. Only the ornate works surrounding the arches vary widely from building to building. It is interesting to note that while the rear portions of most buildings are usually left unfinished or in an incomplete stage of construction, the street front of each building invariably possesses a finished appearance. There seems to be an inherent desire and a concerted effort on the part of the inhabitants to provide this completed look to the buildings when viewed from the street. To achieve this, decorative parapet walls have often been constructed to terminate buildings. The building crafts also show a high level of development which is evident from the intricate designs visible in the cast-iron balcony railings, the brackets and the column capitals in Nach Mohal.

In contrast to the decorative building fronts, the interiors of the rooms are relatively simple and unadorned. Only the niches or recesses in the thick walls contain elaborate carving. The interiors are mostly painted over lime mortar. Most of the doors and windows of the buildings were originally made of expensive wood with decorative designs, and have now been replaced by low quality wood, steel or mill steel sheets. Old cast-iron railings with their ornate work have been replaced in many buildings with ordinary metal grills.

Conclusion

Though for centuries the whole area was inhabited only by Shakharis, today a wide variety of traders such as goldsmiths, artists, and businessmen reside

permanently within this locality.

Shakhari Patti offers a unique roadscape through repetition of common building features and through uniformity in architectural treatment. This gives a harmony and continuity in the overall development worth conserving, which is now being threatened by modern interventions. The settlement, along with its unique socio-cultural heritage, is now in a state of chaos and confusion. There is a general degradation of the whole area which can be attributed to the following possible reasons:

First, the complex nature of ownership patterns, one of which is "Ownership due to prolonged occupation", has resulted in each house being owned by several families. Ownerships have now reduced to rooms only with rights to use other services. This has generated a sense of insecurity of ownership and subsequent reluctance on the part of owners to improve the condition of their property.

Secondly, the overall economic hardship caused by the decline in the Shakha business is primarily responsible for the dilapidated condition of the houses. This results in a poor rent structure, leading to a vicious cycle of poverty.

Therefore, the conservation of Shakhari Patti would mean a conservation of the *craft* and the community, simply because one is not possible without the other. To effect such conservation, the following recommendations are made:

1. Like other cottage industries, the Shakha business must receive official support and patronage in the form of soft loans, better market facilities and an easier system of procurement of raw materials (an imported item). Shakharis do not presently receive any such incentives.

2. The infiltration of businesses other than crafts in that area must be discouraged or stopped through restrictive laws. The area should be considered as an artisans' village to encourage traditional crafts.

3. The site must be listed as an area for architectural conservation, to prevent demolition of old buildings and to preserve its traditional flavour.

4. Some kind of official ownership rights should be given to the users, on the basis of which loans can be advanced for property improvement. Any plan for development will simply fail without users' participation in Shakhari Patti.

5. Technical assistance necessary to improve the houses should be made available. Better houses will improve the rent structure which will eventually help lower the density.

6. Modern traffic is incompatible with the narrow street of Shakhari Patti. The street has a pleasant pedestrian scale and therefore should be converted to a pedestrian lane, so that one can walk safely while watching the Shakharis at work. Conserving the area, turning it into a more attractive area for residents and tourists alike, should improve business as well as property values while giving people a chance to enjoy the nostalgia for the past.

PART III
WORKSHOP PROJECTS, BANGLADESH



KHAN MOHAMMAD MRIDHA'S MOSQUE, LALBAGH, DHAKA

Paper prepared by: Roxana Hafiz

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The Workshop Brief

Khan Muhammad Mridha's Mosque is located close to the north-west corner of the Lalbagh Fort in Old Dhaka. It was built in 1706, a few years after the fort, and stands on a raised platform which is supported by a series of vaulted chambers. The platform is reached by a flight of steps from the garden which lies on the east side of the Mosque. In addition to the prayer hall, there is a separate structure which stands in the north-eastern part of the platform and serves as a small madrasa. The vaulted chambers below serve undefined purposes.

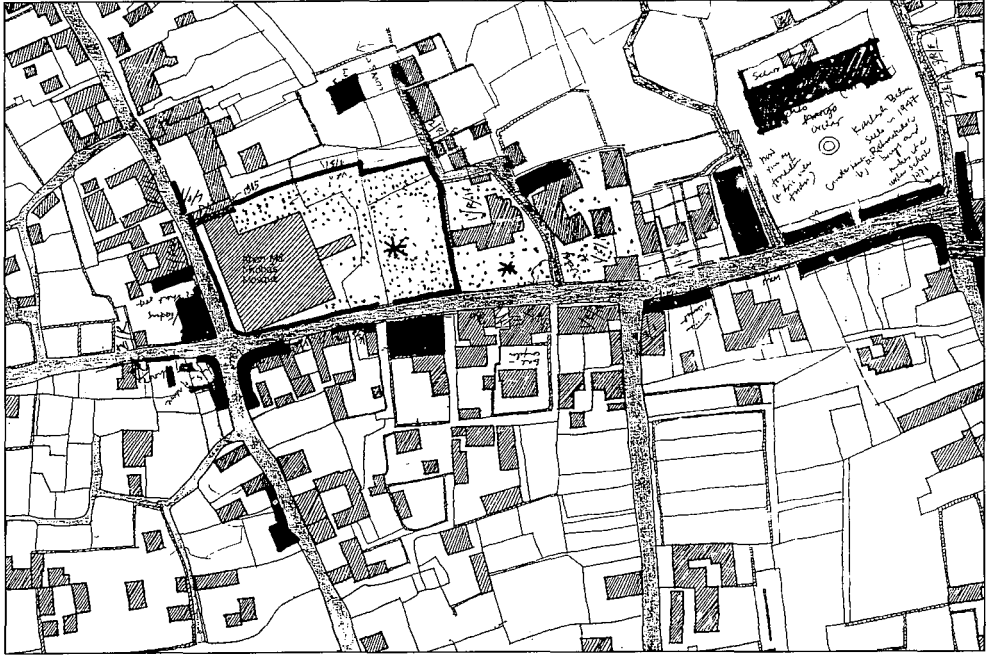
To the north of the Mosque there is a small playground and a six-storey apartment block which dominates the surroundings. On the south and west sides there are streets with buildings of various heights and uses.

The workshop team members are asked to carry out the following six tasks:

1. A survey of the Mosque and surrounding area.

You will need to take rough measurements so that you can draw up floor plans of the Mosque to a scale of 1 and 200 and a plan of the whole area to a scale of 1 in 500.

You will also need to examine and consider the structure, finishes, decorative details and services of the Mosque and the general condition of the garden. Regarding the surrounding area, you are not expected to enter into every building, but to make a rough and mainly external survey only, reporting on the



Area plan of northern part of Old Dhaka, showing the site of the Khan Mohammad Mridha Mosque and garden

general condition of the buildings and examining the spaces between the buildings.

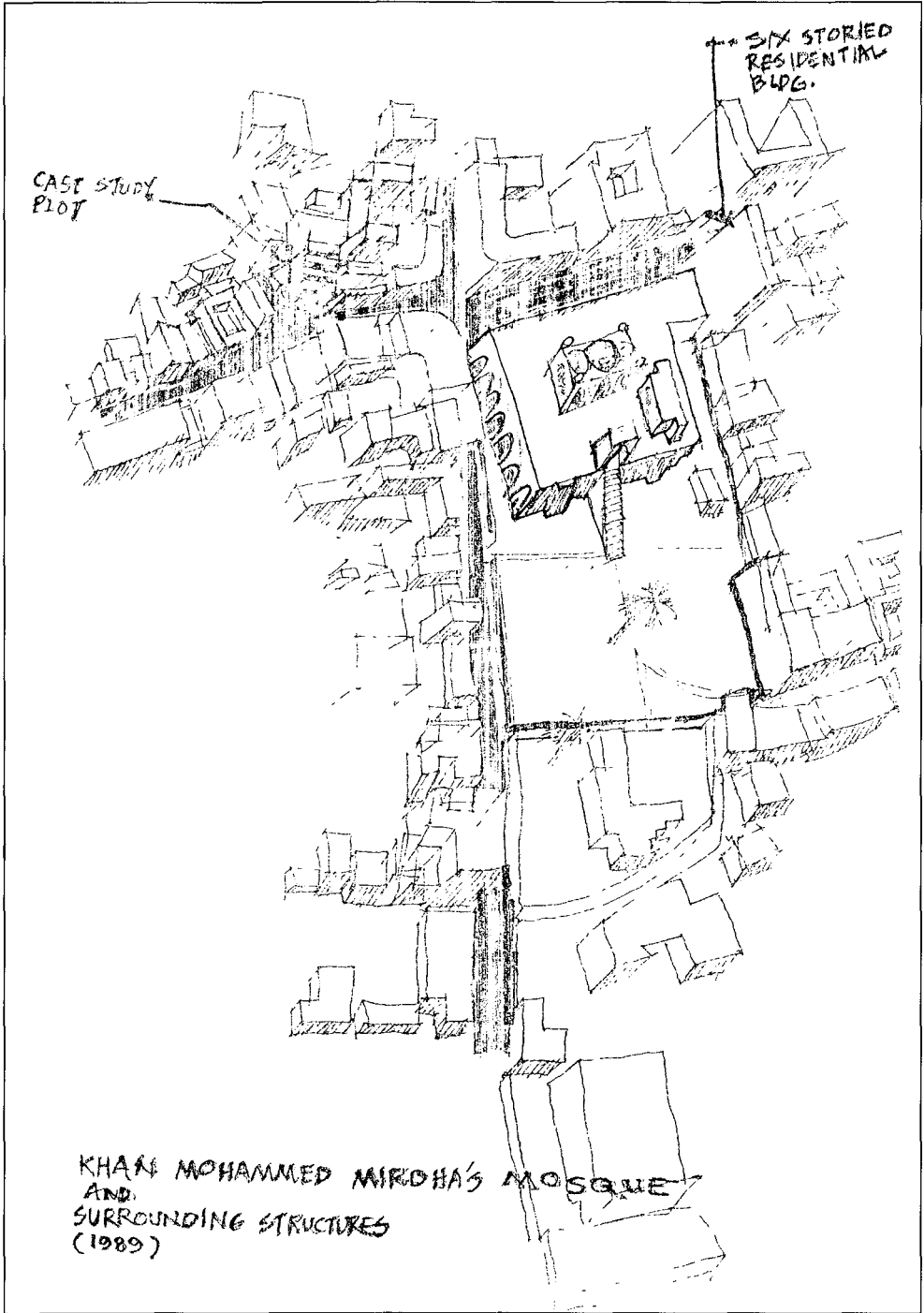
2. A proposal for the restoration of the Mosque.

This task is to be seen as distinct from the conversion of the cells around its base to new uses. It will include the removal of all accretions, making the building weathertight, a better solution for the disposal of the rain-water and the work necessary to restore the building externally to something like its former condition.

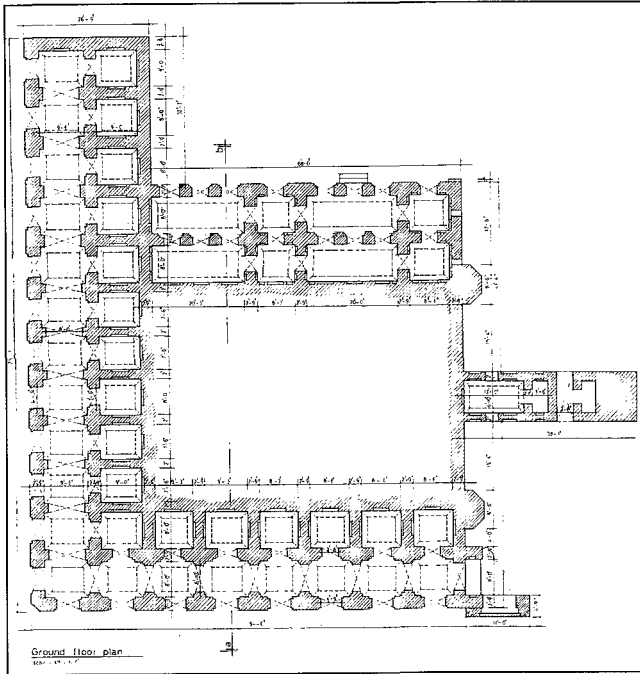
3. A proposal for the rehabilitation and conversion of the cells around the base of the Mosque to new uses.

In developing this proposal you are asked to consider the relationship of the cells with the raised space outside them, and to the two streets which run alongside but at present on the other side of a wall.

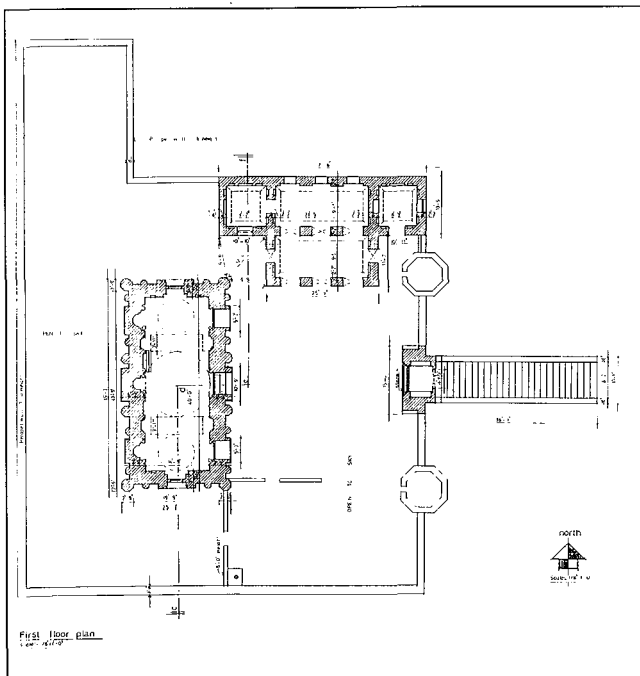
You will need to draw the floor plan to show the new uses and the changes you propose to make. Drawings should be to a scale of 1 in 200.



The area to be treated by the case study plan showing the Mosque and its surroundings



Ground floor plan of Khan Mohammad Mridha's Mosque, showing the cells around the base presently used as living quarters or for miscellaneous uses



The Mosque's first floor plan shows the wide terraces used to accommodate over-flow crowds. The north-eastern structure is used as a madrasa and as a hujra (living quarters for the Imam)

4. A proposal for the restoration and improvement of the garden to include the demolition of the existing open ablutions for the Mosque and their replacement by new facilities.

In making new planting proposals for the garden, consideration should also be given to ways in which the impact of the six-storey white apartment block to the north might be reduced. Plans of the garden showing the proposed re-planting and new layout, and the design for the new ablutions block should be drawn to a scale of 1 in 200. Elevations and sections of the new ablutions block should be drawn to a scale of 1 in 100.

5. A proposal for a new building in one of the streets which run past the Mosque.

Land values are high in this part of Old Dhaka and the restoration and rehabilitation of the Mosque and garden, even the construction of the new and offending six-storey apartment block, have pushed these land values even higher. There is pressure to redevelop and several landowners in the street are considering taking advantage of the situation.

In your design proposal for a specific site, which will be given to you, you will need to consider height and bulk limitations and other design guide-lines to help achieve a sympathetic solution which will also give the landowner the returns which he is looking for.

Floor plans should be drawn to a scale of 1 in 200 and elevations to a scale of 1 in 100.

6. A proposal for the upgrading of the street environment.

You will need to consider the space between buildings, or between buildings and garden. You should examine the quality of the services, the floor surfaces, the wall surfaces, the street furniture, the overhead wires, the lighting, etc.

Introduction

Khan Mohammad Mridha's Mosque is one of the oldest structures — nearly three hundred years old — situated in Lalbagh, close to the famous Lalbagh Fort.

Lalbagh itself is located on the northern fringe of old Dhaka. Originally Lalbagh was a garden-villa area for the Mughal nobility. Gradually it developed into an upper middle-class residential area of Hindu merchants in the British Colonial period. The area was then well populated, if not dense. After partition (1947) most of the Hindu population left for India, and was subsequently replaced by Muslims.

The Mosque is a live monument — historically important and still being used by the local faithful. It was built in 1706 A.D. by Khan Mohammad Mridha under the patronage of Quazi Ibadullah.

The Khan Mohammad Mridha's Mosque illustrates the elaborate style of the single aisled multi-domed mosque of the post-Shaista Khani period. The Mosque follows the "qua-plan" of the Muslim Madrasa, which was so extensively used in Egypt during the Ayyubid and Mameluke periods (11th to 15th C. A.D.). It is unlike any other — the Mosque proper is built on a platform or podium. It exemplifies the architectural characteristics of the Mughal era. Therefore the Mosque needs to be conserved not only for its religious meaning and its historical value, but also for its unique architectural characteristics.

The Site, and a Survey of the Mosque

The built-up area of Lalbagh is irregular and haphazard. At the street level most of the structures around the Mosque have commercial uses, such as shops of various kinds, small foundries, small-scale printing presses, and cottage industries. This type of development is of recent origin, and probably has grown from the commercial potential of the area. Most of the structures are three to four-storey walkups. The Lalbagh area has services like water, electricity, gas and sewerage.

