

HERITAGE AND CONTEMPORARY ARCHITECTURE IN AN
URBAN ENVIRONMENT : A CASE STUDY, BHOPAL

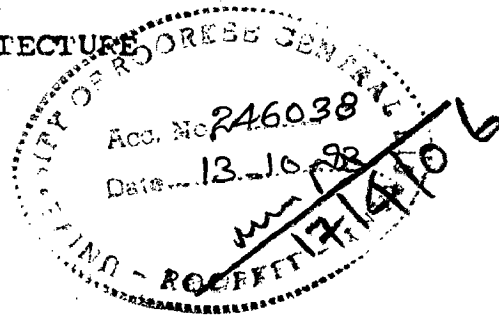
A

DISSERTATION

submitted in partial fulfilment of the
requirements for the award of the degree

of

MASTER OF ARCHITECTURE



by

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CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in the thesis entitled **HERITAGE AND CONTEMPORARY ARCHITECTURE IN AN URBAN ENVIRONMENT: CASE STUDY, BHOPAL** in partial fulfilment of the requirement for the award of the Degree of **MASTER OF ARCHITECTURE** submitted in the Department of **ARCHITECTURE AND PLANNING** of the University is an authentic record of my own work carried out during a period from 1st June 1990 to 31st Jan. 1991 under the supervision of **MRS. RITA AHUJA**.

The matter embodied in this thesis has not been submitted by me for the award of any other degree.

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This is to certify that the above statement made by the candidate is correct to the best of my knowledge.


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A C K N O W L E D G E M E N T

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INTRODUCTION :

India with its rich cultural heritage, has an equally rich architecture, while discussing architecture and heritage, we have to keep in mind that our country has inherited possessions, associated with history and civilization, which has been the source of inspiration to the present generation and posterity. We have also inherited in the most of the towns and cities, natural assets in the form of lakes, rivers and mountains etc.

There is a great need to pay attention towards our existing cities, their intrinsic visual qualities and the differences between them, not just so called historic towns but, all those with an individual identity. Cities are no longer perceived simply as religious, commercial, historical or university centres. But as formed urban localities in which such dimensions as image, symbols, perspective, structures, and all emotional values are brought together in the complex web of total perceptual experience.

Any discussion of the design of our urban environment should start with considerations of how the existing townscape has been created and with an understanding of urban design concepts of the past. Our forefathers created this urban environment either .

by an evolutionary and often intertitive process over time, or by a single minded design effort, in response to the needs and aspirations of their time. We can learn much from their experience and imagination, in our efforts, to create an urban enuironment of high quality for the needs of urban society of today and tomarrow. This means sensitive and intelegent understanding of our fine old buildings, of the form and character of urban spaces, and indeed of whole historic parts of our towns and cities leading to the formulation of action programmes, for the preservation, conservation and rehabilitation of our historic heritage.

In the design and modification of urban areas, however, we must allow in addition, for what have been termed, intellectual perceptions and satisfactions, and for our insight into such related questions, as historic continuity, the vitality of urban centres, functional coherence, urban forms and planning as a mirror of civilization. This dissertation is aimed to find some of the ways and means of maintaining the existing character of towns and to suggest that the qualities that we inherited from the past, can become a discipline for change today.

Bhopal has been very rightly called ' the

Cultural Capital of India' by Late Prime Minister, Mrs. Indira Gandhi. It is one of the important historic cities in the country, which possesses a diverse and rich architectural heritage. But the forces of time are changing the demographical, economical, cultural, physical scenerio of the city. Most of the traditional forms within the city are being obiterated, and are in the danger of being lost forever. One thing may be said with confidence that the city's cultural heritage frozen in ubiquity of its monuments, and the built environment is worth preserving and contemplating about.

But if change is inevitable and a degree of preservation desirable, how do we resolve the conflict, how do we preserve our heritage effectively, how do we maintain visual completeness between old and new, how do we maintain the character of our cities, are the fundamental questions.

As I already suggested, it is hoped to show that a conservation policy, is not simply a matter of dealing with historical buildings, but also a part of creative process, that can provide inspiration and discipline for change. The areas or parts of cities, of acknowledged beauty, can provide a basis of inspiration, for contemporary architecture and for future, important is that upto what extent, we are able to derive from them, the fundamental aesthetic values or traisms relating to norms, in urban

compositions, which may sometimes be equally valid, in the very changed circumstances and conditions of today.

To achieve the fulfilment of these objectives mentioned in the foregoing, taking Bhopal, the capital of Madhya Pradesh as a case study, This dissertation have been grouped into nine Chapters, each Chapter is further divided into different sections. Its main theme is that, a city's past, its present, and its future, must combine to create a recognizable unit, so that its growth can be seen and felt to be continuous.

CHAPTER I

THE VANISHING HERITAGE : A CULTURAL CRISIS

1.0 Cities are a juxtaposition of buildings, streets, and spaces between them, and we may expect them, to be very similar to each other. But hundreds, thousands of cities are existing in the world, and none are identical. Every city possesses its own character and formulates a distinct mental image, on the observers mind. The uniqueness of a city is a consequence of its organization, street pattern, exploitation of contours, landscaping features, character of nodes, landmarks, the thematic continuity or discontinuity of its districts, consistency, or discontinuity of its districts, strength of edges, the way in which the built masses are juxtaposed and adapted to micro climate, local regional and national

traditions absorbed, and people's habits catered for. Cities are unique, while certain of their features have a family likeness with similar features in other cities, Each contains its own character and identity, reflecting the total culture of society living there in.

Culture with which we are concerned here comprises inherited artifacts, goods, technical processes, ideas, habits and values. The negligence of these may result in a crisis of cultural continuity.

With understanding these inherited values we learn a bit of history, sociology, anthropology, building design, in short we learn about ourselves.

1.1 HERITAGE :

In every community as 'Frederick le Play' pointed out, there are three elements, the place, the work and the people, the sociological equivalent of environment, function, and organism¹. Out of the interaction of the Folk and their place through the work, the simple life of the community develops. At the same time, these elements carries with its specific spritual heritage. The people have their customs and manners, and morals and laws, as we might say more briefly their institum tions. The true identity of a society is sought in terms of its self-consciousness or cul- ture, at the heart of which lies a distinctive value experience. This basic value exprence may be said heritage. It is nothing except a mode of human life self awareness, for value is nothing except the self, revealed or felt to be revealed as a consent of experience. On this fundamental experience or heritage , is reared the underlying world view of the culture, with its multiform expressions in institutions, beliefs and symbols. The continued vitality of culture thus depends on the continuity of its underlying communication of value, which is the heart of heritage².

1.1.1 DEFINED :

To sum up, cultural and architectural heritage can be defined as,

'Human's Esteemed Relationships, Institutions
Traditions Acquired from Generations Experience.

1.1.2 THE ARCHITECTURAL HERITAGE :

An entity, which may be called an architectural heritage, is a product of time, in the form of mass and space. When aesthetic values, construction techniques, and their products, carry over beyond the living groups, it becomes an architectural heritage, where human experience is transformed into viable signs, symbols, pattern of conduct, and system of order.

1.2 HERITAGE : THE SOURCE OF INSPIRATION AND IDENTITY

' The past is ever with us and all that we are,
and that we have, come from the past, We are its
product, and we live immersed in it, to continue
it, with the present, and extend it to the future'

... J.L. Nehru

The discovery of India

When people speak of the value of history or of the need to understand the historical aspect, of a contemporary problem, they most commonly mean that, it is essential to know how the problem grew up or developed from its origins, in the past. History is this knowledge of origins, and development or education of contemporary matters.