The Mosque is situated in the south-west corner of a walled compound of 0.8 acres. This corner is also the intersection of two roads with the one along the southern boundary being the busier. The Mosque and its supporting structure take up about one-third of the compound, the rest being a garden. This garden is the only open space in the otherwise densely-populated surrounding area. A gateway in the middle of the southern wall is the main access point. The southern wall contained archways which have been filled up at a later period, as the brickwork shows. The southern wall is part of the oldest boundary wall existing; the other three walls have been rebuilt at a much later date.

The Mosque is a small three-domed structure measuring about 24 feet by 48 feet. The Mosque proper stands on a 100 foot podium, which is raised 16 feet from the ground level. The interior of the Mosque is divided into

three bays by two lateral arches, each containing a decorated *mibrab* under multi-cusped arches, which are framed with rectangular panels. There is a *bujra* on the northern corner of the terrace. This is the living quarters of the Imam of the Mosque, and where he holds classes for religious education of local children. The *bujra* seems to be a later addition (evident from the R.C.C. beam used over the doorway).

The Mosque is approached by a flight of twenty-five steps from the eastern side of the podium. The steps are partially covered with stone slabs held in place with metal clips. At the top of the step is an arched gateway leading to the Mosque proper through the terrace forming the open roof top of the podium. There are three doors on the eastern wall of the Mosque, the central door providing for the major access to the interior.

Three squat domes stand on high shoulders, the central dome being higher and bigger than the other two. The reduction in the size of the side domes is achieved by an intermediary stage of pendentives — a technique altogether different from those seen in mosques of earlier periods.

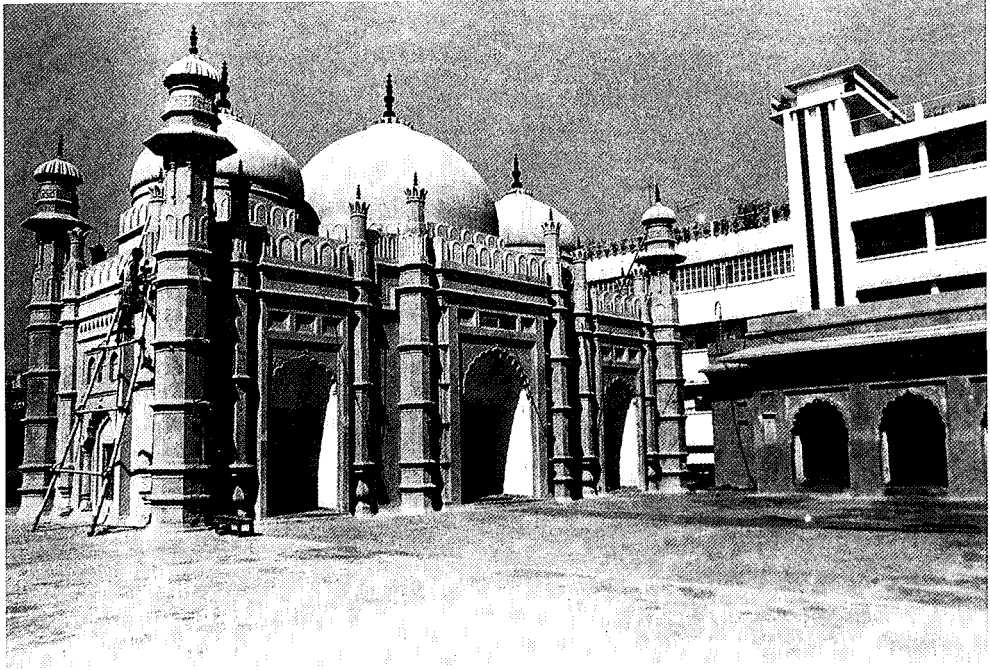
The podium is an interesting structure in itself. A nine-foot wide corridor runs along the northern and western part serving seventeen 9x9 foot chambers beneath the podium. There are four more chambers on the southern side. The purpose of these chambers is not very clear. The central part of the podium is inaccessible.

The subsidiary pilaster minarets border the entrances and the projection of the *mibrab* at the back of the west wall. The eastern face of the wall shows profuse panelling and ornamental merlons at different stages of the parapet. The corner minarets of the Mosque rise higher than the parapets and terminate in ribbed cupolas. The whole structure was built of bricks and lime mortar, and the lime-plastered surfaces are of a slight pinkish colour.

The Mosque itself serves for the five-times-daily prayers. The Jumma and Eid congregational prayers extend to the podium terrace and the surrounding garden.

At present Khan Mohammad Mridha's Mosque is run by an 18-member Masjid Committee. The committee members are elected by local influential people for one to two-year terms. The mosque committee fund is raised through donations and charity from the local people. The *madrassa* has about 25 students taught free of cost. There are three teachers whose meagre remuneration is provided by the Municipal Corporation.

Maintenance and repairs have to be done with permission from the Department of Archeology as the Mosque has been declared an archeological monument. But the Masjid Committee has put up a lattice gate and has repaired certain elements to some extent on their own, which are not in



The Mosque on its podium terrace was extensively rebuilt some time after 1913, when an old photo showed it in ruins

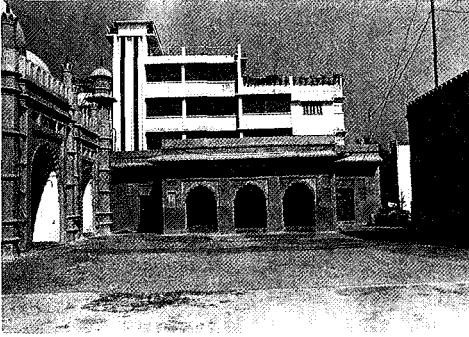
harmony with the original nature and characteristics of the Mosque.

The Mosque authority claims that a large part of the surrounding land originally belonged to the Mosque, but initial leasing, subsequent confusion regarding the ownership laws of the country, and the city authorities' negligence have resulted in the loss of the property rights.

During the course of the study, an old photograph was found of Khan Mohammad Mridha's Mosque taken in 1913. It shows the structure in partial ruins. No record is available as to how the Mosque came to be destroyed or when it was rebuilt. However, from the point of view of the structural condition and external appearance, the Mosque was found to be in reasonably good shape.

Encroachment on the Mosque's compound is distinctly evident in surrounding structures, the most outrageous being a six-storeyed apartment building built along the northern wall of the podium, defying Bangladesh's construction rules and regulations. Rising land values make such constructions lucrative in the Mosque's immediate vicinity.

Repair work of the minaret, cornice, and parapet wall of the Mosque is considered essential. It should be remembered that such repair/maintenance work needs to use the same size of bricks and lime mortar as used originally. It seems also that renovation of the doors and windows has been done badly in the recent past. The doors, windows, and exposed electric



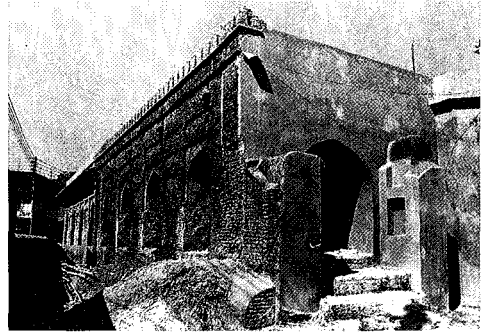
The hujra houses the Imam as well as about 25 children and three teachers in a madrassa school



The flight of steps leading up to the gateway entrance of the Mosque



The corridor connecting the cell-like chambers beneath the Mosque's podium



Exterior view of the corridor and podium

wiring need to be restored in keeping with the original form and characteristics of the Mosque.

Degree of intervention necessary for conservation

Legislative Support: legislation for protecting and preserving historical monuments exists in our country, but is not strictly enforced. This is evident from the encroachment of the six-storey apartment building. Ironically, the owner of the apartment building is a member of the Masjid Committee. Loopholes in the existing legislation must be removed.

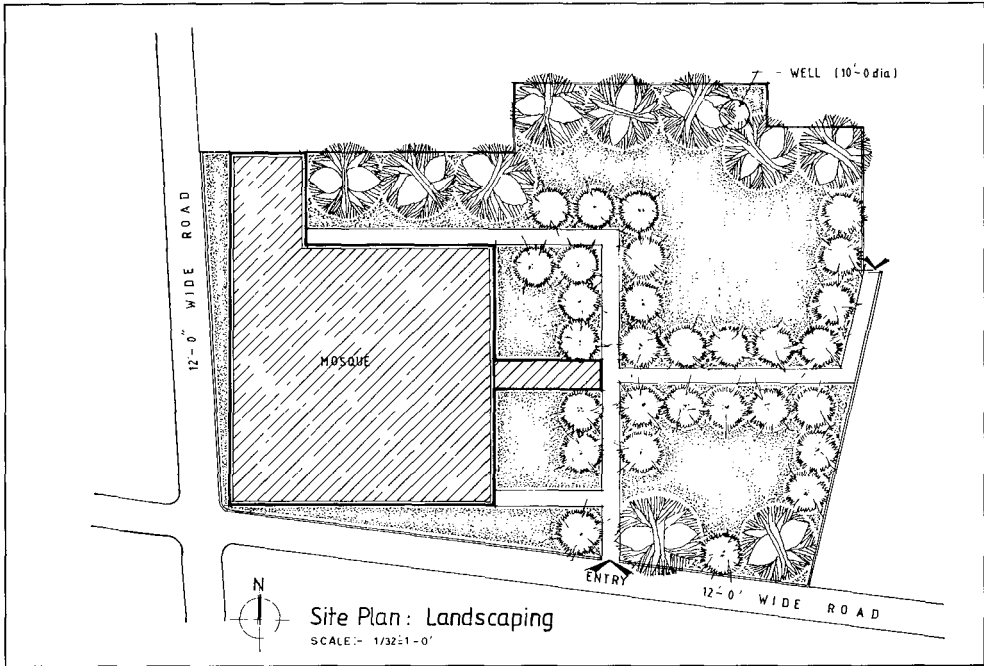
Public Awareness: the people must be made aware that the Mosque is an integral part of their daily life, still useful and a benefit rather than a burden. Therefore, the people will accept the responsibility of protecting the Mosque from natural deterioration and/or deliberate destruction.

Planning Control: A Master Plan for the preservation and protection of the

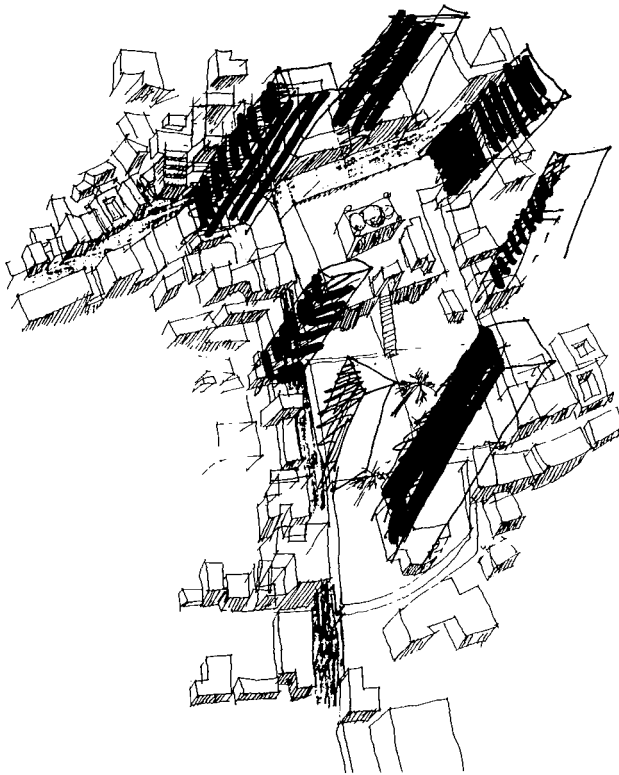
Mosque and similar other monuments of historical and architectural importance within Dhaka City needs to be prepared.

Physical Intervention: Since the Mosque was constructed in 1706 and rebuilt after its partial destruction in 1913, it has suffered natural deterioration due to climatic conditions and lack of necessary maintenance. The following are specific tasks suggested to conserve and revive the structure:

- i. The podium terrace needs to be sloped properly to drain out the monsoon rain water.
- ii. Repair work of the minarets, cornice, and parapet wall must be done in harmony with the original brick work and colour of the lime mortar plaster.
- iii. The chambers beneath the podium need to be provided with lighting arrangements.
- iv. The filler brickwork within the arches of the southern wall needs to be removed and replaced with a suitable lattice-grille. The other three walls may eventually be rebuilt in the same way.
- v. The ablution space and the toilet need to be removed from their present position and placed in a more suitable location, such as in the structure along the northern wall.
- vi. The grave beside the Mosque needs to be restored to match the plaster work of the Mosque.
- vii. The exposed surface drains need to be covered.
- viii. Tall and leafy trees need to be planted along the boundary, to provide shade as well as to hide new structures towering over the Mosque. Coconut palms and eucalyptus trees are suggested. The garden should also be maintained and planted with the same kind of trees.
- ix. Near the compound's entrance there is a stand-pipe to provide water to the local poor people. This needs to be moved to near the proposed ablution space.
- x. The profile/elevation of the Mosque is disturbed by the presence of



Proposed landscaping plan for the garden of Khan Mohammad Mridha's Mosque. The taller trees on the north would block some of the view of the six-storey building.



THE FUTURE ?

Without adequate area conservation and planning controls, the site of the Mosque could, in the near future, be totally overshadowed by tall buildings, as Fuad Mallick's imaginative drawing shows.

a tall bamboo pole for the public address system. A more discreet arrangement should be installed.

In addition, the following points are offered for consideration:

Should the chambers beneath the podium be let out as shops? It has been seen from the survey that most of the structures surrounding the Mosque have commercial uses at the street level. It would therefore be in harmony with the area to let out the chambers beneath the podium as shops. This would generate an income to maintain the Mosque, avoiding dependence on the otherwise scarce public and private resources. If the chambers beneath the podium were to be let out as book shops, “attar” shops, or enterprises of a similar nature (i.e., not contrary to the sanctity of the Mosque), it would adaptively re-use present facilities as well as generating a monthly income for the Mosque.

Should the responsibility of maintaining the Mosque lie solely with the Department of Archeology? The Mosque has been declared an archeological monument by the Department of Archeology, by which act it shouldered the responsibility of its maintenance and preservation. Since this Department has the proper, qualified personnel for the protection, preservation and maintenance of the Mosque, the responsibility should not in any case depend upon the local Mullah or the Masjid Committee who have no such knowledge or training.

PAINAM NAGAR, SONARGAON

Paper prepared by: Zainab F. Ali

*Co-ordinators: Sherban Cantacuzino
Wabidul Alam*

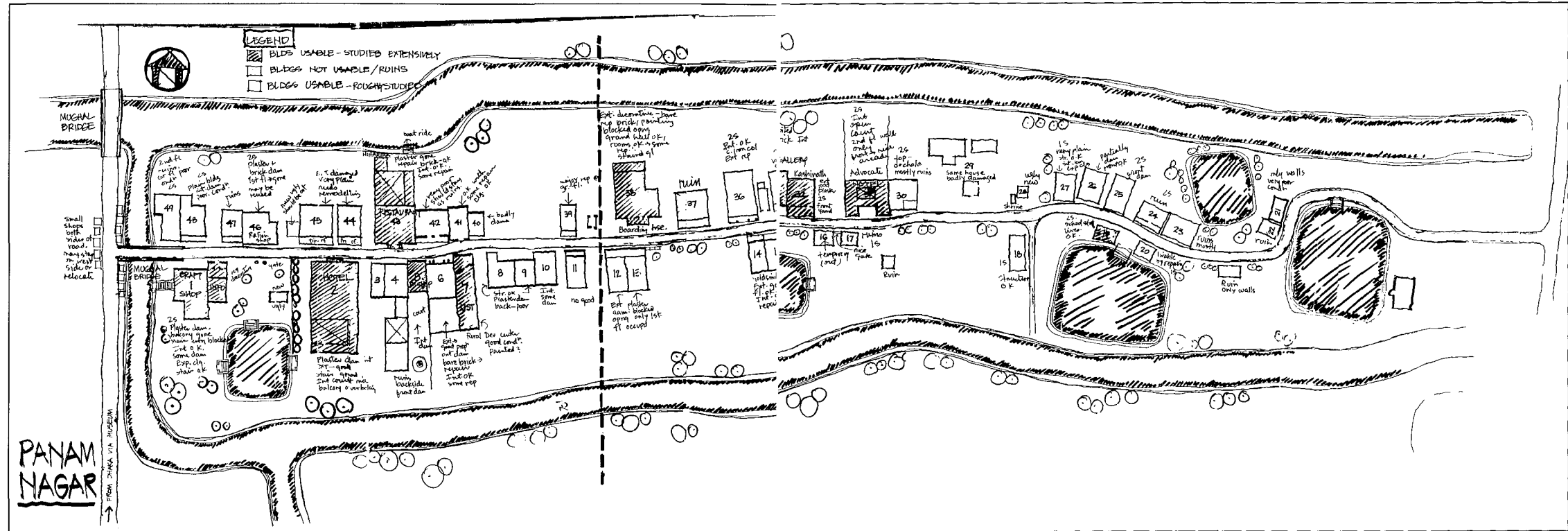
*Participants: B.K.S. Inan
Abdul Malek Hawlader
Nazirul Alam
Shafiqur Rahman
Zainab F. Ali*

The Workshop Brief

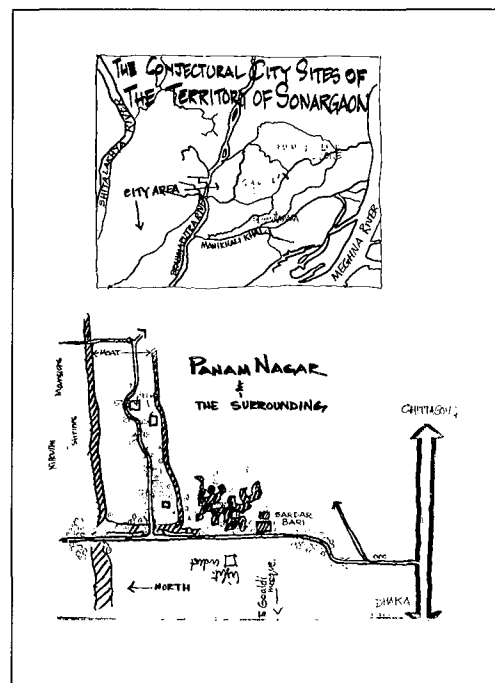
Painam Nagar (Village) is situated some seventeen miles east of Dhaka, between the Shitalakhya and Meghna rivers. It is close to the ruins of Sonargaon, Bengal's oldest city, and to the Folk Art Museum and Crafts Village. Painam Village consists essentially of one long street, lined with grand houses built by wealthy Hindu merchants in the late 19th and early 20th centuries. Subsequently abandoned when the owners migrated to India, these houses have become derelict.