For people their city is a great book, on which written the history of aspirations, struggles, social ideals. Since the townscape is made up of a number of components, it constitutes a homogeneous formation rarely. The juxtaposition of individual buildings, group of buildings, derived from different epoches, and every creative epoch introduces a new element in it, which then made their contribution to the morphological plurality of the urban composition. This is an inherent structural law. We see therefore, that the urban compositions, result from the accumulation of different elements, are not only representation of their own particular period, but also contribute to the total living urban composition corresponding to the social and creative needs of later periods.

1.3 THE HERITAGE AND CONTEMPORARY ARCHITECTURE :

'Time present and time past are both perhaps present is time future. And time future contained in time past what might have been and what has been point to one end which is always present'

... T.S. Eliot
Burnt Norton

History is always relevant to the present problems, and it is true that all the three concepts of history show a connection between history and present. The first of evolution, the second of contrast, and the third of parallels. The integration of past evidences and the natural landscape

into the spatial cluster of future is not only feasible, but desirable. It is feasible, because it does nothing to hinder the development of the dynamic structures, it is desirable and even imperative, for man's physical and mental health³. It would grant him direct access to his social and cultural heritage, and ensure continuity of social development.

In relating the factors of economics, aesthetics and ethics, in modern urbanization, it can be said that this past of urbanization has brought us, an extra ordinary artistic heritage, produced with very limited set of resources. It is an inescapable fact which are we have to face with some humility, in view of the chaotic state of our contemporary urban areas. Whether or not we can see the means of directly deriving benefit, from this past wealth, which have so much of a challenge to offer us. We can not afford to forget, that they have set standards, which we have yet to emulate, satisfactorily, or in any reasonable degree, in todays urban creations.

1.4 IDENTIFICATION AND STATEMENT OF THE PROBLEM :

During last forty years or so, our cities have facing several changes. Progress have become socially and culturally associated with westernization. Much of our traditional forms, either being lost, or now looked down upon. With this loss, we are also loosing a number of time tested techniques,

methods and values, which were developed by our forefathers, either by an evolutionary or intuitive process over time or by a single minded design effort in response to the needs and aspirations of their time. We can learn much from their experience and imagination in our efforts to create an urban environment of high quality, for needs of urban society. Urban design may be defined as 'a thoughtful process of giving physical form to urban development as a response to urban sociological needs, and aspirations'. In the appreciation of architecture, a building is often isolated from its surroundings for contemplation. The urban designer on the other hand, thinks the effect of an extensive sequence of buildings and spaces. The urban environment is less likely to be appreciated by the sightseer or tourists, than by the conscious or partly conscious citizens, who live in the town, who are variously aware of their surroundings, and who move in the spaces of the city, every day.

Now, the question is, why this cultural loss is going on? and Why most of our contemporary architecture is facing failure in creating a meaningful urban environment. While designing or modifying any urban composition, some basic points to be taken in to account, according to the check list proposed by American Institute of Architects⁴, are :

1. The environment matrix which consists of the

city, historical, geographical factors
etc.

2. The social urban fabric
3. The physical urban fabric

Unfortunately, in our country, the cities are not described in their long term historic rhythms or generic codes, to explain the social and physical urban fabric in true sense. The available data is based on an quantitative analysis. In this context, statistics, demography, population growth, etc. are not proved sufficient, to draw the picture of an urban area in totality. Therefore, a judgement about the visual characteristics of a city, is required, which is intuitive, as well as imparical. It must include the various sociological, psychological, physical, aspects responsible for the creation of that particular image. For identification of the areas, worth preserving within the city. And if we are wise, what we have to try to do is, to extract from these inspiring historical examples, some of the well tried, essential principles of grouping, and composition, which wide ranging opinion has persistently continued to accept as pleasurable and beautiful.

1.5 OBJECTIVES AND SCOPE :

OBJECTIVES :

This dissertation is oriented to achieve objectives that are constituted of two approaches, first subjective and the second objective approach .

The objectives that are subjective in nature are :

1. To highlight the value of an architectural heritage, and its significance, and need in the creation of contemporary architecture to make the architects and planners aware of these valueable assets.
2. To formulate a systematic method of studying a city in a different way, oriented towards the creation of a worthwhile urban environment, where the satisfaction of inhabitant has given the top priority.
3. To find some of the ways and means to retain the our heritage to create harmony between the heritage and contemporary architecture.

The objectives that are objective in nature are as follows :

1. Study the physical and visual characteristics of the city in question.
2. Collect and document authentic data about the historical buildings of architectural importance, which are considered as a living evidence of the heritage of the city in question.
3. Perceptual analysis of selected study area, in order to find out the essential elements of form and space and the principle guiding the organization of spaces. IMP
4. Bringing out some of the urban element, urban characteristics from the analysis of the old buildings studied, which can be utilised in providing a character to the contemporary architectural creations, in order to maintain continuity between the old and new.

SCOPE :

This study which is invariably related to the whole city life and form may become dangerously expansive. Therefore, it is kept within certain boundaries and these are :

- 1) The historical buildings situated within the Bhopal's Municipal Boundaries, which are supposed to be of greatest historical, Architectural interest have been studied.
- 2) The buildings constructed after the region of Dost Mohd. Khan have been selected for documentation. The period before is not supposed to have any remarkable influence over city's architecture, and the period after 1928 A.D. shows a complete change in architectural style, because the frequent use of concrete.
- 3) Selected buildings, represent, the widest possible spectrum of old buildings of Bhopal.
- 4) Socio economic, cultural religious and other factors have been studied.
- 5) There is a documentation of historical buildings within the city which represents the findings from surveys, interviews, visuals and no proposals or methods for conservation has been incorporated.
- 6) It is morphological study of essential elements of form and space and the principles which control the organization of space.

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CHAPTER II

THE CONCEPT FOR BETTER LIVING: BUILT ENVIRONMENT

2.0 What do people need ? They need a sense of security and of creativity. The sense of security requires adequate food, shelter, clothing, health, protection, education and information, the feeling of group membership, law comfort luxury, reciprocity in production and consumption, dignity, and equality of opportunity.

 The sense of creativity requires a feeling of accomplishment, of adding something to the world, improving it, receiving group approbation for accomplishment understanding the world better.

 For better living, they do need a good environment. Although, the natural and institutional environments are dealt with in a number of academic disciplines, also the fine arts, the man made physical environment, including the city itself, has been a neglected focus, in general, in broad sense, whether in historical, functional, behavioural or purely aesthetic terms.

2.1 THE CONCEPT FOR BETTER LIVING : BUILT ENVIRONMENT :

City is not a mere collection of buildings. It is people's art, a shared experience, a place where our complex political, social, economical, methods and approaches to the city are establishing, at macro-cosmic level a single focus aim or objective is the creation of a worthwhile environment for people to live, to work, to play in⁵. Its architecture is not to be looked at but to be in. It draws us into its depth and involves us in an experience, shared by all the people, who are moving about, in it. Now how to describe a city or a part of it, in ways which will be confirmed by different observers. This refers to the term 'Built environment'.

The Human environment is the area of his vital activity and the activity of a man depends on his environment. According to Kurt Lewin,

'Environment is a field of values and possibilities⁶.'

The environment is an area of interpersonal relations, a space in which people meet, communicate, make acquaintances, co-operate, conflict, enjoy a good reputation or ill reputed. Interpersonal relations and contacts, may either be directly modified by the spatial organization of the environment, as by distance, neighbourhood, dwelling in the same place, walking the same street etc., or indirectly mediated by a similar type of activity, as walking for a bus, going for a walk with children or dogs, entertainment in the same place etc.

2.2 A PSYCHO ANALYSIS :

The environment is an area of the physical and mental development of man. It influences not only his physical and mental health, but also the process of forming his needs, views and opinions, his way of life, attitudes and strategies. It may organize or disorganize his personality, accelerate or retard his mental development, form his emotional life, and be the source of his hopes and fears, activation or discouragement.

The environment is a pattern of sensory stimulation, a more or less organized source of stimuli which determine one's activity level⁷. Certain elements of the environment have for man, the value of either goals or objects of guidance, besides they may be regarded as means, i.e., factors either facilitating achievements of goals or making it more difficult.

2.3 HERITAGE AND BUILT ENVIRONMENT :

The present century will no doubt be remembered for the unprecedented cultural and political upheavals, that have led to a condition of global instability. The speed with which our traditional forms have undergone transformation has greatly increased the psychological need for permanence. In the context of total urban environment with which we are concerned here, the architectural, social, psychological value of an architectural heritage is great. Because its presence

enriches our visual experience, and gives us a feeling of intimacy, and reassurance, and provides a link with past. It offers play material, that detach the observer from narrow minded pre-occupation with the direct utility of whatever he may be doing⁸. A location built environment became full of diversity, extending our latitude for behavior and, orientation also mediates by artifacts.

2.4 URBAN AESTHETICS :

The main objective of any urban composition is the creation of a worthwhile environment for people to live, to work, to play in. This environment will utterly fail in its purpose unless it provides the satisfaction, which only comes from the human perception of a thing of beauty. It is evident that human beings benefit, spiritually, and physically, in a functionally efficient, and aesthetically pleasing environment.

Aesthetic is the term, derived from Greek word *αισθητικος*, which originally meant sense perception⁹. Aesthetic appreciation is widely considered to be subjective, and the beautiful is held to be, not a quality of an object, irrespective of the perceiver, but a value, that the perceiver places on an object, whether it be a natural landscape, a building, a painting, a poem, or a musical composition, what is, or is not beautiful is a matter of opinion, yet similarities of the human mind, and the tendency for people of the same civilization, and similar education. For people of the same civilization and similar

educational bases, to think alike results on similarities of aesthetic judgement, and a consensus of opinion results in what some philosophers regard, as aesthetic objectivity.

Important in the aesthetics of urban environment, or townscape is the mood and character of the percipient. In the appreciation of architecture a building is often isolated from its surroundings for contemplation. The urban designer on the other hand thinks the effect of an extensive sequence of buildings and spaces.

The patterns, shapes, colour, and light and shadow, constitute the essential aesthetic value of urban environment, irrespective of what the buildings are, whether houses, temples, offices or schools. The perceptual stages are first, the two dimensional abstract pattern of coloured shapes, second the three dimensional, sense of space and the solid objects in space, and third, the symbolic reference to the purpose of these objects. The greatest degree of aesthetic experience depends on the first, a second degree on the second and hardly any on the third.

2.5 SPACE PERCEPTION :

We do not simply perceive a world which is common to all of us, but different worlds, which are a product of our motivation and past experiences. Space perception is a complex process and the visual part of it is dynamic rather than static. It is concerned with the movement around and through

buildings and spaces. Our eyes and head are also in a continuous state of movement, through which light, shade form, and particularly the three dimensional binocular qualities are fully comprehended.

Perceptive processes involve more than one of the senses. The physical effort of movement up or down stairs the acoustical qualities leading to echoes, or to the dead effect of a noiseless area, the clinical odour of a hospital and very characteristic smell experienced in particular cities are obvious examples of sensory perception¹⁰.

To the human observer the townscape of structural urban space like every other visual image always appears as a flat, perspective image. In other words, it is a projection, centered on the eye of the observer. This projection produces an elliptical cone, with a vertical angle of about 30° , and a lateral angle of about 90° . It also produces an imaginary plane of projection, approximately 50 cm in front of the observer's eye, which passes through the main axis of the optical cone at an angle of 90° .

The observer's angle of vision is widened by a second optical cone, with the same centre, i.e., the observer's eye and with a lateral angle of 60° . But in this outer space of vision, objects are not registered as a form, with precise outlines, instead of an exact perceptive image, the observer simply receives an impression of colour and light¹¹.

Due to the binocular nature of human vision, perspective image which are actually flat are enriched by an impression of depth. But this impression of depth which is in fact an imperfect perception of physical volume and three dimensional nature of space is the only way, in which man is partly able to grasp the essence of space.

Our imperfect perception of space is improved by a further factor namely our direct experience of the urban scene. By physically entering into urban space, we experience it, in an extremely intimate way, thus acquiring an indelible impression, and as far as humanly possible gaining full access to urban formations.

CHAPTER III

THE FUNDAMENTAL VOCABULARY

3.0 What do citizen need around them physically ?

Pleasant views and vistas, well composed in three dimensions and in relation to their movements. A sense of adequate comfortable enclosures, at human scale, in the space they occupy, houses, gardens, streets. A sense of graceful continuity and transition from themselves, and the occupied spaces to the larger landscape around.

A sense of articulated relation to community from home to work, to recreation, from house to neighbourhood, to community, to metropolitan, to region, to nation and on to continent and hemisphere and world. According to Ruskin the spatial quality of architecture distinguishes it from other arts and it is the story of man shaping space.

3.1 THE BASIC CONCEPT OF SPACES :

'Space is the sum of all places,
a dynamic field with direction
and qualitative qualities'

... Aristotle

Architecture is fundamentally the shaping of space what distinguishes architecture from other arts in its spatial quality. Space is volume defined by physical elements. Man lives in atmospheric space which, achieves form, volume, comprehensibility and scale, only when it is defined by tangible visible elements, and only to the extent that it is so defined. Every physical element above or below the horizontal ground plane, on which we are standing defines space, qualifies it gives it height, depth, simple order, complex structure, or indefinite continuity, within the range between agoraphobia and claustrophobia.

What is that, forms the environment itself and how the walls, the surfaces themselves are modulated, articulated to give a specific character to the city, to define the spaces or the group of spaces of the city. Then beyond that the most difficult is the value judgement, on the quality of this environment. This certainly include the factors previously mentioned, but also will include a final assessment of the relative quality of a scale of good or bad of the physical

visual environment that has been created. For this, we have to develop a whole new fundamental vocabulary.

The physical city after all is a system of activity areas, spaces, masses and circulation systems. For the creation of better living environment and to get desired visual and perceptual results, which are required to be human in scale, the array of masses, the deployment of spaces, mixing of urban activities must be proper; otherwise it may result in cities without sympathy, without pride and without human form. For this some principles regarding mass, space, scale etc. are to be examined.

3.2 SCALE :

Scale is that relation between the dimensions of the parts and the whole is any portion of our environment, which gives us sensations of bigness or smallness, complexity or simplicity, unity or disorder, as we pass through or stay in it. There are various sources of scale, the human form, animal forms, structural elements in inanimate objects such as plants and rocks, the elements of the site itself, ground forms, water forms etc.

3.2.1 SCALE IN URBAN DESIGN :

In urban design the term scale meant that, the city and its parts, are interrelated and also related to people, and their ability to comprehend their surroundings - to feel

in place in the environment. It seems obvious that in general, the scale of the human environment, should be that of the human form. If too big in scale, our surroundings tend to dwarf and isolate us, if too small they cramp and crowd us. The sensation of scale is also partly a matter of personal psychology, claustrophobia and agoraphobia, are its most extreme expressions. The effect of monumental scale is a function, the control of its development. It is used by authoritarians population, monuments in democracy give confidence to a common man. But the general scale in the general environment must have a close relation to the adult form; the monumental scale is occasional and climatic. We also need variation in scale, from boudoir to mountains. Indoor scale is determined by the human form and structural necessities. Outdoor scale is determined by these two plus the scale and character of the site and its views.¹³

3.2.2 SCALE AND HUMAN VISION :

Our two eyes have a general field of view and a detailed field of view. The general field of view has an irregular conical shape measuring about 30° up, 45° down and 65° to each side. It sees the general shapes, while the detailed field of view which has a very narrow cone, within this larger cone, sees the details of the objects¹⁴.