The Workshop team members are asked to carry out the following five tasks:

1. A survey of the village, of its buildings and of its open spaces. You will need to take rough measurements of all the buildings and of the space between the buildings, so that you can draw up a plan of the village to a scale of 1 in 500. You are not expected to enter every building and take detailed measurements, but you are expected to take rough measurements of as many of the major buildings as possible (it should be possible for one person to survey two buildings in the time available, making ten buildings in all, given a team of five), so that you can draw up floor plans of the houses to a scale of 1 in 200. You will need to examine and consider the typology of the houses, their structure, finishes, decorative details and services, as well as the general condition of the external spaces belonging to



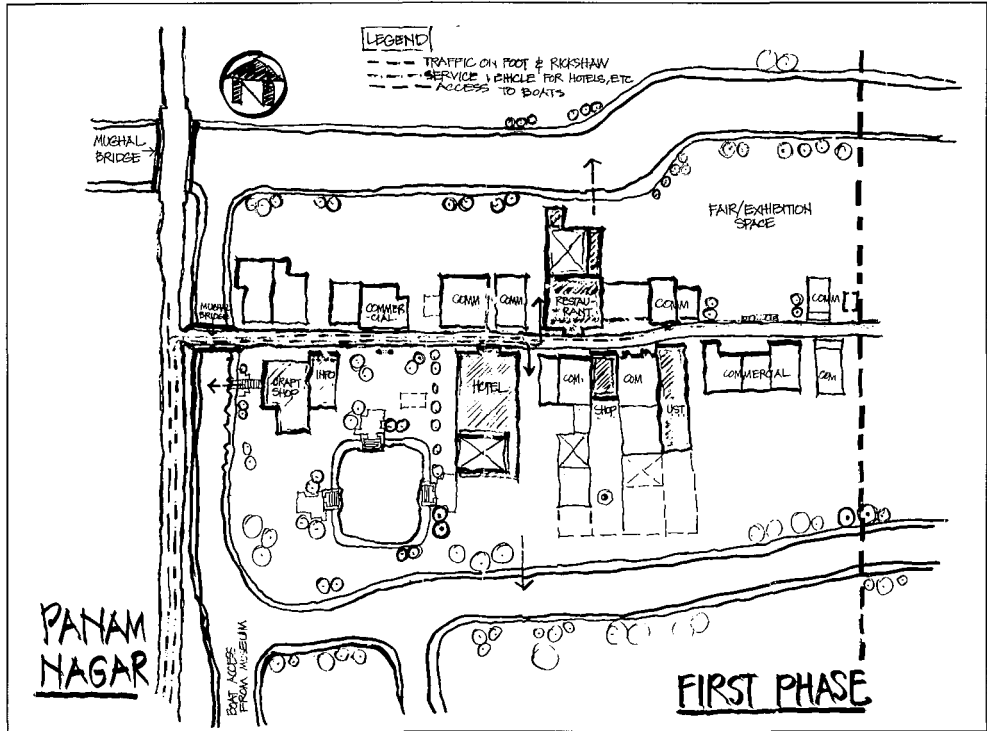
Layout plan of the whole village Forty-nine buildings were recorded and action plans developed for a number of them suggesting new uses



Sketch plan showing the location of Painam Nagar



The main street, Painam Nagar.



Re-development plan for Painam Nagar, First Phase The buildings with potential for the most rapid cost recovery are to be done first, including a craft shop, a hotel, a restaurant, an information center, a rural development office, and several commercial sites

each house, mainly at the side and back. You will also need to look at the public and common spaces of the street and, at certain points, between the houses.

2. A proposal to restore one of the ruined houses.

This task is to be seen as distinct from the possible conversion of this house to a new use. It will include the removal of all accretions, opening up blocked openings, making the building weather-tight and the work necessary to restore the building both externally and internally to something like its former condition. You are asked particularly to

- i. consider whether the external surface of the brick walls, formerly plastered, should be re-plastered or left as brick and merely pointed and
- ii. show how you would restore the elaborate plaster decora-

tion in the central hall and the general principles of restoration which your method follows.

3. A proposal for the restoration, conversion and rehabilitation of the whole village. It is suggested that the proximity of Painam to Dhaka, its beautiful and quiet rural surroundings, and the fact that it is close to the ruins of Sonargaon, to a number of famous tombs and mosques, to the few surviving Mughal bridges and to the Folk Art Museum and Crafts Village, make it a potential tourist centre where visitors to Dhaka might spend two or three nights if there were adequate hotels and other tourist facilities like restaurants, cafes, and shops.

In carrying out this task, you are asked to do two things:

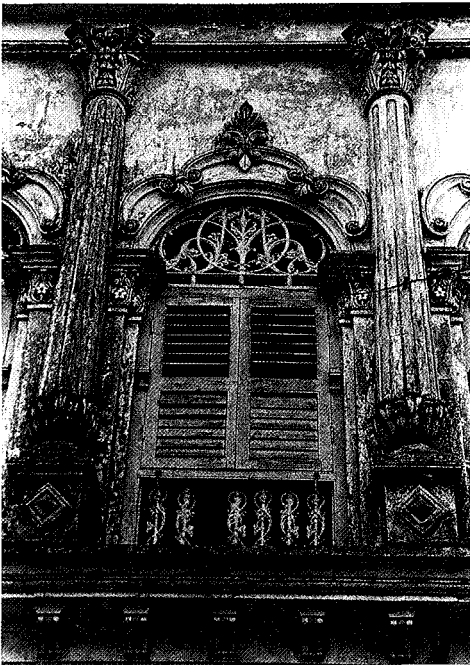
- i. to propose an overall scheme for new uses in existing buildings and for any new buildings which may be required, by means of a plan of the whole village drawn to a scale of 1 in 500;
 - ii. to take one of the existing buildings (it need not be the same building as in ii above) and show how it could be converted to a new use, by means of floor plans drawn to a scale of 1 in 100. In your proposals in i you should bear in mind the need to re-house the squatter population, some of which will find employment in the proposed tourist centre.
4. A proposal for a new building serving a purpose of your own choice, on a site of your own choice, but bordering the street.

In your design proposal you are asked to justify the use accorded to the building and to consider the typology of the existing houses (height and bulk limitations) as well as design guide-lines regarding materials and features characteristic of the locality. The reason for asking you to consider these things is to help you achieve a design which is sympathetic to the existing buildings, without imitating them.

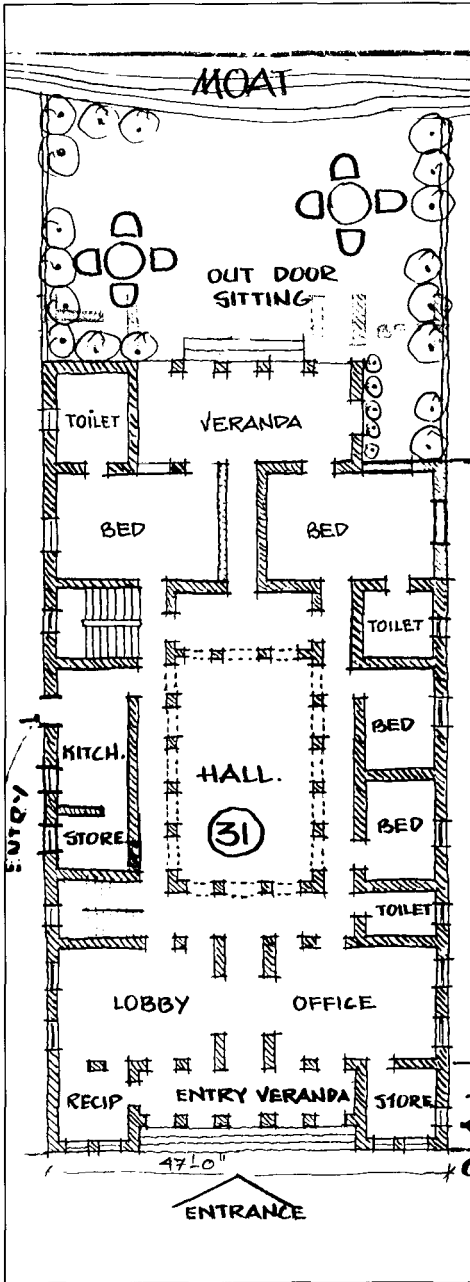
Floor plans should be drawn to a scale of 1 in 200; sections and elevations to a scale of 1 in 100.



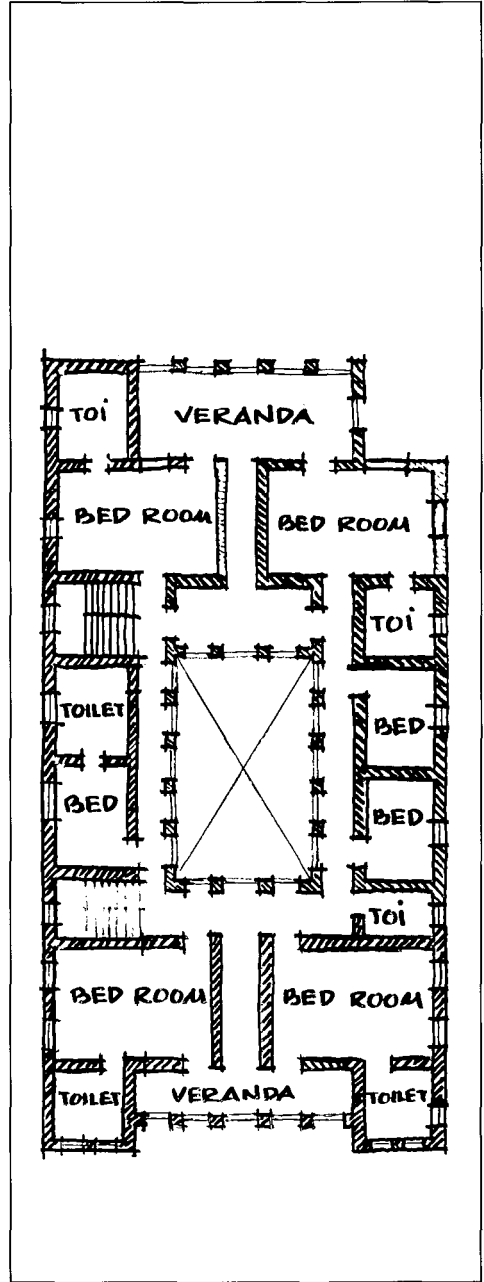
Building #2, proposed for renovation into a hotel, will not need extensive work



A detail of the proposed hotel Variety in Painam Village was created through these decorations: pilasters, columns, plasterwork decoration and ironwork detail.



Plan of the proposed hotel (building #2) The two-level hall and the outdoor sitting area on the moat promise to give the hotel the open, gracious feeling of the original Painam mansions



Plan of proposed hotel, second floor

5. A proposal for the upgrading of the street environment and for the provision of vehicular service access and car parking.

You will need to consider vehicular movement both for servicing and for normal access, bearing in mind the narrowness of the street and the fragile nature of the paving. You will also need to consider the repair and possible extension of this paving, the street furniture, the overhead wires, the street lighting, the services to the buildings, and some of the smaller ruined buildings which may not be worth restoring and converting to new uses and which may be better left as consolidated ruins after having accretions removed and blocked openings cleared.

Introduction

Painam Nagar is a unique example of early urban settlement of Bengal. The residences are close to each other with the central road being the major access and the canals serving as the secondary or service access. The architectural style of the buildings is English Renaissance or the British Raj style, used throughout the cities of India in the 19th century. It is a coherent neighbourhood of richly detailed buildings which tell us about the life and culture of our past. Its lucky location in the tourist city of Sonargaon, surrounded by the ruins of the old capital, Mughal and pre-Mughal monuments, tombs and palaces gives it a good chance of being a successful educational and recreational center. Since the township is owned by the Government of Bangladesh and is mostly unoccupied, renovating the structures to accommodate new uses will not be difficult.

History

Sonargaon, then called "Suvarnagrama", was built at the confluence of three major rivers (Meghna, Brahmaputra and Lakhya) as a centre of commerce in the 12th century. With the Muslim rule in the 13th century, Sonargaon became the famous capital of East Bengal.

It flourished as the capital till 1608, when Dhaka superseded it. Although its political importance was diminished, it remained a centre of commerce and trade for a long time. Painam Village became prominent during the British period, when a cloth trading centre grew up under the influential *Zamindars*. The cloth merchants came from various places such as Calcutta, Patna, or Bombay. These wealthy Hindu merchants, titled *Shahas* and *Poddars*, built their exquisite residences in a beautiful setting in

Painam Village. The villagers were protected by two moats on the north and south. Originally there were three bridges with gates secured at night for protection. Most of these buildings were built in the early 20th century except for a few late 19th century examples.

In Painam Nagar, close-knit families lived side by side and often enjoyed religious and other celebrations filled with feasts and musical festivals. People from nearby villages were invited to come and witness the many celebrations and rituals, such as *Nagar-Dola* in the grand hall of the present Boarding House building. These merchants lived a vibrant life until the partition of India in 1947 when a majority of them left for India. A few families stayed in Painam Nagar till 1960s and with their departure the whole village was nearly abandoned. At present about two hundred and fifty people live in Painam Nagar. Some of them are the staff of the Folk Arts Museum and of the local school. The rest are unauthorised occupants consisting of shopkeepers and spice-vendors.

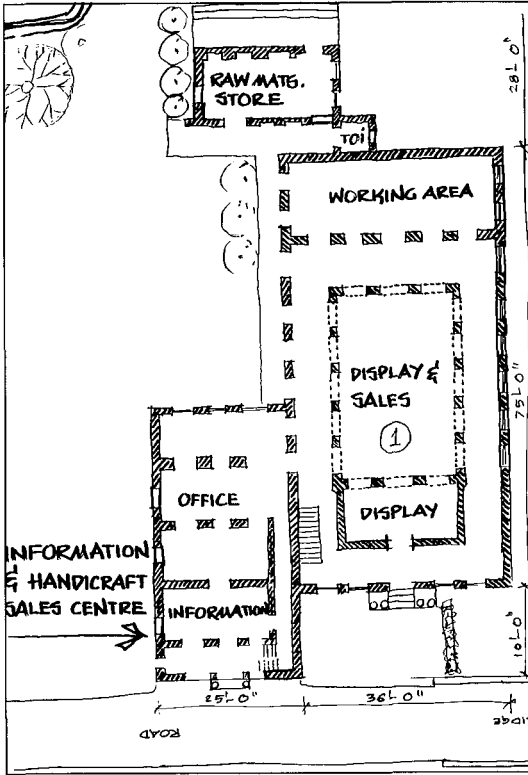
Survey and Analysis

Painam Nagar is approached by a humpback Mughal bridge of the 17th century. It is a camber type bridge constructed of bricks arranged in circles about five feet in diameter. We are told that originally the bridge had two towers at each end flanking a gateway. A single road of less than a mile stretches east-west and is lined with about 50 two and three storeyed buildings. The road is made of brick pavers and needs repair. Painam Nagar is enclosed on both north and south by two moats. The northern moat is navigable during summer. After surveying, the buildings were grouped into three categories :

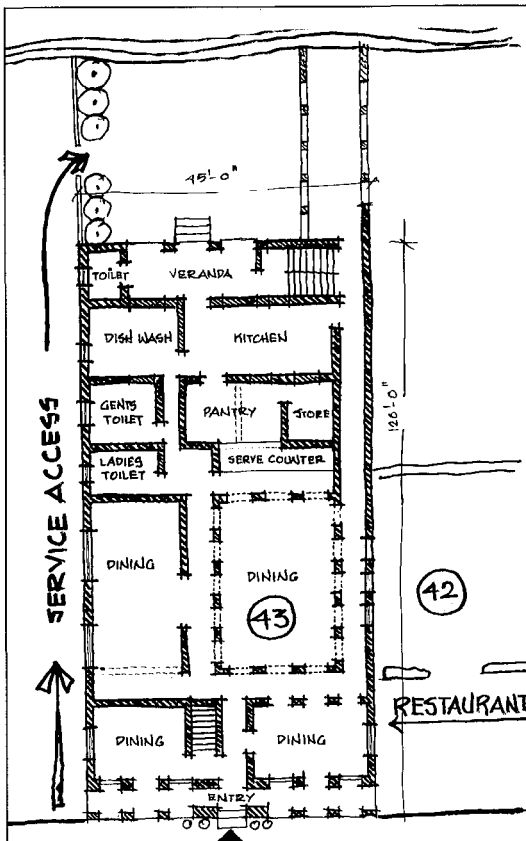
Buildings in good condition were defined as structurally sound and not needing major renovations. Some restoration work might be needed such as the repair of plaster decorations, cleaning up the brick facade and replacing doors and windows.