There are certain limitations associated with the

human vision these are :

1. We can not see an object which is farther from us than about 3,500 times its size.
2. We can see people upto 4,000 feet.
3. We can discern body gesture upto 450 feet.
4. Maximum distance for recognizing a face is 80 feet.
5. Maximum distance for discerning facial expression is 40 feet.
6. The range of conversational distance is upto 10 feet (maximum 8 feet is normal conversational distance while a person at 3 feet distance is supposed to be in a close relationship).

The intimate spaces of a city are usually not greater than 80 feet across, the urban space is not greater than 450 feet. In monumental vistas greater than 4,000 feet human beings cease to play a part.

Our normal field of view, in a space, determines the degree of enclosure, which is largely determined by the relation of viewing distance, to building height, its impact¹⁵ is as follows :

1. When a facade height equals the distance, we stand from a building, the cornice is at a 45° angle from the line of our horizontal

sight. In such a situation we feel well enclosed since the building is considerably high, than the upper limit of our field of forward view.

2. When a facade height is half than the viewing distance, it coincides with the 30° upper limit of our normal view. This is the lower limit, for creating a feeling of enclosure.
3. When facade height equals one third, our distance from the building, we see the top at about an 18° angle. In such a situation, we used to perceive the prominent objects, beyond the space itself.
4. When facade height is one fourth our distance, away from the building, we see the cornice at 14° angle, and at this angle there is a total loss of the feeling of to be enclosed.

3.3 URBAN MASS :

Mass is solid three dimensional form. Urban mass may be the buildings, ground surface, vegetation etc. in a space. Our eyes and light conditions governs the way we see mass. We used to observe the masses in the following manner :

1. From a viewing distance which equals the height of a building or object, we tend to notice details more than the facade as a whole.
2. At an angle of 30° or 1 to 2 relationship, we tend to see the object as a whole composition.
3. At 1 to 3 relationship or 18° angle, we tend to see the objects in relation to surrounding objects.
4. At an angle of 14° or 1 to 4 relationship, we tend to see the objects as a forward edge to the distant view.

3.4 URBAN SPACES :

Urban spaces and activity, a study to understand the relation of the activities to the spaces. These spaces are formed due to certain needs of the society. In the organic cities, these spaces have a different meaning. In the present context, the relevance of these spaces is to be highlighted.

Urban space, pattern, grain, size, density and texture, are primarily aspects of solid form, the building masses of the city. In Architecture, it is rather helpful to conceive of a building not only as a solid, but as spaces modeled by solids. It is also helpful to consider a city this way. The spaces of the city range from the space of the street, to the space of a park system, and, ultimately, to the vast space, in which an entire city exists. It is helpful to think of these spaces, as two generic types : formal or 'urban spaces', usually molded by building facades and the city's floor, and natural or 'open spaces', which represent nature brought into and around the city.

Basically an urban space must be distinguished by a predominant characteristic, such as the quality of its enclosure, the quality of its detailed treatment or out fittings, and the activity that occurs in it. An urban space should, ideally, be enclosed by surrounding walls, have

a floor which suits its purpose, and have a distinct purpose to serve. If, however, any one of these qualities is sufficiently strong, it alone may establish the sense of urban space.

3.5 IMAGE OF THE CITY :

In course of time people become aware of many cohesive linkages, and urban indicators, which formulate a particular mental image of the city. It is the product of both the immediate response, and memory of past experience. Professor Kevin Lynch takes this in the way that man's orientation presupposes an environmental image, a generalised mental picture, of the exterior or physical world. He found that there are five basic elements, which people use to construct their mental image of a city. These are pathways, districts, edges, nodes and landmarks¹⁷.

3.5.1 PATHS :

Paths are the channels along which the observer customarily, occasionally or potentially moves. They may be streets, walkways, transit lines, canals, railroads. For many people, these are the predominant elements in their image. People observe the city while moving through it, and along these paths, the other environmental elements are arranged and related.

3.5.2 EDGES :

They are the boundaries between two phases, linear breaks in continuity, edges may be barriers, more or less penetrable, which close one region, off from another or they may be seams, lines along which two regions are related and joined together. These edge elements, although probably not as dominant as paths, are for many people important organizing features.

3.5.3 DISTRICTS :

Districts are the medium to large sections of the city, which are the component parts of the city itself and which have some common, identifying character.

3.5.4 NODES :

Nodes are the points, the strategic spots in the city which possess a characteristics activity function. They may be simply concentrations, junctions, place of a break in transportation etc.

3.5.5 LANDMARKS :

Land marks are external point of reference. They are prominent visual features in the city, which help people to orient themselves in the city and help identify an area.

These five basic elements of a city are supposed to be sufficient, to make a visual survey of the form of a city.

Their importance lies in the fact, that people think of a city's form in terms of these basic elements.

None of the element types isolated above exist in isolation in the real case. Districts are structured with nodes, defined by edges, penetrated by paths and sprinkled with land marks.

CHAPTER IV

A MEASURE TO SAFEGUARD THE INTRINSIC QUALITIES OF BUILT ENVIRONMENT : ARCHITECTURAL CONSERVATION

4.0 Citizen need also a sense of relation to history, to the stream of tradition from past, through present, to future. A sense of building the future, in the present, on the past, not embalming the past in static reproductions. For history can not repeat itself, a sense of resolution of the contradiction between the need for change and new forms, and the respect for history.

But as a human being, they do need both cultural and physical roots, it is one their basic psychological needs, and the ignorance of this phenomenon may adversely affect their mental well being, more over when an entity gained the status of an architectural heritage, its value became a national possession, to be defended against encroachment and alien influences. To safeguard the intrinsic qualities of our fine existing built environment, one of the measures is its conservation. . . .

4.1 HISTORIC BACKGROUND :

After neglecting their architectural monuments for centuries, the Italians were the first to take really positive steps to protect their heritage. The principle of conservations of historic monuments was first established by Pope Pius II. During the last century, however, the urbanization has speeded up considerably in towns like Genoa, Florence, Naples and Bologna, due to the introduction of industrial sites, and modern road network which threaten to distroy the unity of the traditional townscapes, of these historic centres. On the other hand, Italian public opinion has now been made aware of such dangers. The flooding of florence in 1966, and the gradual subsidence of venice, have provoked widespread interest in the fate of the historic towns.

Germany first realized the need to preserve her cultural heritage, following the Napoleonic wars. Unlike Italy, which was required to restore mainly individual architectural monuments, following thesecond world war, Germany had to face up to the more difficult task of rebuilding entire historic centres. While Italy's major contribution in the sphere of preservation has been the development of new conservation techniques, for works of art, and while Germany acquired an early appreciation of the importance, of the townscape and, of more recent years, considerable expertise in the reconstruction of whole urban areas. France has always taken the lead in the

establishment of new and effective administrative methods. The French authorities backed by the specialists, and by public opinion took an early interest in the protection of individual living architectural monuments. The great wave of destruction unleashed by the Revolution, in which the French churches and monasteries were particularly hard hit provoked a powerful reaction. In 1826, Victor Hugo called for war, on the destroyers and in 1839, the Commission Nationale des Monuments Historiques' was founded. The French Romantics rediscovered the middle ages, thus do creating a general interest in this period, which led to the protection and restoration of many medieval buildings.

The greek have adopted a somewhat paradoxical attitude to historic monuments. They have always felt a profound respect, for the cultural tradition of classical antiquity. The modern Greeks, however, shown little respect for the living architectural monuments. The affinity felt by the modern Greeks , and for that matters, by all the peoples of the western world - with antique culture, and Byzantine splendour , shifted all interest in the more modest products of the five hundred years of Turkish rule, even though these possessed considerable aesthetic value, and were of great importance for the cultural continuity of Greece .

4.2 AN APPROACH TOWARDS CONSERVATION IN TODAY'S CONTEXT :

The city is a living organism, that develops and adapts itself to ever renewed needs and to the means of their satisfaction. The problem of historic centre should not slow down the renewal of cities. It is a question of directing the development of cities without renouncing the values that historic sites have both for us and for future generations. Conservation is the action taken to prevent decay, it embraces all the acts that prolong the life of our cultural and national heritage. A well developed conservation programme, offers numerous benefits to property owners to special interests such as local historians, to tourists and to the public or community in general.

The logic of larger building sites, to make better economic use of modern building technology, coupled with organizational changes which favour the larger unit, over a multiplicity of smaller ones, derives contemporary development inexorably towards a large scale, and to some extent an anonymous diagrammatic form of architecture. At best this is acceptable, at worst it could be a boring sameness. The retention of sizable and homogeneous parts of our towns, and cities, built to an intimate scale, with character, will help greatly to retain a sense of place, and identity, and a welcome contrast to the new development. Our old areas are one of

our greatest economic assets. The country's rapidly growing tourist trade is dependent on visitors being able to experience the unique environment of these old areas. The justification for a balanced conservation programme can be considered in terms of economic, cultural and planning benefits. There can be both public and private economic benefits, to any city undertaking a realistic and through conservation effort.

The cultural benefits derive from the broadly define educational functions of an historical conservation programme. These are less tangible, than the economic benefits but not less valid. Major historic districts can become basis components in a city's identity. Well maintained historic buildings lend variety scale, and dignity to the city scape.

Monuments are places, or objects of human endeavour or natural evolution, whose preservation by reasons of their historical, artistic or scientific importance is in the interest of society. Monuments may be historic, artistic or natural. Historical monuments comprise all those places and objects, which are associated with events, and personalities of popular history, or which throw light, on historical research and its branches like cultural history, folklore, archeology etc.

Historical monuments may be squares, streets, public gardens, buildings, furniture and articles of common utility,

costumes, weapons, documents, plastic and pictorial representations, inscriptions, burial places and tombs, boundary walls and milestones and so on.

Artistic monuments are historic works of urbanism, architecture, fine art, applied art, and historic and cultural resources.

4.3 WHY AND WHAT TO CONSERVE :

What to conserve ? What is related to why, and both must ultimately be answered by each community in the context of its local conditions, opportunities and aspirations. Each community must determine the extent, and the relative significance, of its own historic and cultural heritage. Though it is possible and in some cases desirable, to draw on the experience of other communities in developing aspects of a conservation programme, a successful programme must be custom tailored to fit local conditions. This is particularly true in the determination of what to conserve. The evolution criteria must be relevant in terms of unique local circumstances.

It is probably useful also to distinguish between buildings, and places, that are of significance, and those that are merely of interest. All cities have numerous structures, that are interesting, but many fewer contain structures that are of real significance especially of regional, and national

importance. The significant buildings should be those, that have the greatest educational value, in that they contribute substantially to the architectural, or historic heritage of a community. These structures must be saved.

Historic can be interpreted in many ways. An historic building can be one of distinct merit in a particular architectural style, or it can be a rather mundane structure, associated with a notable person or event. In terms of years, a building can not be historic until it is 50, 75 or perhaps 100 years old. Too strict a definition leads to a focus in the conservation effort, and ignores the buildings or other features which may be valuable community assets, but which fall outside of the definition. The broader umbrella that is provided by considering conservation as both Historical and Cultural, allows the development of a more flexible and comprehensive programme, that is not tied by preconceived architectural style, or age limitations. What is only of cultural interest today, may possibly be of historic interest tomorrow. The story of a city's past, as it is interpreted through a comprehensive conservation programme, is a story of continuity, growth and change, spanning various areas, it should not be considered as a story of a single isolated period.

CHAPTER V

BHOPAL : THE CULTURAL CAPITAL OF INDIA : CASE-STUDY

5.0 One of the main reasons for the rapid loss of identity of many cities is their failure to adopt and implement consistent visual policies. The confusion and lack of informations, both about the physical growth, and qualitative aspects of the particular city and the most important is the informations with regards to historic buildings, landmarks, nodal points, has already resulted in many irreplaceable losses not only of individual historic buildings but of whole area. Such important elements as high buildings are allowed to proliferate with out rhyme or reason in city after city and often to blur and distort fine existing features on the sky line. Now, there is a need for the retrospection of the city in question, its physical characteristics, and visual aspects, so that a continuity and harmony can be achieved between the historical and contemporary architecture.

5.1 BHOPAL : A PROFILE :

Bhopal has been very rightly said 'the cultural capital of India' by late Prime Minister Mrs. Indira Gandhi. Being one of the centres of art and cultural activities within the country, this picturesque city has an important place on the map of India. Bhopal, the capital of Madhya Pradesh, the very heart of India, is situated along 77.35°E latitude and 23.25°N longitude, and has an altitude of 550/660 meters above mean sea level.

It is situated on the main broad gauge line, connecting Delhi with Nagpur - Madras and Bombay. It is also connected to Indore - Ujjain, Badodara and Ahmedabad. National highway No. 12, connecting Jabalpur and Agra Bombay road N.H. 3 at Biaora, passes through the city. It has a prominent position on the air map of India.

History, divinity, serendipity, art and architecture have combined together in the city to make a rich visual experience. The city envelops the observer with a sense of great past, one can trace a glorious history through monuments, that tell stories of empires, and kingdoms, of warriors and builders, of poets and musicians, of saints and philosophers. It resounds with a thousand memories, Raja Bhoj, Nawab begums, Barlaatullah, Iqbal. It is steeped in divinity, and has been a mingling of diverse religions, Hinduism, Budhism, Jainism, Islam - giving rise to vibrant art and architectural forms.

5.2 HISTORICAL GROWTH :

Bhopal the capital city of Madhya Pradesh, is a primate city in the region, in most beautiful natural surroundings provided by low hills and extensive lakes. With time Bhopal has evolved, grown and attained its present status. It is one of those historic cities, which have enjoyed splendour of a capital and have also suffered the onslaught and destruction of feudal wars.

It is said that, this picturesque site was selected by Raja Bhoj, some time in 1010 - 1015 A.D. The city owed its origin and early life to strategic reasons rather than trade.

It was, therefore, subjected to fury and destruction by feudal wars. The present grid iron plan of the central city with Jama Masjid at the focal point bears imprint of Temple Planning. The city being capital of a Principality was under constant danger of attack by other rulers. A stone wall with six major gates Imami gate, Peer gate, Jumerati gate, Itwara gate, Budhwara gate, Ginnori gate were constructed for protection. Some of the work was carried out during the regime of Gaus Mohammad Khan. The inhabitants lived under constant fear and insecurity, particularly during after the decline of the mighty Mughal empire. Then inhabitants therefore, preferred to huddle together within the fort wall of the town. The

poorer section lined thus outside the fort wall.