Buildings that need repair are those which will have to be checked for structural solidity; a substantial amount of restoration work is needed.

Ruins are buildings past the point of restoration. Some of these may be kept as they are, provided they are safe to be around; dangerous ruins have to be taken down. Conserved ruins will tell us what happens when we abandon our culture.



This building (#1 in the layout plan) is the first building the visitor will encounter upon entering the village over the Mughal bridge, and is appropriately designated to be an information centre and crafts shop



Plan of the proposed restaurant (building #43 the plan) The project is included in the First Phase of renovation

Since the original owners left, only a few buildings have undergone minor changes. At a glance they look similar because of the use of the similar materials and methods of construction, and because most of the buildings are two storeyed. The facade treatment is symmetrical in all of them even if the plan inside may not be. These buildings are usually adjoining; a few buildings have a side entry or a walkway to the rear. Entry ways are marked by columns, archways and various decorative elements.

Bangladesh's heavy monsoon restricted the use of open courtyards in these houses, so most have interior halls. The larger buildings have two courtyards while the smaller ones have one courtyard or covered hall with archways and balconies around it. Although the decorative style was European, the planning of the houses was definitely local. The rooms are small and dark, the stairways steep and narrow. Hence the buildings represent a fusion of British Raj style with the architecture of Bengal. We can find examples of that in the decorative patterns existing throughout Painam Nagar. For example, local floral patterns are used around the arches along with the carved stucco figure of the Madonna in the interior hall of a building.

Brick dominates as the construction material. Because it was the only material available, the undaunted artisans of Bengal proved that they could mould the bricks into any shape they needed: angled, rounded, arched and semi-circular shapes. Brick was also used in a variety of moulding patterns. For surface decorations we see the use of clay, abundantly found in this country, in both floral and geometric patterns. A notable feature of the brick and plaster work is its imitation of stone and woodwork detail, such as brick imitating stone quoins or plaster depicting wooden door and window patterns. Cast iron is used in various shapes and designs in balconies, rails, balusters, brackets, ventilators and in window grills. Glazed tile is also used for decorations in many of these residences.

Another common feature found is the *chinitikri* decorations — the Bengali mason's use of a new material for surface decorations — the broken china pieces. The examples of *chinitikri* are mostly in the later buildings and in some renovation work in the Painam Village.

The ruins show the technique of construction used in these houses. The upper floors were made of bricks laid into circular pattern plumated upwards, 12 to 15 inches thick. Some houses had dropped ceilings with access to the attic for storage. Windows were fairly large, so the perimeter rooms were well lit.

Services: The survey shows that electricity is scarce in the township. Tap water and cooking gas are also not available in Painam Nagar.



The Kashinath Bhaban building is on the right (#32 on the plan) The building on the left with the setback (#33) is to be renovated into an Art Gallery



Detail of Kashinath Bhaban showing the high quality of the surface decoration



A close-up of Building 32, Kashinath Bhaban, shows that the surface of the columns is striped with broken china pieces

Drainage: There are no proper drainage systems visible in Painam Nagar. The site is slightly sloped towards the canal from the side of the road, and that helps the drainage of the area. But for heavy rainfall or flood, proper surface and sub-surface drainage has to be added to the street and the surrounding area.

Proposal

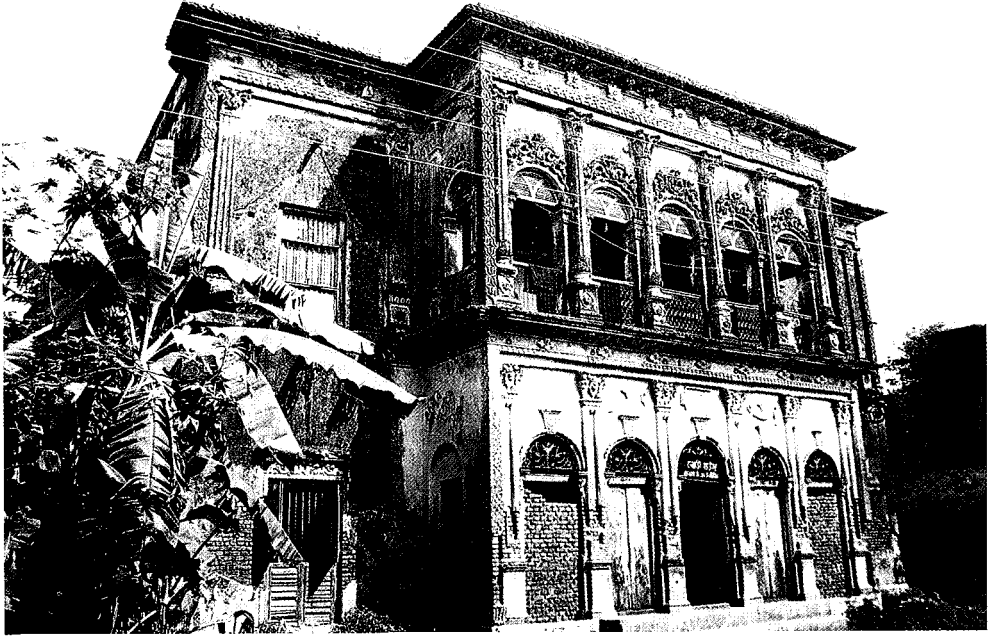
Painam Nagar should be rehabilitated into an educational/recreational centre geared towards national tourism. These abandoned buildings are idle resources and can be recycled to earn revenue. These old buildings should be restored and renovated to house new uses such as hotels, shops, restaurants, arts and crafts stores, galleries, exhibition spaces, and other necessary services such as rental apartments, a post office, a first-aid center, an information center etc. If we need to build any new structure, its design should be sensitive to the context of Painam Nagar.

A committee of architects, developers, financiers, planners, historians and representatives of the community and government may work together in this project. The decisions such as what to tear out, what to keep, how big the spaces should be and how to build the new, have to be made according to the new uses of the buildings. We have to study a building and decide what function will best suit its spaces.

This conservation work for Painam village can be achieved in phases. In the first phase, we can rescue a few buildings near the entrance and put those into adaptive reuse. All the services have to be installed in this phase. Evaluating the success of the first phase we can proceed with the planning of the second one.

Canals and Ponds: All the canals should be excavated where needed, cleaned, and the banks repaired. A link can be made from the moat at the Folk Art Museum to the southern canal. Boat rides and angling can be arranged for the tourists. The four ponds are valuable assets of the township and should be cleaned and the access landings repaired. Suggestions have been made for cultivation of fish in the larger ponds.

Open Areas: Improvement of the open spaces through planting trees and maintaining grass areas with proper drainage will enhance the beauty of the area. Some spaces can be made into gardens and some can be left open for exhibitions or local arts and crafts fairs.



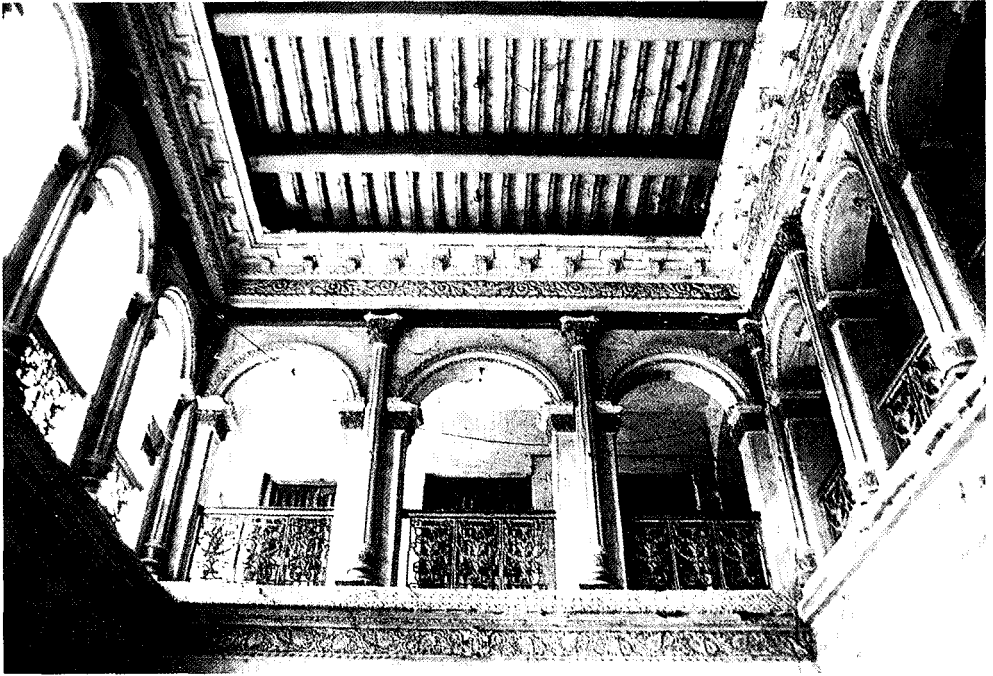
The exterior of Building 38, the Boarding House, shows the elegant second-storey veranda



Façade detail showing the elegance of the surface decoration as well as the damage caused by rising damp



Façade detail of Building 38 showing both Bengali and British influences



The proposal for Building 38 is to turn it into a boarding house



Building #38 exhibits a beautifully-proportioned interior ball with mezzanine.

Services: Since there is no drainage system at present at Painam Nagar, digging up the road for drainage will allow installation of electrical cables and gas mains. Existing overhead electrical lines should be removed. Modern storm and sewer systems have to be worked out for the whole Painam Village. Regular trash removal should be an integral part of the service plan.

Circulation: Repair and cleaning of the brick paving is required for the road, this road should be kept as a thoroughfare for the villagers who use it today. Heavy vehicles should be prohibited in the street except for small service trucks for delivery or garbage removal. Rickshaw, horse carriage and bicycle traffic will be allowed in the street. Adequate lighting should be added to the street and this lighting should blend in properly with the architectural style of the buildings. Car parking for the day tourists or hotel guests may be arranged outside the village, for example, in the area on the western side of the bridge. Parking can also be provided in the nearby Folk Arts Museum and the tourists can take a rickshaw or a boat or walk to the village. In addition to street lighting and smooth traffic flow, street life can be enhanced by street festivals and seasonal decorations.

Rehabilitating current occupants: Present commercial operations such as the ration shop and NGO office can remain in the village. Unauthorised occupants may be rehabilitated by providing work and housing for them in the village, or low cost housing may be built outside the village.

Restoration and Renovation: Restoration is a major issue in our proposal. Careful decisions have to be taken about the damaged plaster-work restoration — how to restore it and how much of it to restore. If a building is beyond restoration, it has to be stripped down to its bricks and simply modernized to fit a new use. A building facade which needs little repairwork (Kashinath Bhaban) can be restored to its original lustre. The red brick, some of it covered with decades of dust, should be cleaned and repaired inside and out. Damp proofing is needed for most of the buildings. Some of the buildings have to be checked for their structural solidity and repairs should be done accordingly. Roofs should be replaced in many of the buildings without altering the original design. Motels, restaurants, and art galleries have to be equipped with air conditioning systems. All the buildings should be modernized in regards to light, air, fire exit and other necessary codes. In the renovated plan, walls may be removed and columns introduced to reinforce the upper floor.

Workshop/training for Renovation and Restoration

The tasks before setting up the training shop are as follows: to understand the technology used in these structures; to study the architectural styles (brick, iron, wood and plaster details have to be studied and catalogued); to find experts familiar with this kind of restoration work from throughout the country and if needed, from abroad.

Cost: We have to identify various cost elements, i.e., cost of bringing in utilities, cost of restoration, cost of renovation, and cost of operation. Some buildings will have quicker cost recovery than others. Hence in the first phase of conservation work, there may be a number of easily recoverable spaces.

Funding: A thorough economic feasibility study to guide investors is vital for the conservation of Painam Nagar. Funding for the conservation project may come from the Government or from private resources.

Community participation is also vital in the conservation plan whatever the size of the present community may be. People's need of permanence and pride in their heritage will work positively for this project. There are many historic sites scattered all over Sonargaon area such as the Sardarbari, (Folk Arts Museum), Nilkuthi, Goadi Mosque, Tomb of Ghiasuddin Azam Shah, temples, shrines and palaces, and we should try to incorporate these landmarks along with Painam Nagar into a total conservation plan. Although Painam Nagar was created at a different point in history, an integrated conservation plan will have a better chance of being a success.

Painam Nagar is a unique example of its kind. Conservation of our architectural heritage on a larger scale can be achieved here, probably the first of its kind in the country.

RUPLAL HOUSE, DHAKA.

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The Workshop Brief

On the south side Ruplal House presents a river front of some 300 feet; on the north side it has three unequal projecting wings and a garden. The building is two storeys high overall and contains a large number of apartments of various size. At present it is heavily encroached by spice and vegetable vendors and by a colony of unauthorised squatters who have erected shanty hovels against the building. The east block, however, is owned by a private person.

The street which runs past the north side of the house (and the surrounding area generally) is characteristic of old Dhaka, with houses of varying height built right up to the street line.

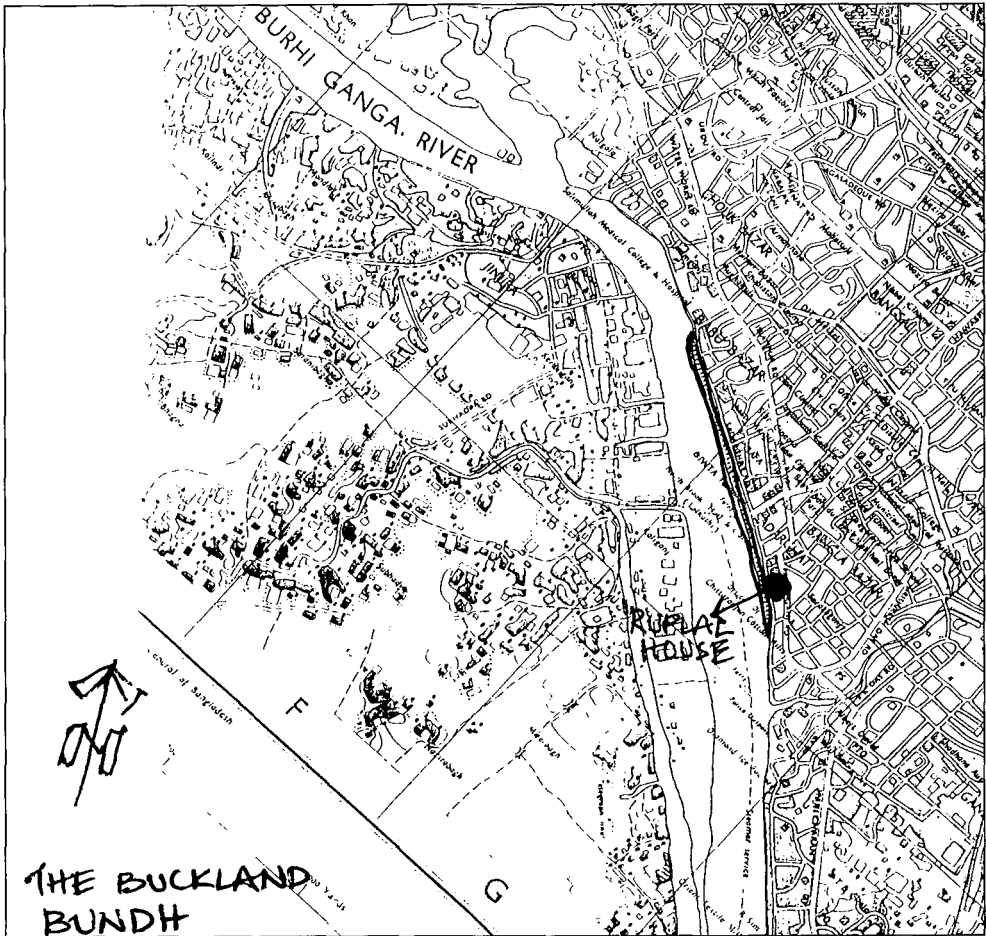
The Workshop team members are asked to carry out the following six tasks:

1. A survey of the Ruplal House and surrounding area.

You will need to take rough measurements so that you can draw up floor plans of the house to a scale of 1 in 200 and a plan of the whole area to a scale of 1 in 500.

You will also need to examine and consider the structure, finishes, decorative details and services of the house and the general condition of the garden.

Regarding the surrounding area, you are not expected to enter



Dhaka city plan showing location of Buckland Bund area and Ruplal House

into every house, but to make a rough and mainly external survey only, reporting on the general condition of the buildings and examining the spaces between the buildings.

2. A proposal for the restoration of the Ruplal House.

This task is to be seen as distinct from the conversion of the house to one or more new uses. It will include the removal of all accretions, making the building weather-tight, and the work necessary to restore the building both externally and internally to something like its former condition. In making this proposal you are asked particularly to highlight the general principles of restoration which you intend to follow.

3. A proposal for the conversion of the house to one or more new uses.

You will need to draw the floor plans of the house to show the new uses and the changes you propose to make. Drawings should be to a scale of 1 in 200.

4. A proposal for the restoration of the garden to fit in with the new use or uses you are proposing for the house. Drawings should be to a scale of 1 in 200.
5. A proposal for one or more new buildings in the street which runs past the north side of the house.

Land values are high in Old Dhaka and the restoration and rehabilitation of the Ruplal House has pushed these land values even higher. There is pressure to redevelop and several landowners in the street are considering taking advantage of the situation. In your design proposal you will need to consider height and bulk limitations and other design guide-lines to help achieve a sympathetic solution which will also give the landowners the returns which they are looking for. Floor plans should be drawn to a scale of 1 in 200, sections and elevations to a scale of 1 in 100.

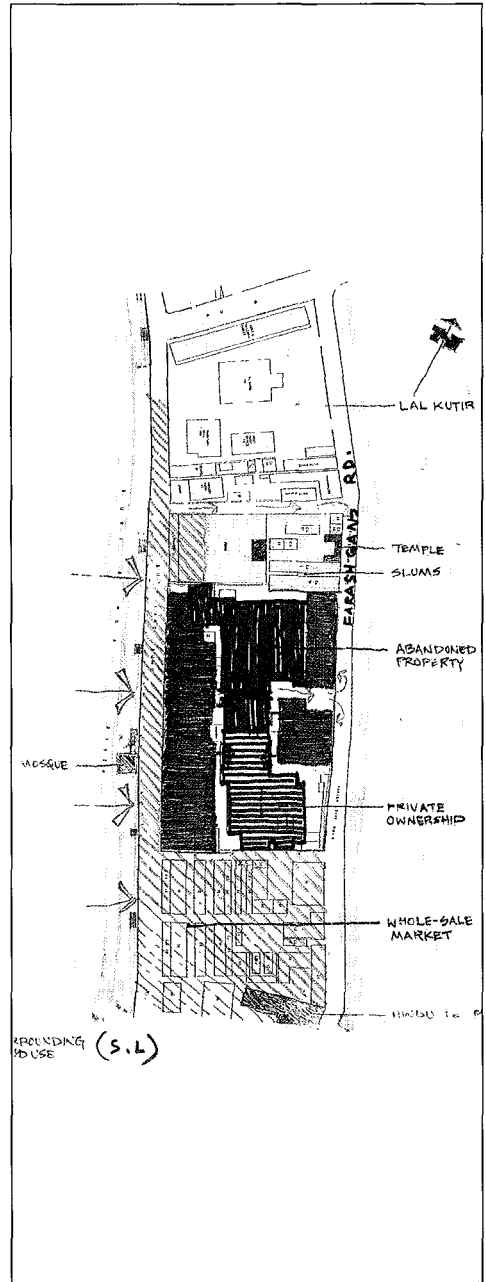
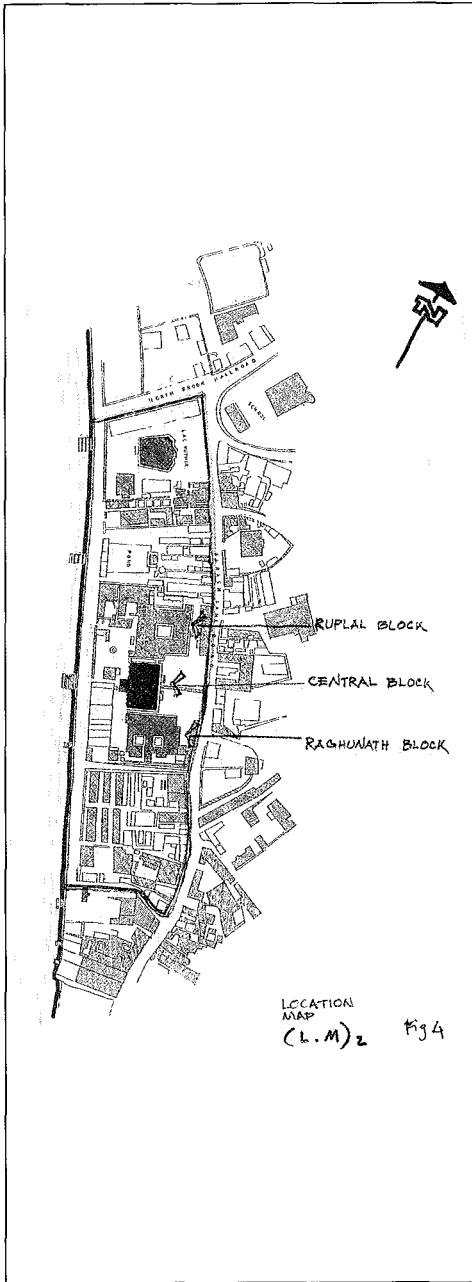
6. A proposal for the upgrading of the surrounding area and for the improvement of the spaces between buildings.

You will need to consider the quality of the services, the floor surface, the street furniture, the overhead wires, the lighting, etc.

Introduction

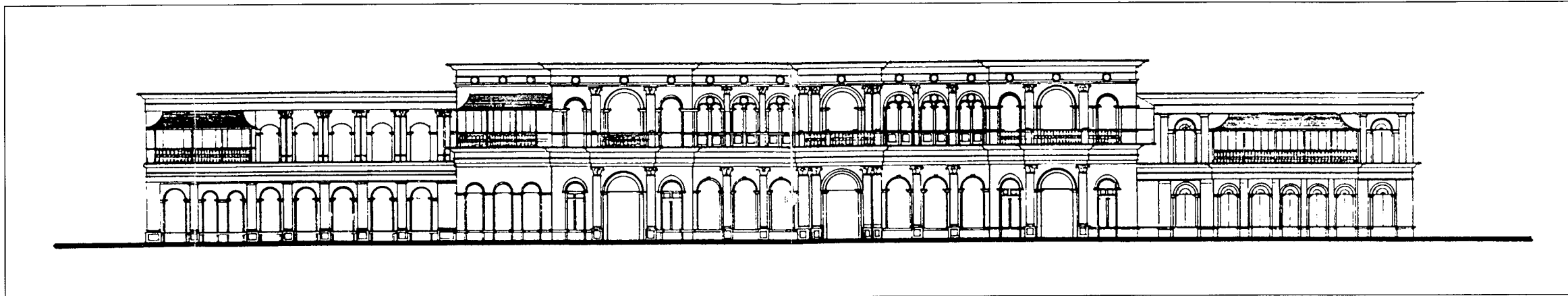
Ruplal House is a grand nineteenth century mansion situated on the northern bank of the River Buriganga in the southern part of Dhaka city. It is built on the Buckland Bund, an embankment built primarily to save the banks of the river from erosion. At the same time, the Bund provided the city with a river-side promenade. On the north of the site runs the Farashganj Road, one of the main links between the Eastern and Western parts of the Old City, presently extremely overcrowded.

Ruplal House is a very important example of a chain of river-side

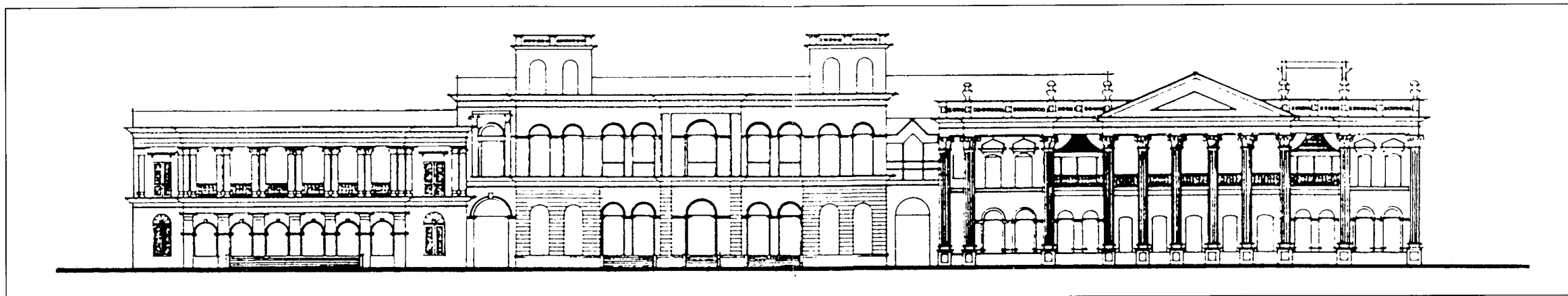


Location plan of buildings comprising Ruplal House

Land use and ownership diagram



Ruplal House, Dhaka, southern elevation from the riverside. Built by wealthy Hindu merchants, this late nineteenth century residence was designed by Martin & Company of Calcutta



Ruplal House, north elevation showing pediment marking main entrance on Ruplal's Block

mansions — among them Ahsan Manzil and Lal Kutir — constructed by eminent citizens of 19th century Dhaka. Proximity to water has always been appreciated by wealthy land owners, and we see its present counter-part in the artificial water bodies created for example in Dhanmondi, Gulshan and more recently Baridhara.

Ruplal House is known to have hosted a lot of the cultural activity of the time. Gurus of Indian classical music like Ostad Alauddin Khan, Ostad Wali Ullah Khan and Lakshmi Devi used to hold regular *jalsas* or classical performances there.

Socio-Politico-Economic Environment

Since the shifting of the capital of Bengal in 1704 from Dhaka to

Murshidabad, Dhaka had gradually lost much of its political and economic importance, becoming a neglected outpost of the British Raj. A century later, squalor and unhygienic conditions were commonplace in Dhaka. As conditions reached notable extremes, the attention of the authorities was attracted and from 1825 onwards, the collectors of the District are said to have exerted efforts to improve the civic amenities of Dhaka. One result was the construction of the Buckland Bund; another was the series of riverside mansions built along this Bund. Dhaka after a long period of obscurity started to come into the limelight once again.

Ruplal House was built during a period in our history which witnessed the gradual rising of the merchant class in a society of landowners or *zamindars*. This merchant class understandably wanted to exhibit its newly acquired status by building prominent town palaces.



Buckland Bund Besides controlling river erosion, the Bund (embankment) served originally as a promenade for Dhaka's citizens. It is now dominated by wholesale vegetable and fruit dealers.

Ruplal Das and Raghunath Das, the two sons of a prominent merchant, Swarup Chandra Das, commissioned this graceful neo-Indo-Classical residential complex. They purchased the land from expatriate merchants along with an existing building on the site; they then commissioned the Calcutta-based architectural firm of Martin Company to build them this grand mansion, which would appropriately declare their status in the city.

Physical Aspects of the Project

The complex known as Ruplal House in reality consists of three distinct blocks of differing architectural styles. These blocks are completely separate in the ground floor, but are related to each other at the upper level by interconnections supported by archways spanning the ground level. For ease of identification, these three blocks are referred to as Ruplal's Block, the western wing; Raghunath's Block, the eastern wing, and a Central Block that linked them.

Of the three blocks, Ruplal's is the most imposing, built in the neo-classic style then prevailing in England. This grand wing has been finished with great attention to the minutest detail and can still convey, over a

century later, some of the astonishment and intense pleasure that it must have imparted in its prime. This wing is generously supplied with neo-corinthian capitals on fluted columns, several different types of window details, beautiful mosaic work and stained glass. The neo-corinthian portico at the northern side of this block lends it a very western flavour often observed in colonial buildings.

Very similar to Ruplal's Block is the central block. The two archways that connect this to the east and west block are treated differently. The western archway is topped by an essentially oriental gabled detail which seems to have been a later addition. The eastern archway, on the other hand, continues in the same style as the central block.

Raghunath's block which lies to the east of the complex is of a different architectural character from the rest. In the facade which faces the entrance court in the north, there is a distinct absence of arches. The capitals are no longer corinthian, but seem to be of a more Indianised origin. Workmanship on this block is apparently much inferior to that in Ruplal's Block.

However, there seems to have been an agreement in the construction of the river-side facades of the three blocks, all in the "Ruplal style", with a slight emphasis on the central block. The overhanging balconies of the three blocks also present a unified appearance.

Though at present there are no gardens or grounds serving this complex, it is clear that the north and south of the buildings consisted largely of formal gardens leading to the entrances.

The style and details of these blocks are as numerous as the constructional principles employed and any attempt at documentation must necessitate taking each block separately and discussing the treatment of the different elements there-in.

The walls are load-bearing constructions of 25 to 30-inch thick brick masonry work. On some interior surfaces there are alcoves or niches about 5 inches deep built into the walls.

Most of the columns in Ruplal's and the central block are fluted. The method employed in Ruplal's block to achieve fluting is moulding of lime plaster on the surface of circular brick columns. The main northern portico with its triangular pediment has columns of this sort. Raghunath's columns are mostly circular brick columns devoid of fluting and are topped by plain square capitals.

All the external capitals are neo-corinthian in appearance and have square bases. The columns of the interior courtyard have Corinthian capitals on the upper ceiling level, but those of the lower ceiling level are slightly different and look like hybrid Indo-European styles.

Ownership Questions

The multi-ownership pattern at Ruplal House creates a complex situation from the legal standpoint. At present half of the house is occupied by legal owners; the other half was declared enemy property and hence is under possession by the government. The private owners have been in this site for about 35 years, when they bought it from one of the descendents of Ruplal's brother.

An informal talk with some of the present owners during the workshop period revealed that some of them would be willing to move to other areas and give the authorities the opportunity to conserve this building as long as proper compensation was handed out. The owners actually mentioned that it would be a relief to them to do this for two main reasons. Firstly it was becoming increasingly difficult to repair the building as definite ownership areas were not demarcated and secondly the wholesale market, especially the spice market, which surrounds the complex was making life very unpleasant.

The abandoned half of Ruplal's House is at present occupied by families of army staff. We feel that if properly appealed the Government would also voluntarily hand over this section for conservation purposes.

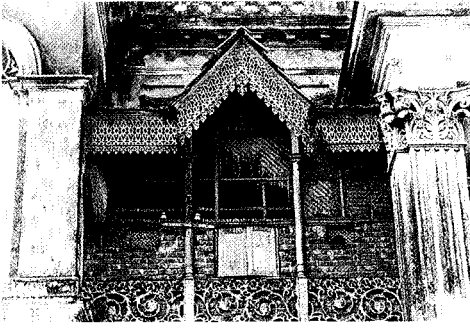
However, it is quite possible that legal intervention may be necessary to empty the building of its present varied occupancies and this has to be one of the first steps before the commencement of any actual physical conservation work in this project.

It is unclear at present whether there exists appropriate legislative support within the existing legal framework in this country. New supportive laws may have to be formulated by lawyers; this task is beyond the scope of architects, planners and engineers, who can merely outline the required end results.

Master Planning Control

The fact is that along with its other important associations, Ruplal House is undeniably part of an historical zone of the river-side palaces of Buckland Bund. Any plan to conserve Ruplal House, therefore, has to take into account a conservation plan for the embankment too, in order to restore the original setting.

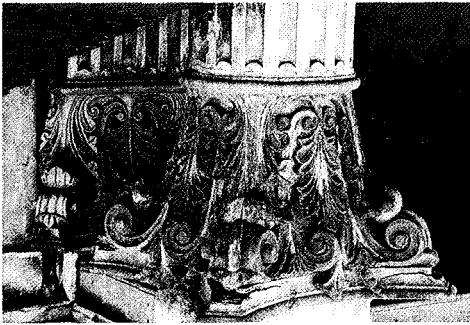
A government proposal to develop this embankment in 1963 (Buckland Bund Scheme) included the preservation of historical buildings along the Bund, notably Ahsan Manzil, Lal Kutir, BAFA, Ruplal House, etc.



The gabled connection between two of the blocks of Ruplal House, fairly intact but abused by careless modification



Balconies at Ruplal House, presently used as toilets.



Detail of the corinthian capitals in Ruplal's Block of the mansion



The north pediment, Ruplal's Block (western wing). The only such pediment in the structure, it highlights the most imposing of the three blocks built in the neo-classical style



Rising damp on the ground floor has disintegrated the plaster finish of the brick columns

Secondly, it mandated the development of the embankment extending from Babu Bazar in the north-west to Mill Barracks in the south-east.

From the planning point of view two factors are of special importance, the traffic pattern and the land use pattern. The streets here are narrow, the volume of traffic is enormous and on the increase all the time, which contributes to heavy traffic jams, a regular feature in the daily life of old Dhaka. To overcome this, alternative routes have to be suggested. One possible solution is river access.