The city flourished during the regime of Begum: Kudsia Begum started construction of Jama Masjid in April 1828, and also built shops around the Masjid. She also developed a road, from Jumerati to Ibrahim pura.

Jahangir Mohammad Khan built the first extension of Bhopal, beyond Pul Pukhta, known as Jahagirabad. During this period, the city also sprawled beyond the fort wall, in an unplanned and haphazard manner.

Begum Shajahan built second plan extension of Shajahanbad, with Taj-ul-masjid, shopping centre, and residential area. One of the important contribution was linking of Bhopal, with Itarsi, and Jhansi, with a broad gauge railway line.

Sultan Jahan Begum also added an extension known as Ahmedabad situated at Kohi-Fiza to provide accommodation for palaces and offices of the State.

Hamidul Khan added an other extension known as Professor Company and Bhamla Hills Colony. He also declared some incentives for location of industries at Bhopal and few industries like straw products and flour mills were established.

During the regime of Nazar Mohammad Khan peace

and stability was established after a pact was executed with company government in 1871. It was during this period that demolition of fort wall and gate was undertaken which was continued during the part 'C' state also.

After independence Bhopal was selected the capital of Madhya Pradesh and inspite of this it was not planned in initial stated. Some areas and needs were planned as piece meal job. So secretariat, residential quarters etc. were constructed to immediate needs.. It was only in 1939 - 60 that an overall development plan for capital project was prepared, which was a better proposition as compared to then existing situation.

The township of B.H.E.L. was located at a distance of 3 Km. from boundary of Municipal Corporation. But this small gap suffered and suffers an unplanned development. So the total impact of these to large developments was not realised in the beginning and it was only in 1962 - 68, i.e., interim development plan for the whole city was prepared and published.

This was as regards the growth of Bhopal as per urban development.

5.3 SURVEY INFORMATION AND STATISTICAL DATA :

5.3.1 TOPOGRAPHY :

Bhopal city lies in a hilly terrain which sloped towards north and south east. Hilllocks of different altitudes are situated along the south west and north west portion of city. The two lakes and hills make the city of lakes and hills. This remarkable topography of the city provides enchanting and panormic view of city and natural scenic beauty.

5.3.2 CLIMATE :

The city enjoys a moderate climate. Temperature ranges between 50°F and 104°F. The average rainfall varies from 50°60" which is mostly concentrated in the months of July, August and September. Westerly and south westerly winds are more predominant here.

5.3.3 SOIL CHARACTER :

Bhopal stands on a red sand stone strata on the Malwa Plateau with various hillocks in and around the city. The top portion of various hillocks and the slopes have mostly hard soil mixed with boulders. Black cotton soil is observed in various depths from 1.25 m on north eastern and its hinter land have sand, stone, black vasalt and morum which can be used as building materials.

5.3.4 DRAINAGE :

The natural drainage of the city is provided by three main streams which are joined by small nallahs and rivelets. On the north eastern side, the drainage is provided by river Halali and on the north eastern side it is provided by Kaliyasote river. Both these rivers drain out in Betwa, Halali, near Vidisha, and Kaliyastoe near Bhojpur. On the south western side, the drainage is provided by various small nallahs, which drain out in Kolar river, which ultimately joins river Narmada.

5.3.5 EXISTING STRUCTURE :

Bhopal had a significant increase in population when it was declared as capital. Prior to this moderation of trading communicaties gave impetus to grow of the city. Also industrial establishment like B.H.E.L. resulted in the sprawl and growth of the city.

5.3.6 CIRCULATION PATTERN :

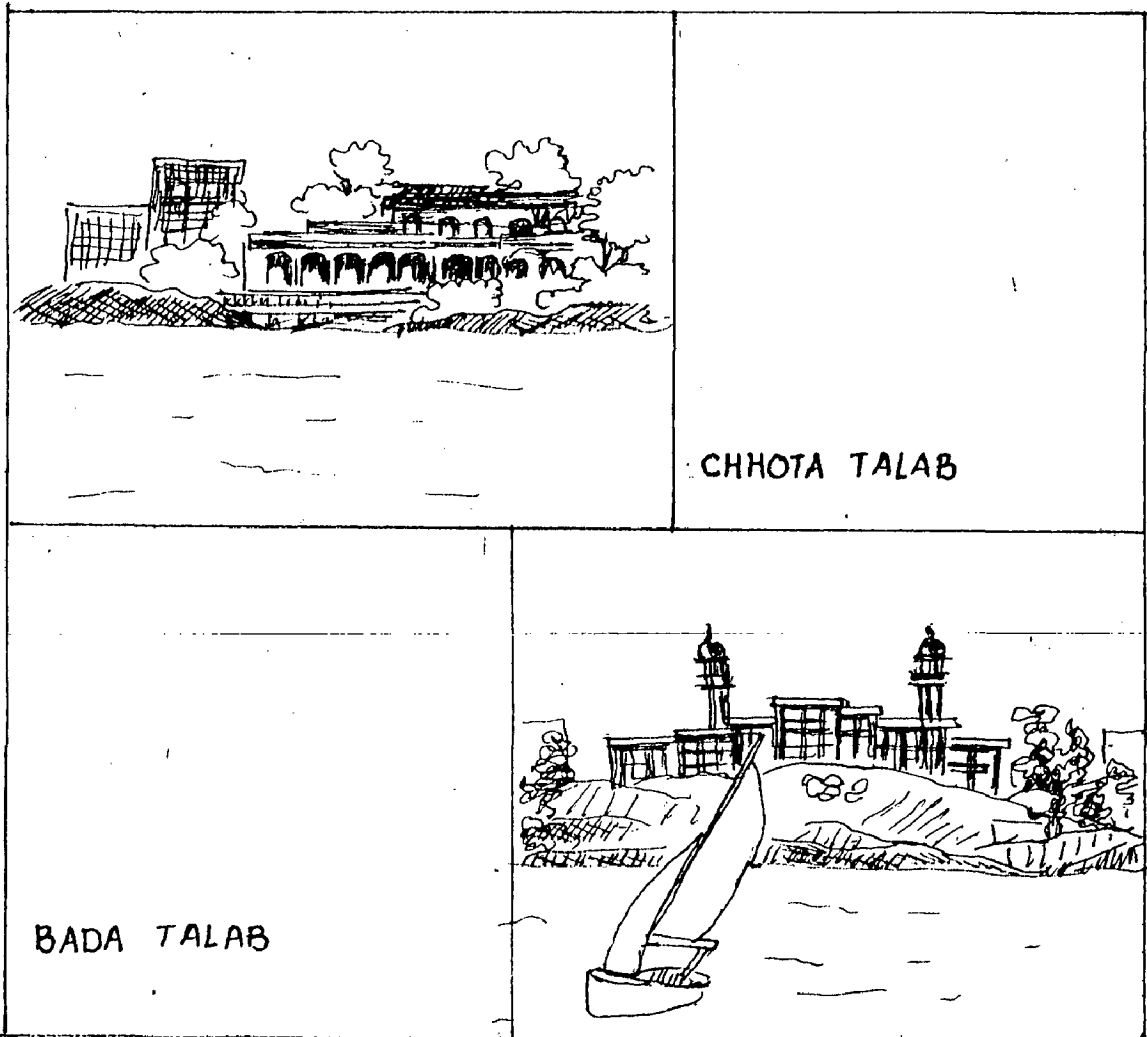
The circulation pattern has distinct features. All regional roads terminate in the city and loose their identity. The city and various townships have their own separate road pattern unrelated to each other. The road pattern of Main city, that is of the core is bold grid

iron pattern.

Bus stand is located on the junction of Hamidia and Chola road and is close to central business district, but is away from the township. Old Railway Station serves the whole city which is located near Bus Stand. Habib-ganj Railway Station is now coming up.

5.4 TOWNSCAPE DISCIPLINES :

Water played a vital role in evolution and development of the city. It came into existence after a lake was created by Raja Bhoj in the early 11th Century. In later periods also because of the topographical advantage, many more lakes and water bodies were created by different rulers in different periods. That is why Bhopal is called 'the city of lakes'.



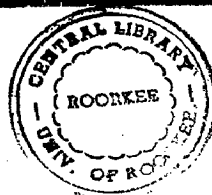
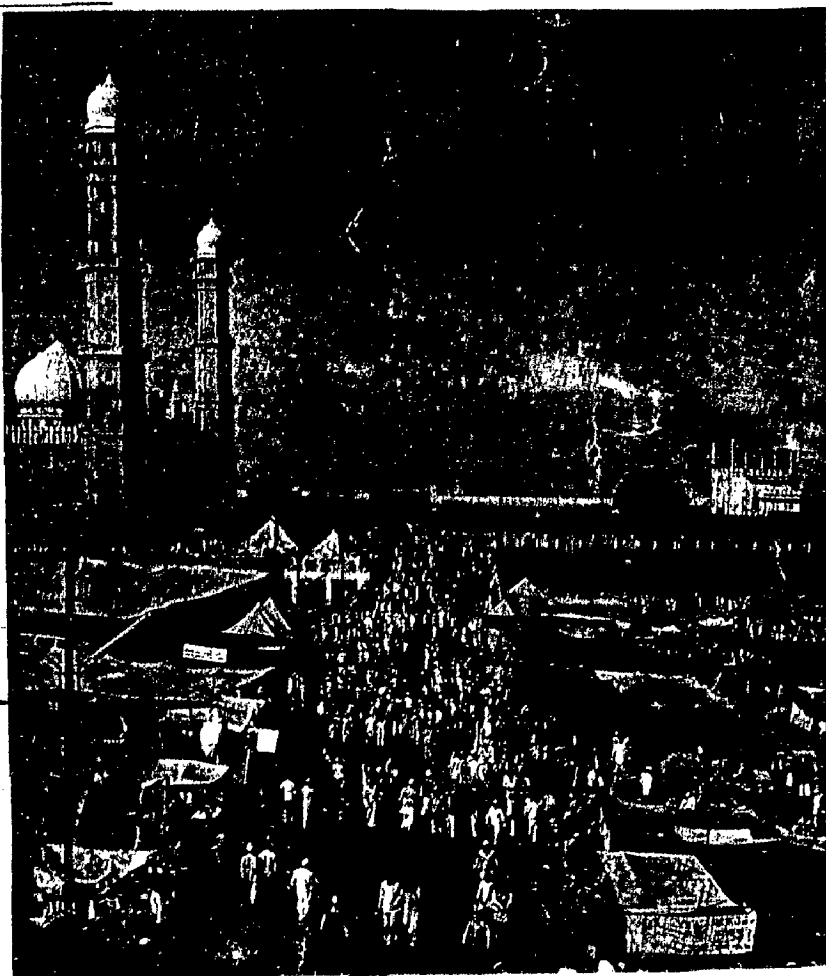
Being a muslim area, the old Bhopal's skyline is dominated by minarets. The historically and architecturally significant buildings, Tajul Masjid said to be one of the biggest mosque in Asia.

Taj Mahal, Ahmedabad Palace, Benazir, Noor Mahal, Sadar Manzil, Babe Ali Complex, Alexendra School are some of the landmarks.

Bhopal is a modern city in spite of its cultural past. Bharat Bhawan, Indian Institute of Forest Management, Birla Mandir, Vidhyanchal Satpura. Vallabh Bhawan,

TAJ-UL-MASJID

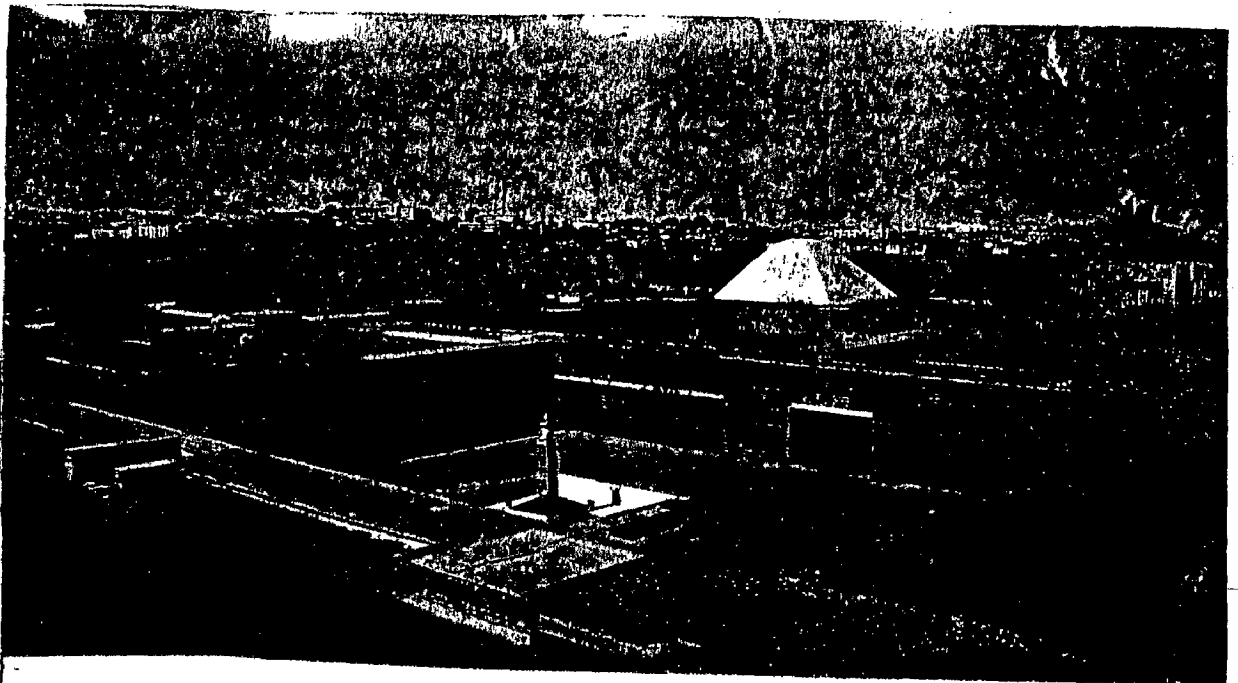
The religious node
and landmark.



246038.