A river connection between easily accessible points in Newer Dhaka, like the Sat Masjid area to the Buckland Bund, may be worth serious consideration to solve the traffic problems.

Land Use Pattern

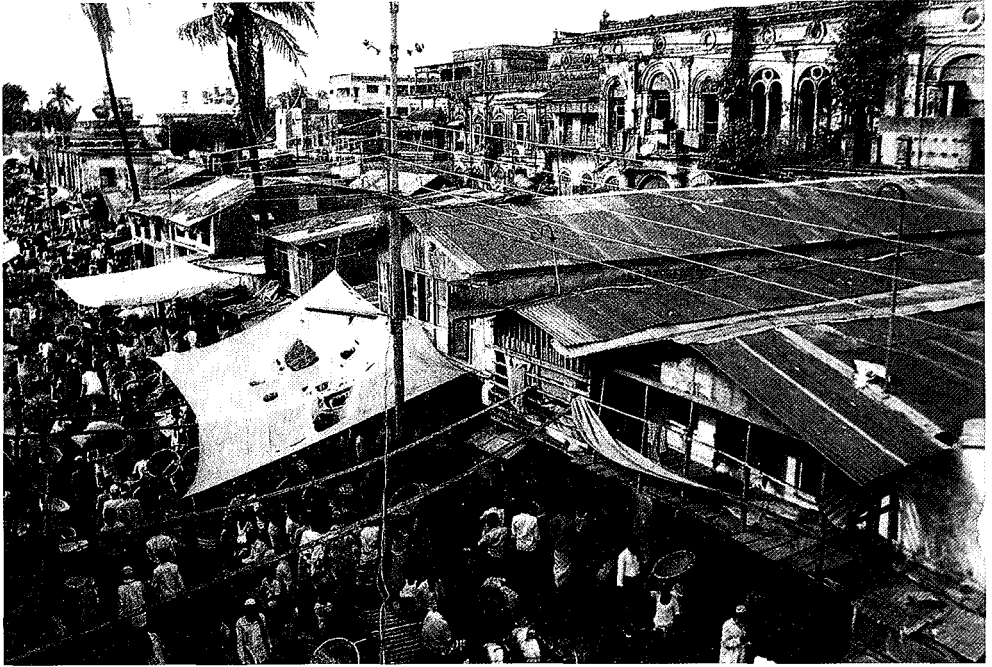
The commercial activity in this area has been on the increase for quite some time.

One of the wholesale centres of old Dhaka was the neighbouring Shyambazar. From here the wholesale market started to overflow into the Buckland Bund and Farashganj Road. At present the embankment is absolutely crowded with wholesalers primarily of vegetables and fruits. The Farashganj side and the premises of Ruplal House are occupied by spice wholesalers. The goods are delivered from the river which makes possible this encroachment on the banks, almost totally illegal.

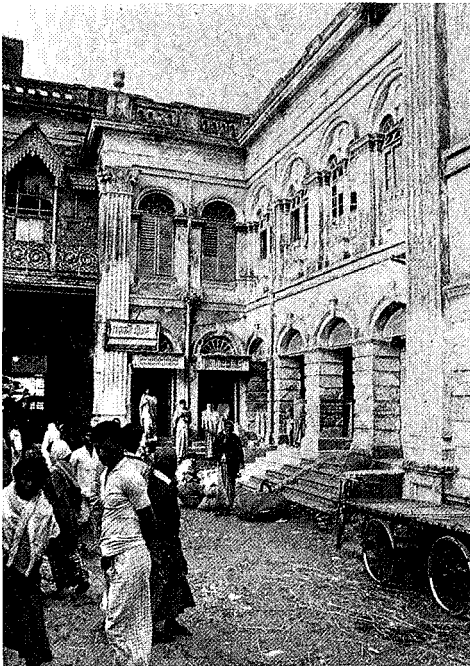
In the beginning of this decade the Town Planner of Rajuk conducted a study on this market. His findings showed that there has been a spontaneous shifting of this market to new centres like Kawran Bazar, Gabtali and Saidabad. This was a direct result of a government restriction on the movement of heavy vehicles in old Dhaka.

With the construction of the new China-Bangladesh Friendship Bridge which gives easy access to the northern bank of the river Buriganga, it is hoped that the shifting trend will further accelerate, as this new bridge provides relatively easy transportation to and from the other bank. We know that there is a proposal to form a new wholesale centre across the river which would encourage the shift of the Bund wholesalers. A removal of the market from the Ruplal area would free the locality of its encroachment and also reduce the traffic load to a marked extent.

Thus Master Planning control has to be implemented as a prerequisite to any conservation work on Ruplal House.



Buckland Bund, Dhaka, with Ruplal House in the background. The present market activities are illegal. Proposals to ameliorate the situation include a new wholesale centre across the river. Government restrictions on heavy vehicle movement in old Dhaka may also encourage a shift of the market to new centres.



Ruplal House, showing the encroachment of the wholesale market.

Physical Intervention

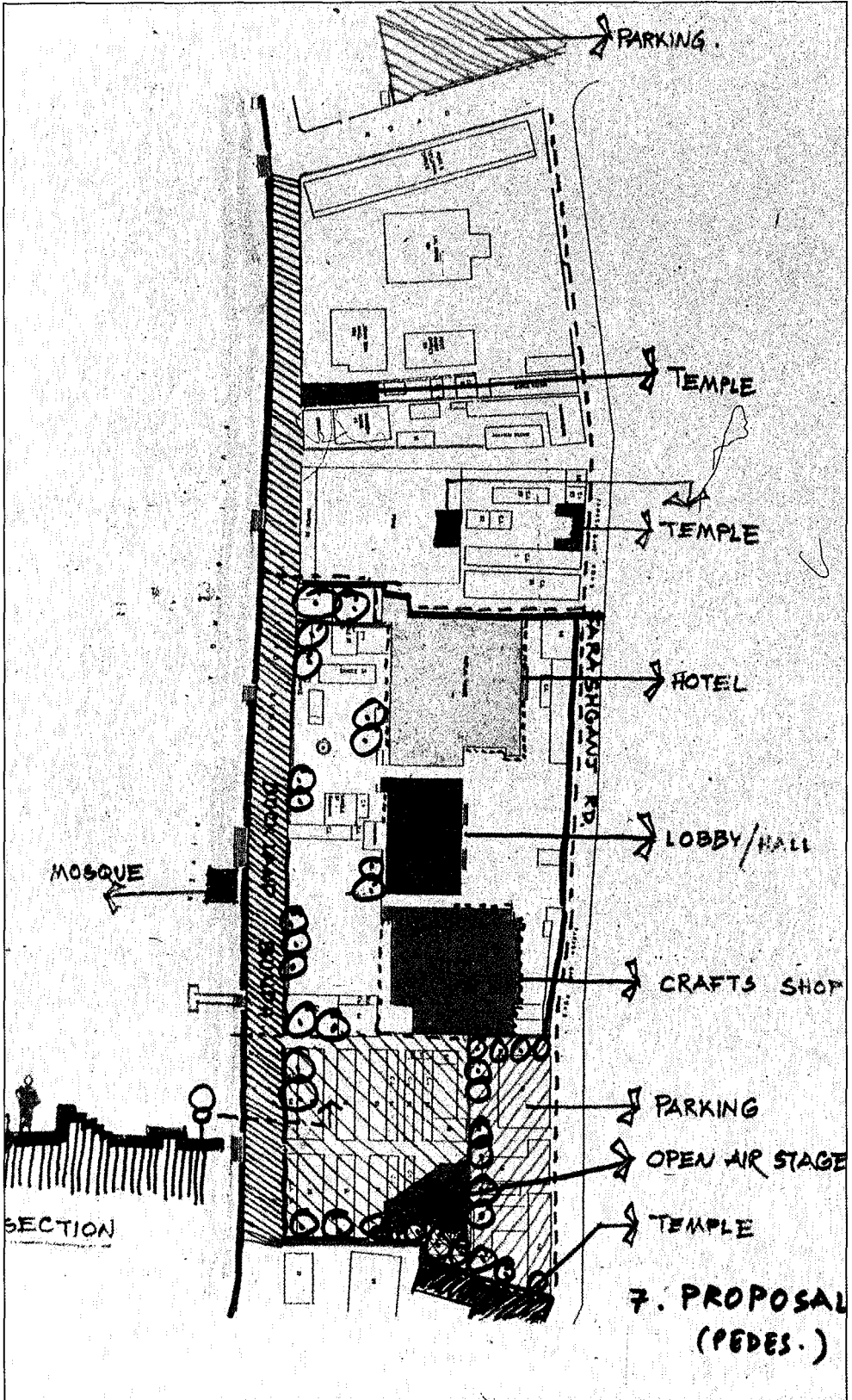
In the course of the workshop, this group tried to ascertain the degree of physical intervention necessary to realise the conservation of Ruplal House. The technical feasibility study at this stage consisted of locating damage to the various parts of the structure and subsequently listing them according to priorities. The following is a summary of the findings.

1. The roof was found to be leaking in many parts. The timber beams are slowly decaying and are termite-ridden. One section of the roof has caved in. Roof repair is obviously the first line of action.
2. There appeared to be fractures in the fabric of the building at certain points, either caused by earthquake or by differential settlement. If on further examination this is found to be severe, under-pinning of the foundation may have to be undertaken.
3. There appeared to be definite evidences of rising damp up to about 10 feet above ground level. This is probably the effect of a very high water table and may require site-draining. A detailed survey by experts is necessary.
4. Damage done to the building by encroachers is quite high. Heavy jute gunny bags of whole spices are stocked against the walls with little thought given to the structure. The open drains are used as latrines. This adds to the already acute drainage problem in the area.
5. Make-shift toilets have been added at random around the building and leaking pipes from them are producing damage to walls.

Rehabilitation of the Structure

Any conservation project has to be made economically and socially viable before work on it can be approved. Possible uses for the building discussed in this workshop were:

1. The mayor's formal office, with formal gardens where he could entertain and conduct ceremonies of special importance.
2. A house for cultural activities, dance, dramas, etc. The demand for this is quite high at the moment in this area.



Planning proposal of the redevelopment of Ruplal House as a hotel and tourist center.

3. A city museum. There may well be further possibilities for new uses for this beautiful building.

4. The use for Ruplal House that the Team supports finds its origin in the original setting, i.e. the Embankment. We propose that Parjatan Corporation, the tourist organization of Bangladesh, take over the property and convert it into a tourist centre with hotel accommodations. This would include a grand dining hall and a multi-purpose hall, both of which could be housed in the beautiful but forgotten ballrooms of this building.

The complex would include a local tourist centre and specialised shops for crafts, jewellery and books. There could be provision for viewing the craftsmen at work, who would have their sales sections attached, e.g. such crafts as *Nokshi Katha*, jewellers, wooden and bamboo carving, and weaving.

However, the rehabilitation cannot stop at the building itself. Any proposal for its conservation must include the following points:

1. Treatment of the Buckland Bund stretch from Shyambazar to Babu Bazar as an historical zone.
2. Complete pedestrianization of this embankment. If this is not possible, pedestrianize at least the stretch from Shyambazar to Lal Kutir.
3. Installation of green areas, benches, gas lamps, selected vendors, horse carts, etc., anything to give the place a feeling of history.
4. Restoration not only of Ruplal House but of other buildings of particular beauty along this stretch. Ahsan Manzil and Lal Kutir have already been done. We hope that adding Ruplal House to this list will enrich this zone further and more proposals for restoration will follow.
5. Establishment of alternative boat routes to and from new Dhaka to ease congestion.
6. Proper planning for shifting the wholesale market to a more suitable area.
7. Installation of adequate sewerage and drainage to prevent the water table from rising further and creating more structural damage.

Conclusions

It has been obvious from the start of the workshop that Ruplal House cannot be treated as an isolated building in the middle of a crowded spice market and that conservation of the actual building will automatically demand the conservation of the bordering river-side belt. This would not only revitalise the area, but would also provide a much needed breathing space for the city dwellers.

A zone such as has been suggested would encourage the population of New Dhaka to re-establish its link with old Dhaka and thus with their roots. There is a dearth of open civic amenities in the city as a whole, which is why the newly opened China-Bangladesh Friendship Bridge is so crowded in the evenings. People are forever seeking open spaces. The historic zone proposed with its river-side mansions will provide an excellent opportunity for such a promenade. From this presentation, we hope we have been able to convey to our readers the need to conserve Ruplal House in its original setting. We have to give back Dhaka its water front and with it, its heritage.

ALI MIAN'S GOAL TALAB AND ITS SURROUNDINGS, DHAKA.

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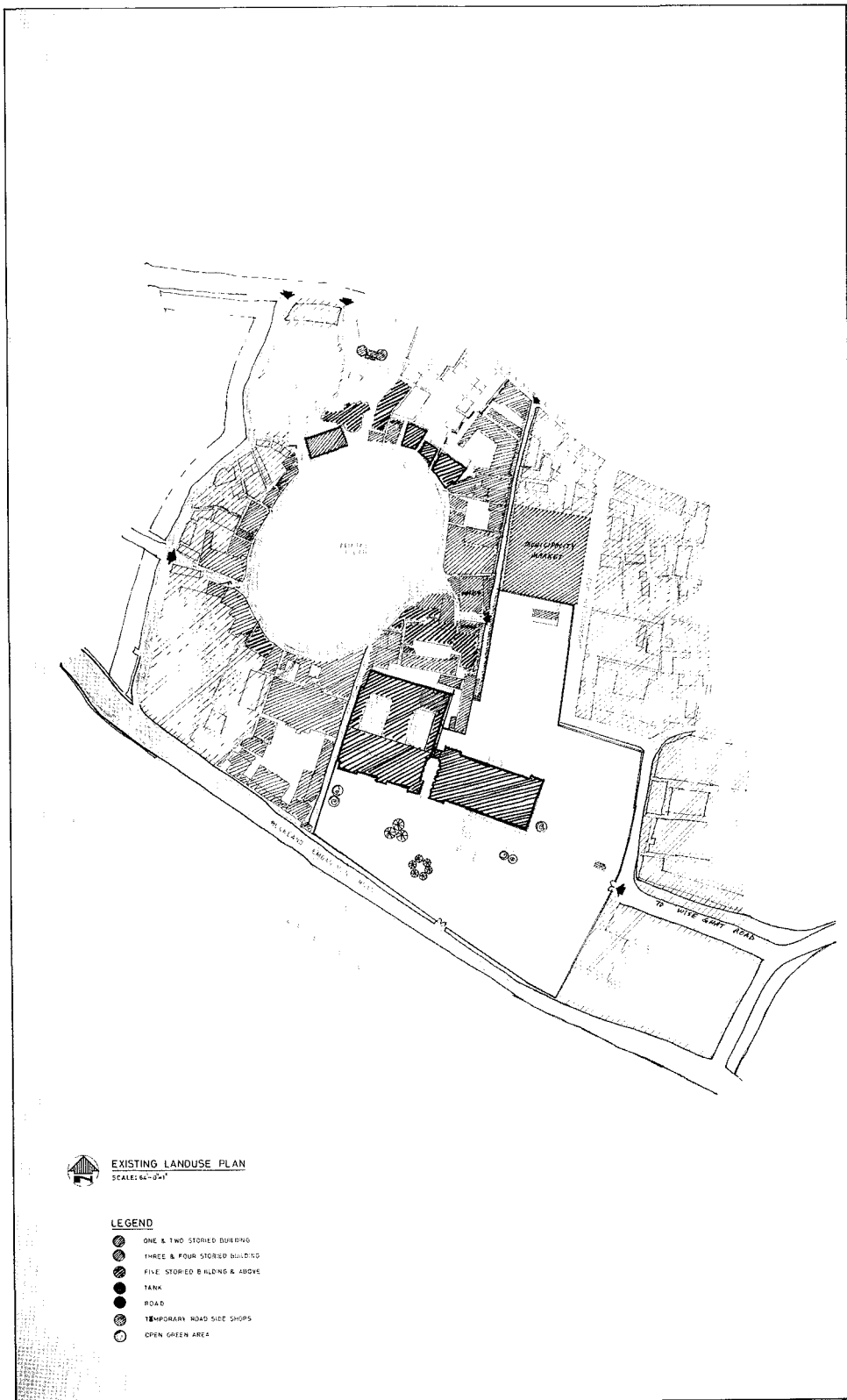
The Workshop Brief

Ali Mian's Talab is an oval-shaped water tank immediately to the north-west of the Ahsan Manzil, the 19th century Nawab's Palace which stands in a large garden near Wiseghat on the river and which has been restored and converted into a museum by the Public Works Department. The tank is surrounded by buildings, some of which are recent and rise to a height of five storeys. An area on the south-east side is used for popular shows like bear dancing. The Andar Mahal, the rear portion of Ahsan Manzil, is a building which stands to the west of the palace proper. It can be seen above the low buildings which still survive on the southern side of the talab. The rear portion of Andar Mahal, which is planned around two courtyards, is not part of the PWD's restoration programme, and is occupied by numerous families.

The Workshop team members are asked to carry out the following six tasks:

1. A survey of Andar Mahal, of the area surrounding Ali Mian's Talab and of the street linking the talab with the Ahsan Manzil (also called "Nawab Bari").

You will need to take rough measurements so that you can draw up floor plans of the rear portion of the residence to a scale of 1 in 200 and a plan of the whole area to a scale of 1 in 500. You will also need to examine and consider the structure,



Ali Mian's Talab, site plan This tank (artificial pond) built in 1838 and now completely ringed by buildings provides much needed open space in a crowded neighbourhood

finishes, decorative details and services of the residence.

Regarding the area surrounding the talab and the street linking the talab with the Ahsan Manzil, you are not expected to enter into every building, but to make a rough and mainly external survey only, reporting on the general condition of the buildings, and examining the spaces between the buildings, the talab itself and the area around it.

2. A proposal for the restoration of Andar Mahal, the rear portion of the residence of Ahsan Manzil.

This task is to be seen as distinct from the conversion of the rear portion of the residence to new uses. The rear portion is an integral part of an important building which combines a European facade with the traditional local courtyard plan. Your task will include the removal of all accretions, making the building weather-tight, and the work necessary to restore the building both externally and internally to something like its former condition.

In making this proposal you are asked particularly to highlight the general principles of restoration which you intend to follow.

3. A proposal for the conversion of Andar Mahal to one or more new uses.

You will need to draw the floor plans of the house to show the new uses and the changes you propose to make. Drawings should be to a scale of 1 in 200.

4. A proposal for the landscaping and planting of the Ahsan Manzil's garden.

The garden at present is a desert and you should consider the value of trees as shade-giving to the ground under them, as shade-giving to buildings, as a screen to an exclusive environment, and as a natural and soft element in an artificial and hard urban situation. You should also consider the garden as a work of art, both to "be in" and "to look at".

5. A proposal for one or more new buildings in the area around the talab.

Land values are high in old Dhaka and the restoration and conversion to a museum of the Ahsan Manzil has pushed these land values even higher. There is pressure to redevelop and several landowners in the area around the talab are considering taking advantage of the situation.

In your design proposal you will need to consider height and bulk limitations and other design guide-lines to help achieve a sympathetic solution which will also give the landowners the returns which they are looking for.

Floor plans should be drawn to a scale of 1 in 200, sections and elevations to a scale of 1 in 100.

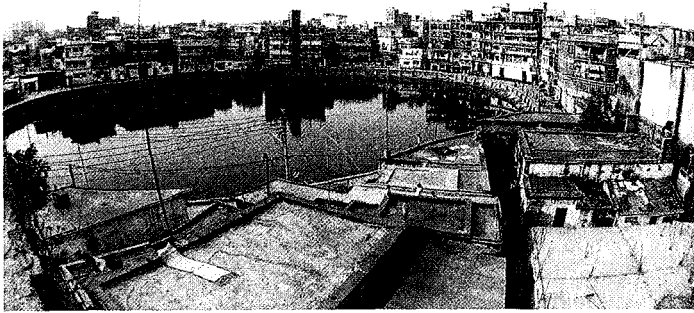
6. A proposal for the upgrading of the area surrounding the talab and the street linking the talab with the Ahsan Manzil, and for the improvement of the spaces between buildings and of the talab itself.

You will need to consider the quality of the services, the floor surfaces, the street furniture, the overhead wires, the lighting, etc. You will also need to consider the wall containing the water tank and the relationship between the water and the public area around it; the requirements of the public area where performances are enacted; and the relationship and approach to the north side of the Ahsan Manzil and its garden.

Introduction

Ali Mian's *Goal Talab* is an oval-shaped pond or 'tank' which is a part of a palace complex known as the Dhaka Nawab Bari, on a built-up embankment of the river Buriganga called Buckland Bund. Originally the palace was a factory built by French traders, bought by the Nawabs and converted into their family residence. They made certain modifications to the building and subsequently added a rear portion with two internal courtyards. In 1838, Khaja Alimullah excavated the *talab* or tank north-west of the palace, used as a private area by the nawab's family. A magnificent guest house was built in 1872 by Nawab Abdul Gani who named it "Ahsan Manzil" after his son Ahsanullah. The two houses were connected by an intricately detailed wooden bridge at the upper level.

At first, the rear portion of the Nawab Bari, or "Andar Mahal", was the only building around the tank, so the courtyards and the banks of the tank were for the exclusive use of the women of the Nawab Bari. As the Nawab's



General view of the Talab



View of the Talab showing the height differences of the structures with the taller five-storey structure, to the north-east (left of photograph)



The taller buildings exhibit commercial and residential mixed uses.

family grew, they gradually built their houses all around the tank. The tank soon became a common area for the Nawab's relatives and thus the private area changed into a public area where fairs, festivals and games were organised.

The area now occupied by the tank was originally a French *jalla* or an undefined low land for garbage disposal. In 1838, the tank was excavated. In 1948, the area around the tank was raised, hard-surfaced and a road constructed all around the tank. The area presents an introverted character because all the buildings face the tank. There were six pedestrian accesses to the tank but vehicles could come in through only one passageway. Therefore this area remained tranquil even amidst the bustle of the surrounding areas. The tank is very important to the locality. While the Nawab's estate has been subdivided among the heirs, the tank remains an undivided property enjoyed by everybody. There is a *talab* committee which looks after the yearly cleaning of the water and arranges angling competitions.

Site Survey

The government has undertaken the restoration of the Ahsan Manzil palace and the front portion of the Nawab Bari, (Andar Mahal) now in its final phase of completion. The rear part, however, remains in a derelict condition, occupied by distant relatives of the Nawab who cannot afford to move elsewhere. A detailed reconnaissance survey of the building was undertaken which revealed the following.

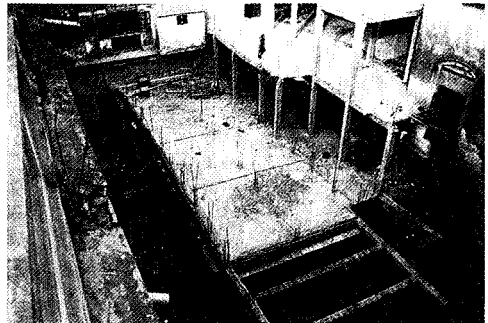
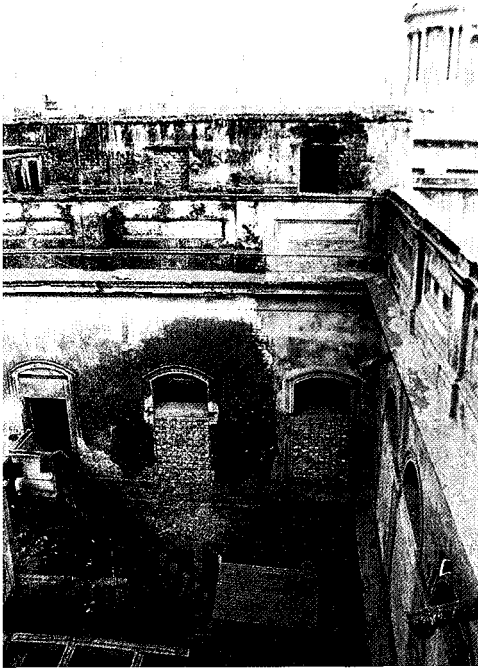
Andar Mahal

The building is a brick masonry structure with a rafter-purlin roof system. It is not of any architectural or historical significance but was found to be structurally sound, albeit with some cracks in the upper storeys and rising dampness in the ground floor. Critical investigation established that the cracks were not due to settlement, but happened during a severe earthquake in the early part of this century. The dampness was also found to be caused by stagnant water and clogged drainage lines. Thus these faults could be easily rectified.

The number of inhabitants has increased over the years to 28 families now living in the building, and all of them legal heirs of the Nawab. Pressure on living areas has forced the inhabitants to occupy verandahs and encroach on the courtyard. Additions were also seen in some parts of the



North elevation and section of Nawab Bari or Andar Mahal.



The market has encroached inside the Andar Mahal destroying its character

Andar Mahal in 1989 shows itself to be in a dilapidated condition with unsympathetic and thoughtless modifications to the structure

roof. Conditions are slum-like. Service conditions are very poor. Only four of the 28 households have a piped water supply.

Tank and Surrounding Area

The entire area of Islampur is experiencing rapid commercialisation. Since Islampur is on the north and north-east of the tank, the structures on this side are most exposed to commercial influences. This is apparent by the height of the buildings, five storeys on the north gradually reduced to single or double storeys on the opposite side. The northern and north-eastern buildings have commercial activities on the lower floors with residential activities on top. The commercial traffic is from the Islampur Road while residential entrances are from the tank. This has helped to retain the residential character of the *talab* area. The edges of the tank have been lined with a masonry retaining wall and a metalled road has been built all around the tank. Traffic is light on this road which acts as the residential approach. Children play in the road; people swim, bathe or just idle in the tank. The *talab* area is a source of great relief in an otherwise congested area. However, certain problems were identified in the area. They are:

- i Lack of services like water supply, electricity and sewerage. Sanitary conditions for most buildings are very poor.
- ii Lack of openness due to incremental growth of built-up areas.
- iii Complete absence of any vegetation. The large water body does soften the harshness of the brick buildings and pavements somewhat but even then, the lack of plantation is badly felt.
- iv Absence of community facilities like playgrounds, clubs, health clinics, etc.

The area just outside is in sharp contrast to the tranquility of the *talab*. Here a four-storeyed municipal market has been developed and hawkers spread all over the road. The hustle and bustle of cloth trading has made it a very busy and noisy area.

Commercial forces are so powerful here that they invaded the only primary school of the area and turned it into a warehouse.

The Garden Area of the Ahsan Manzil

The whole palace compound is barren except for a few palms and minor trees. However, this area has been acquired by the Public Works Department which has drawn up plans for open landscaping in the entire area according to an overall design scheme.

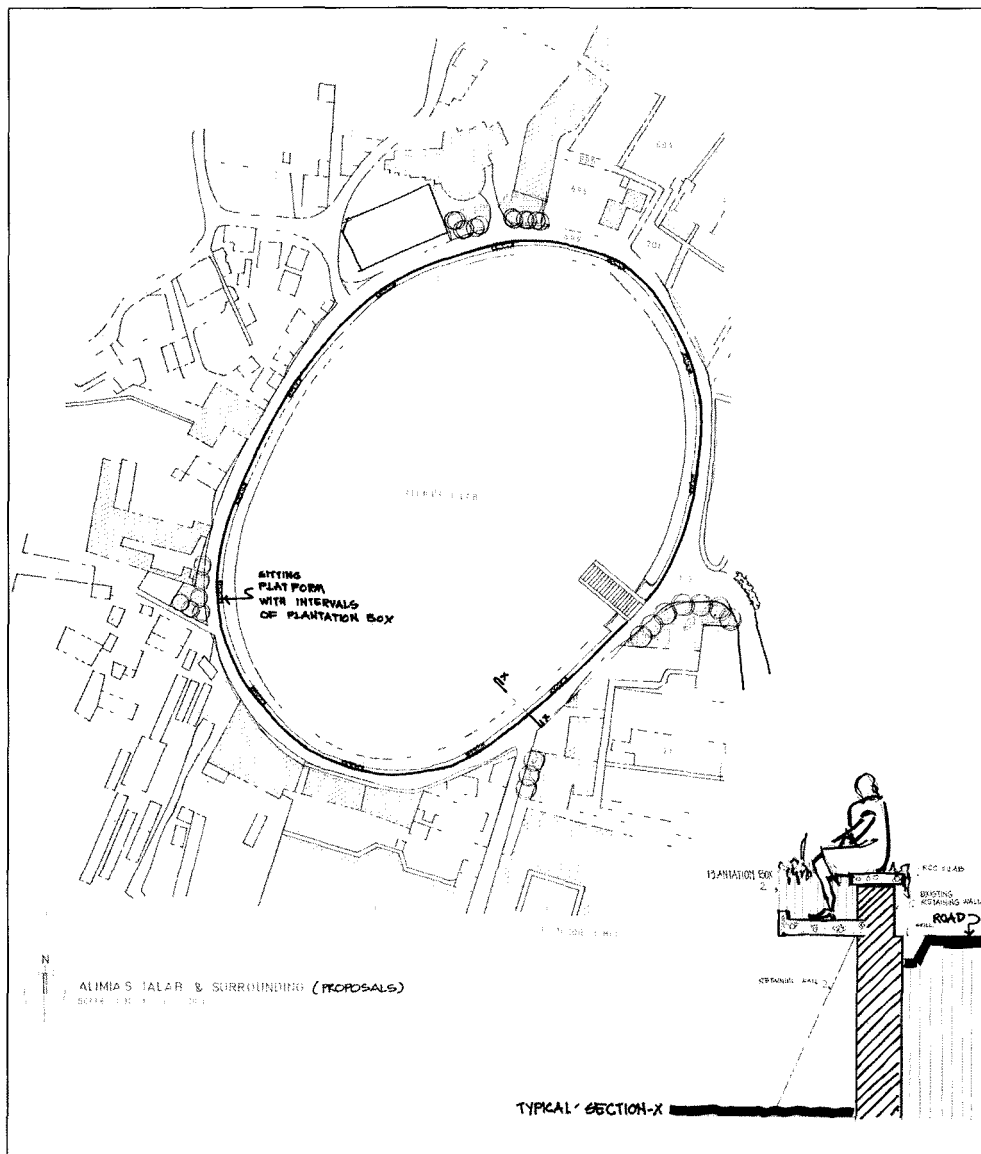
During the process of restoration of the Ahsan Manzil complex, the foundation of a fountain was excavated. The builders had abandoned the work after completing the sub-soil portion.

Proposals

The overall condition of the area is congested, dilapidated and chaotic, where the tank or *Talab* is the only element of relief. Therefore planning proposals were determined with a view of conserving the urban character of the area, enhancing its quality but also returning some breathing space to the tank area. The recommendations are as follows :

Area around the Talab

- i Declare Ali Mian's *Goal Talab* as a conservation area.
- ii Develop planning controls to restrict construction of buildings above five storeys. This will allow adequate sun and air in the tank and bring forth an acceptable skyline. It will also control the density of the area, while keeping the "openness" of the tank intact. Some suggested controls are: height and bulk control, elevation control, land readjustment, land use control.
- iii Upgrading of the services of all the buildings to an acceptable standard. This will involve the improvement of drainage, sewerage, water supply, gas, electricity and street lighting.
- iv Arrange cleaning of the tank itself and purification of the water from time to time.
- v Develop the bank of the tank as a community area. This could be done by restricting vehicular traffic, providing seating benches and necessary landscaping.



The workshop proposal plan for the Talab includes additional seating areas and plantation enhancing its social public use functions

- vi Reopen and upgrade the primary school which was taken over and closed down by antisocial elements.
- vii Create a neighbourhood open area and a children's play area. For this purpose, the land at the rear portion of the Ahsan Manzil is suggested. However, care should be taken so that the openness of the Ahsan Manzil is not diminished. It must be remembered that restoration of a building is incomplete without restoration of its surroundings. Therefore, even if the area is put to a new use the setback of the Manzil should be retained.
- viii Relocate the hawkers from the roadside to the newly-constructed market place.
- ix Identify and list for restoration nearby buildings of high architectural merit (but in the process of decay) noticed in the process of the workshop.

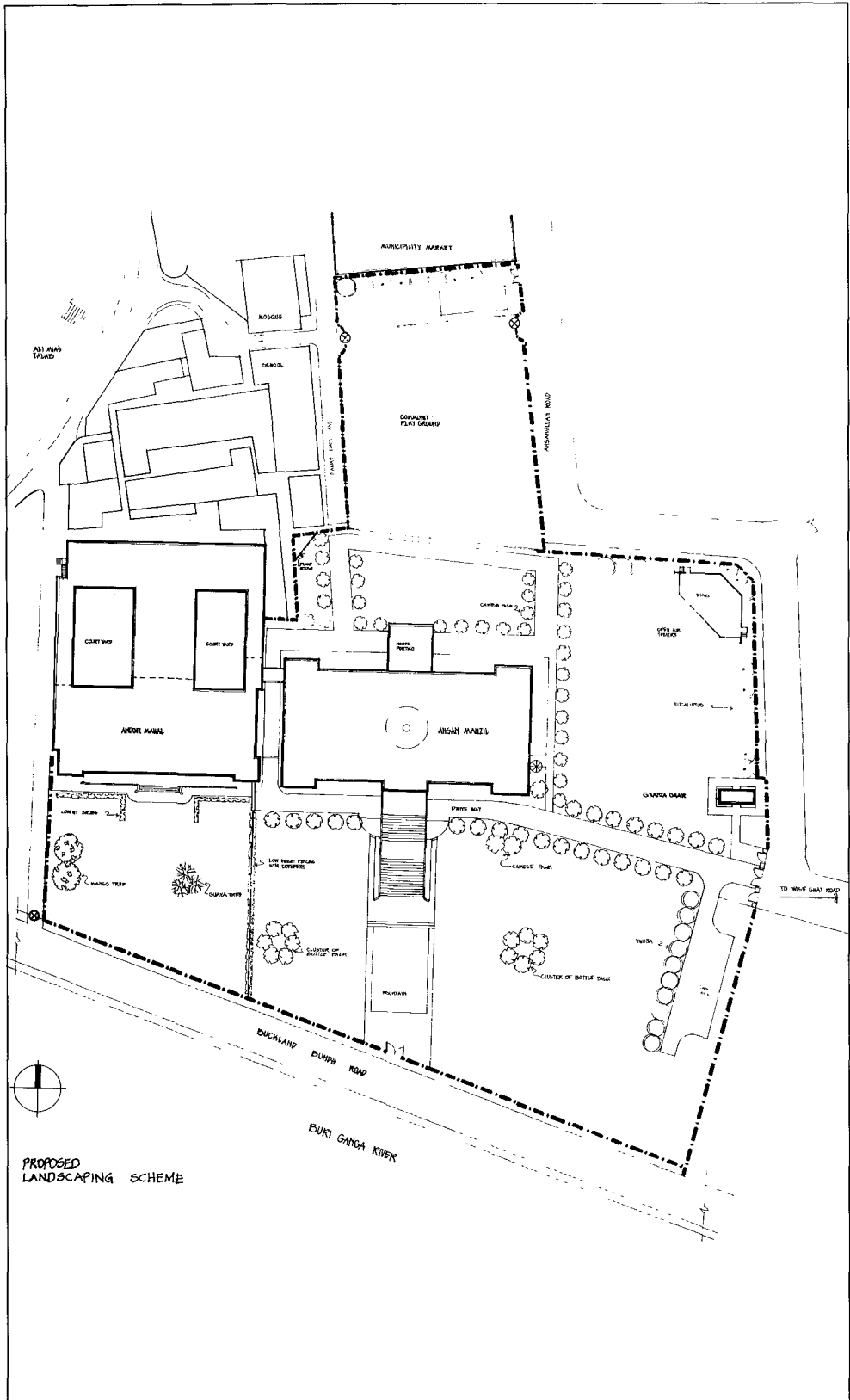
Rear Portion of the Andar Mahal

Since the survey shows that the building is structurally sound, it would be worthwhile to restore and renovate it. Although it is not rich in architectural merit, yet it has considerable use value as it houses a lot of families. Detailed design analysis were undertaken and it has been found that given the proper services all the twenty-eight families could be accommodated in this large building.

It is proposed that this be done, but only after necessary repairs to make good the cracks in walls, the broken roof tiles, the decaying parapets and the rising dampness. Rearranging the internal space will be necessary for the purpose, as will demolition of added constructions particularly those in the courtyard. A possible approach for rearrangement for housing the families is shown.

Landscaping of the Open Area of Ahsan Manzil

- i Convert the whole area into a formal garden befitting the architectural character of the Ahsan Manzil. The proposal would essentially recreate the original landscaping. Palm trees should be planted in rows on both sides of the walkway. Such vertical trees will enhance the formal character and monumentality of the building and at the same time permit clear views both from the building and the river.



Proposed landscaping scheme around Absan Manzil

- ii It is proposed that a fountain be built in the area where the remains of the foundation of an earlier fountain had been found. The fountain should be as far as possible close to the original design.
- iii The open area of the north-east corner is proposed for holding outdoor museum-related activities. This shall be in harmony with the proposed use of the restored Ahsan Manzil as a museum.
- iv The area at the rear of the Manzil should be opened up for use as a community play field. This might be against restoration concepts for Ahsan Manzil, but considering the requirements of the larger neighbourhood, it is an acceptable choice.

In conclusion, this project is not one of mere restoration, but deals with the aspects of urban area conservation. Therefore it is essential to consider this area both in the wider context of the old city and as an aspect of river front development.

All issues of social, cultural, religious and economic importance have to be considered in this task of preserving a unique urban heritage. Supportive laws must be developed so that the people around the tank are not subject to unfair restrictions. The river front of Dhaka had always been an important part of city. Conservation efforts to recreate that lost quality can go a long way towards guiding the future development of Dhaka.

A CRITIQUE OF THE WORKSHOP PROJECTS

John Sanday

It is now time for us to review the results of this workshop and to look back over the last week of intense activity and ask ourselves what we have learned that we did not know before.

During this workshop we have discussed the meaning of conservation, the economics of conservation, and conservation in practice. All this information has been given to us by leading experts in these specific fields.

This workshop has certainly opened the eyes of the participants to their history and cultural assets. Many team members freely admitted that they were *seeing* their case study buildings for the very first time. The case studies were randomly selected, more to identify specific kinds of problems than because of their specific architectural or historic importance. We started with Khan Mohammad Mridha's Mosque which dates from about 1700 and which is representative of an historic, religious structure in a quasi-residential commercial area.

Next was Painam Village, an abandoned street of some architectural significance, strongly related to Old Sonargaon. This site was in a low density agrarian setting, perhaps the only one of this kind.

Another site, Ruplal House, is a large single house of the colonial period. A structure of considerable architectural significance, it is overrun and encroached upon by the wholesale and retail vegetable markets.

And finally came Ali Mian's Talab, a large tank located behind the Ahsan Manzil Complex. The team's brief asked them to consider also the adjoining rear portion of the Ahsan Manzil.

Having selected the sites, each team (composed of four students with a tutor) was given a brief with specific tasks: first, undertaking a general survey to actually assess the historical, architectural, and present condition of the building or sites. Second, to do a study on the possible restoration of the property. Then there was the question of rehabilitation: what to do with the building or the surroundings. This is something that is totally separate from the problems of architectural conservation. People often

muddle the meaning of these two words, and in many ways, and in many cases, the various teams did address the problem of conservation vs. restoration.

We then moved to the all-important surroundings or curtilage of the building to consider its landscaping. One of the points that perhaps didn't come through very clearly was the history of the landscape around many of these buildings. There was a tendency for many of the people to want to apply beautification rather than conservation or restoration of the landscape.

The next question was of incorporating a new structure within the complex: what is often called in-fill. It follows the major problems that architectural conservationists face, that of adding new buildings to an existing building or adding a new structure to an existing environment. It is perhaps one of the most tricky subjects to approach. It is important to actually look at the building, to question the value of any additions or accretions, and to ask one specific question — does it work? Do additions or alterations function correctly? (If not, then one can consider removing them.) In many cases, to make a building work in its present situation in the 20th Century, it is important to make additions so that it actually serves present-day functions. It can be done, and can be done very well. It can also be a total disaster, and it is usually those total disasters that we remember.

The final question that was posed was that of upgrading of the environment. We have varying circumstances among our case studies. The environment was fairly simple in Painam Village, where it is not overly crowded, where it has a wonderful agrarian setting, and where it has the mystique of a series of tumbled down but photogenic buildings. We then go to the other extreme at the Ruplal House, and there you fight your way through a dense crowd of people and vegetables and struggle through the spice market with a handkerchief over your nose. And you wonder how on earth can we upgrade this particular environment. Yet again, we had the question of Ali Mian's Talab. Some people, particularly the historians and the archeologists in our midst, questioned the value of looking after this *talab* (tank or pond). There were even proposals of draining it and turning it into a football field. What is the right answer? The great attraction in the *talab* proved to be the fact that it is a body of water, and as everyone agreed, it is such an important feeling to be near water, particularly in Bangladesh.

I'm first going to mention a word or two about the general methodology of the team approach to case studies.

One basic thing that we have all learned were the pitfalls and the

difficulties in making a good presentation. The use of videos was a specific tool utilized for two presentations; one was better than the other. The lesson we all learned was that the use of video can take you only so far, particularly for non-professionals. The art of making a documentary is that you must put over your point within fixed and unforgiving time limits.

A video is only one of the problems of condensing a large amount of material into a short period of time. The art of presentation, in fact, is in the distillation of material. A suggestion for all the teams was that they should tackle the presentation as though they were selling the project to a client.

There are, in fact, three types of client. For instance, an academic client, which could be the Aga Khan Foundation. The political client would be the government, and the third, more human level of client, would be the owner or occupier of the building. The outcome of the whole question of one's approach to a building is that you have to identify to whom you are actually trying to "sell" your project. You have to consider the time you have available for the presentation. You have to work out the attention span of the person to whom you are presenting, and if you see one part of your presentation missing the mark, have to stop that part and go on to something else.

The bottom line though is to avoid over-kill; just give your clients a sample of what you offer, of what they are after. Keep them looking for more.

Another form of media used in the presentations was the overhead projector. The presentations with good clear diagrams came over extremely well. When you are able to point at your proposal, i.e. this we're going to turn into a hotel, that we are going to use for landscaping, it is better remembered. The diagrams and pictures are far more valuable than a lot of verbiage.

At the feasibility stage, it is very important to present a series of options; you shouldn't thrust down your client's throat the "one and only" option, because he may not like it and then you have lost him. Throw out a series of possible options, and watch your client to see which one he likes and expand upon it.

Don't forget that to come up with a 15 or 20 minute presentation, it is still necessary to do those hours, weeks and months of research, and to have that information by your side in case you require it — just in case someone comes up with a difficult question.

Another point for a presentation is to respond to all tasks. You were all given the same tasks, five or six of them, and in actual fact, not many of you answered all of them. We appreciate you had very strict time

constraints, but nonetheless, if someone asks you a question, you should at least make an effort to answer it or acknowledge the fact that you haven't answered it for some reason or another.

I cannot hope, in the space available, to condense all the recommendations made by each of the teams, but I shall make comments on the content of the individual presentations.

Starting in order with the Khan Mohammad Mridha's Mosque, we all agreed that while the team made a very brave attempt at solving some particularly difficult problems, it should try to make a bolder statement. I feel that your answer was a little bit standard; it would have been worthwhile to try to think beyond the standard answer in what is, after all, an exercise. You made a very bold recommendation, for example, that you should pull down the six-storey building, but you avoided the question of what to do with the empty space beneath the building. You showed us the very interesting photograph of 1960, when the building was a partial ruin, but I don't think you researched sufficiently as to exactly what the levels were. You should have stipulated that further investigations were necessary to see where the original floor was. It was interesting how much historical evidence came out, such as the fascinating series of photographs and old drawings.

One of the lessons, certainly, that you learned from this particular project, was the need for legislation. It is all very well to say that we should pull a building down, but you have got to find strong reasons behind it. Nonetheless, you did make a very good presentation and you unearthed several important questions that still remained unanswered, and it would be well worthwhile to take it a step further and make a few brave statements.

We then move to the Painam Village. The lesson to be learned here is *distillation*, to reduce your information down to what is actually necessary. You had perhaps the most difficult job, because you have two-thirds of a mile of road with buildings and dense construction on either side. Of any team, you probably had more right to dodge a few questions, because of the amount you were asked for. However, you shouldn't get into too much detail; it should have been more of an overview, of putting up ideas as to the use of the various buildings. You identified those that should be removed. You rather overlooked the *macro* view, for the benefit of archeologists and historians. You didn't actually succeed in putting Painam into its historical context. None of us could be presumed to know where the real Sonargaon is, that is, on the other side of the Chittagong road. Nonetheless, it is important to establish the historical link, tenuous though it may be with the whole environment. It is a responsibility that you owe to history to recognize the importance of Sonargaon or Painam in the total

context of Sonargaon, which after all was the most important city in Bengal at that particular time.

One thing which I hope that the workshop will endorse is your recommendation that Painam should be incorporated in the overall development plan for the folk art museum and the recreation center. If nothing else, the information and the interest generated from your presentation has brought to light that very close to the folk art museum you have the opportunity of incorporating an important part of Bengali history.

Next is the Ruplal House. This team was faced with several serious initial problems, including the physical one of actually getting into the building under appalling working conditions. So very wisely, and with the support of their tutors, they decided to make the assumptions that the encroachment from the wholesale vegetable market and the spice market was going to be resolved. They could have spent two hours explaining how they were going to do it; instead, they made a few assumptions, such as that the new Chinese bridge would take the market to the other side of the river, therefore freeing up the curtilage and environs of the house. One has to accept these sort of assumptions to open up the possibilities of an interesting analysis of the property.

They were faced with an important task, that of identifying the future use of the building. It is very important to consider this at a very, very early stage. One of the good things about their presentation was that they came up with several different alternatives for usage. It provoked discussion, which is just what you try to do when you are presenting a program, and I think it underlines the fact that by putting up several options at the feasibility stage, you will get a lot of feedback. Their presentation approach was different from the others. They prepared a very concise statement which they handed out, and then they read it. They knew exactly how long it was going to take, and they put out far more information in a very short time than anyone else did. The fact that they finished 15 or 20 minutes before their time due was a credit to them, because we still had their ideas very fresh in our minds.

And finally, we move to Ali Mian's Talab; this case raised several problems, even the central one of "what is there actually to conserve"? The analysis of the Talab was carried out extremely well, and even those who wondered why the tank was being considered were convinced, after their presentation, of the importance of it. Taking into consideration the extra building in the back of the Ahsan Manzil Complex that was not quite adjacent to the Talab itself opened a series of interesting possibilities. The team dutifully considered this rather dilapidated building with a view to its repair and conservation. As a devil's advocate, I suggested that there was

no point in saving this building; it should be torn down and replaced. At this suggestion they made valiant proposals to incorporate suitable services and facilities for the people who lived in the building; they should be commended for considering the residents. It is too easy to pull a building down and build something better, but what are you going to do with the poor people living in it while you are going through this process?

My personal view was that they should have recommended the incorporation of that building as well as perhaps a larger section of the land almost adjacent to the Talab into a very careful redevelopment of that whole area. History states that there was a strong relationship between the historic buildings and the Talab itself, and the location of the building seemed to be the obvious link. It is therefore important that this be given due consideration. However, you have to go through the process of studying the building before decisions are made, and it is only after doing this that you can truly assess the merits of the existing structure against that of a new one. Normally the guiding factor at the end of it all is cost.

To summarize some of our experiences, we have learned the importance of communication, but even more importantly, the value of *collaboration*. An architect restorer is often named as being a jack of all trades and master of none, not an enviable position to be in. But if you have to know a little bit about everything, the most important thing to know is whom to contact when you have to know more. The architect, the engineer, the planner, the archeologist, and the historian make up a working team. The architect's fate is often to act as the mediator in this team approach. One of the developments that I was sorry did not take place in this workshop was a greater collaboration between the architects, the historians, and the archeologists.

One has also to realize one's limitations, and to remember that one ten-day workshop does not make an expert. You have just started a fascinating journey, and it is now through experience and exposure that you will learn.

Proposals for the Government of Bangladesh

In recognition of this workshop and the extensive research that has gone into its preparation, and the information derived from the four selected projects, it is appropriate to make a few recommendations to our host government in recognition of the impressive cultural heritage that belongs to Bangladesh. We all appreciate the efforts and commitment of the Bangladesh government to conserving and preserving the internationally-acclaimed World Heritage sites of Paharpur and Bagerhat, which is being

carried out in collaboration with UNESCO/UNDP. It is important to endorse the findings of this workshop to show our commitment. While the proposals will be found in a separate section, it is important to emphasize that they are the product of *all* the workshop participants.

WORKSHOP CONCLUSIONS

Sherban Cantacuzino

In drawing conclusions from our first Workshop on Architectural Conservation, it is important to stress that we concentrated on *urban area conservation* rather than on monument conservation. These broader aspects of conservation – of protecting historic buildings, of looking at groups of buildings, at the space between the buildings and at whole areas with a view to improving them – are much less familiar and less understood than is *monument* conservation, which looks at a monument in isolation.

The workshop has been a wonderful learning exercise, and there is no better place to learn than in one's own country. The twenty Bangladeshi architects, planners and engineers who took part in the workshop have avowed to me that they learnt a lot, and, better still, that they now realise that they have to learn more and are ready to do so. One of the main conceptual difficulties lies within architects and planners, whose whole training, oriented as it is towards the design of new buildings and the planning of new suburbs or new towns on virgin sites, makes them ill-fitted for urban area conservation. Of course, learning about the values inherent in traditional urban patterns, or in traditional materials and forms of construction is perfectly possible, and this has been an essential part of the workshop. The readiness with which the groups embraced and quickly understood the field was impressive. The best evidence of this was the strong defence of conservationist principles which some of the groups produced, unaided, when challenged at their presentations.

If the Bangladeshi students and tutors have learnt a lot, for us tutors from abroad, it has also been a fascinating learning exercise. We have learnt a lot about the problems in Bangladesh, and we have learnt also about running and directing such a workshop. Another time, I would include economists and sociologists, both on the student and on the teaching side. Architectural conservation, as Alfred Van Huyck rightly told us, should not be left to architects alone.

Another time, too, I would make sure that the decision-makers were

present, especially at the presentation and evaluation. I would want to involve the leaders of the local community in whose area a project was situated. Perhaps it would be possible to have a special session in Bengali, so that they could join in the discussion and criticism. It seems to me to be essential to involve the local community, for this is one way of building architectural pride and environmental appreciation in a community. It is part of that much-needed process of public education which both Alfred Van Huyck and Professor Mohammed Arkoun have addressed.

In this context of education perhaps Professor Lewcock's written text provides the last word: "The lesson of the great monuments of the past, as well as of the past's 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 perhaps the real and most fundamental justification for architectural conservation.

SELECTED BIBLIOGRAPHY

WORKSHOP PARTICIPANTS

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ILLUSTRATION CREDITS