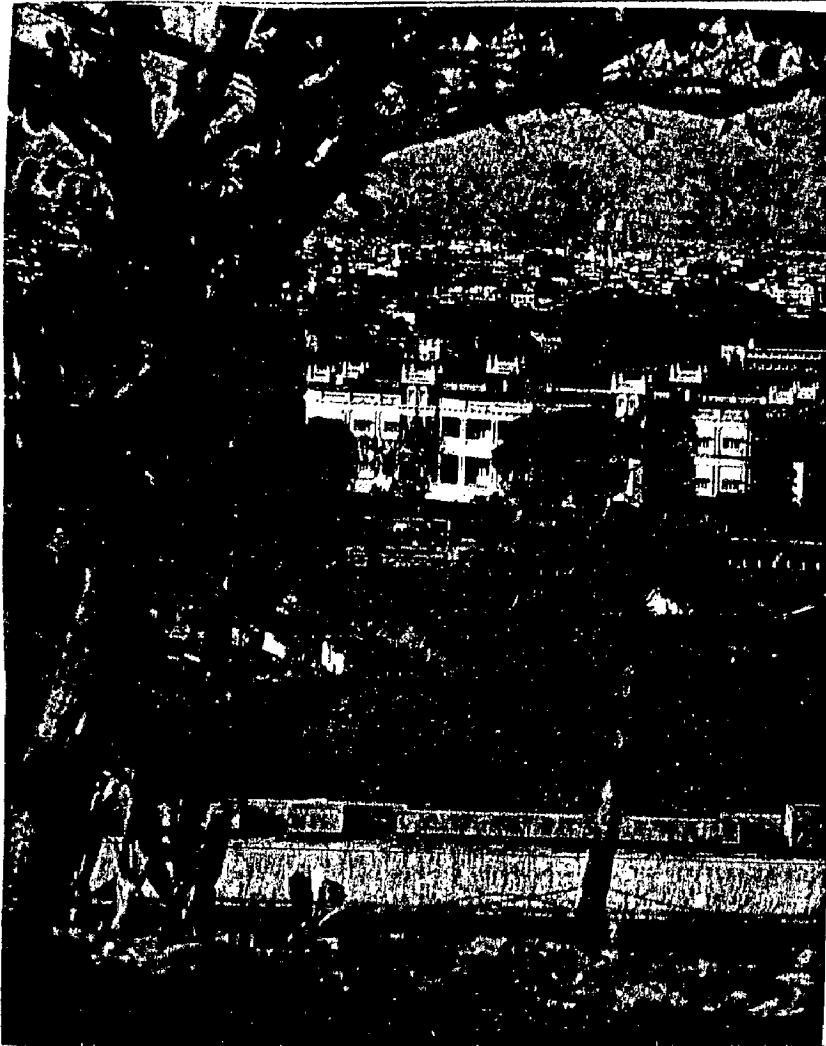
Ravindra Bhawan, are among the landmarks of the newly developed area of T.T. Nagar, Area Colony etc.

Bhopal is a city with a natural grandeur situated on a hilly terrain. Its plateau is broken by a number of hillocks and number of large and small water bodies. Its retreats are delightful for quiet walks, long drives on main and linking roads, climbing on Shayamla hills, Idgah hills, Char Imli, and M.A.C.T. The city itself exists in contrast with the landscape. The intersections of hill, buildings, lakes, landscaped, gardens, have given



The distant view of Idgah hill, Gandhi Medical college, Taj-ul-masjid, on the opposite bank of the great lake (Bada Talab), from Shyamala hill.

rise to spect acular scenery making it a place for pleasure seeking as well as for those who are although living in an urban area, looking for solitude and tranquillity.



Vidhan Sabha,
M.L.B. College,
From Arera
hill .

CHAPTER VI :

HERITAGE : THE SEARCH FOR IDENTITY

6.0 The character and individual identity of different cities is increasingly threatened and the danger of ending up with city after city looking very much the same are very real since the pressures which could bring about this dreary monotony on a monumental scale are very powerful. If we have to preserve, what is still left of the character of some of our cities, and to create new character and identities upon rebuilding and building new ones, very carefully though out, three dimensional planning policies, both with regard to the overall conception and to local implementation.

6.1 A number of towns and cities in India have old and unique historic cores with a strong identity yet few have really fully worked out and firmly administered policies for them. It is not just a question of preserving a few listed buildings but more often one of preservation and rehabilitation of whole areas with their street network, pedestrian alley ways, scale, colour and texture. It is, therefore, essential in an endeavour to retain and enhance existing identity, and foster the creation of new one, for cities to identify, such vital aspects of the urban scene, as historic buildings, landscaping characteristics, urban characteristics.

6.2 THE FIELD WORK :

Survey by the author was carried out in October - November 1990 which resulted in the identification of several possible conservation areas, and in the selection, grading and documentation of twelve traditional buildings which can be seen in the photographs in the inventory. The inventory, is not comprehensive because limitations of time and several obstacles did not allow for more elaborate documentation. Thus, it is only a sample to show the importance of Bhopal's architectural heritage, and their potential for conservation. It does include the buildings which are best known in the area, and are now owned mostly by the Municipal Corporation, Bhopal.

6.2.1 AIMS:

The study is basically concerned with the question of protection and identification of valuable historic environment in our towns, but takes Bhopal as a case study to focus on the issue in more details. Bhopal represents a typical character in its layout. It was chosen not only because it contains some of the most valuable buildings and areas of cultural interest in the country, but more important because due to political, administrative interests, the city is growing in a awful rapid speed. And contemporary buildings, areas as seemed to be greatly influenced

by westernization where there is a great short fall of character and identity, and the heritage of the city is believed to be in great danger of being obliterated. One main aim of this research was the preparation of an inventory of the traditional buildings in old Bhopal. Although the inventory forms an integral part of this work (See Appendices), unfortunately, it is limited to around twelve buildings only which are being developed as an illustration to develop the criteria and the methodology to be followed in preparation of a comprehensive inventory in future.

Because of social restrictions and conservative religious beliefs; the author had faced numerous difficulties in this survey.

6.2.2 OBJECTIVES :

Essentially, the study attempts to achieve the following objectives :

1. To seek the identity of the city in question in architectural term and study its urban form.
2. To develop an appreciation of the philosophy of conservation and its relevance in contemporary

context considering Bhopal as a city, that is rich in architectural heritage, but has hitherto taken few steps towards its systematic protection.

3. To determine the factors which have led, and continue to affect the destruction of historic environment in Bhopal.
4. To investigate, by means of a field survey the state of historic cores of Bhopal, trace their morphological development, analyse their problems, and constituent urban and architectural elements.
5. To select, grade and document sites, and areas of architectural interest, collect data in a systematic way.

6.2.3 SCOPE AND LIMITATIONS :

The conservation survey will be limited to the area enclosed by the old town of Bhopal. The buildings constructed after the region of Dost Mohammad Khan will be selected for documentation. The period before is not supposed to have any remarkable influence over the city's architecture, and the period after 1928 A.D. shows a complete change in architectural style, because of the use of concrete.

6.3 DESIGNING THE SURVEY PROGRAMME :

A sample of conservation survey of Bhopal which was carried out in Oct. - Nov. 1990, would provide a basis for carrying out a comprehensive conservation survey in future. The aims of the conservation survey of Bhopal were :

1. To investigate the historic cores of the city and to analyse their general characteristics and some of the individual urban and architecture elements.
2. To identify their problems and the scale and different causes of destruction with the aim of preparing a documented inventory of cultural heritage.
3. To select, grade, and photograph individual items of interest, and to document other relevant data, about the existing cultural heritage of the city.

In order to carry out the survey, there are four basic, yet essential, requirements. These are as follows :

1. Official permits
2. Base maps and aerial photographs of the area

3. Standardized survey data cards
4. Photographic and measuring equipments

In such study usually, the official permits enable the surveyor to carry out photographic work, to interview public officials, and to obtain maps and use aerial photographs and government reports. Furthermore, they are of enormous help as far as entering private properties are concerned. The occupants of such areas feel somewhat more assured when they see the official letter, and allow the surveyor to investigate the interior freely.

The maps, obtained from Municipal Corporation, Bhopal, the department of town and country planning were somewhat incomplete and had different scale and vintages. They also include several detailed planning proposals.

6.4 DOCUMENTATION PROFORMA :

For the documentation of the buildings the proforma developed by INTACH was followed with little modification. A prototype survey data card, the size of A - 4 was designed for the purpose of writing quick field notes and remarks that are relevant to the particular building under investigation.

The card was laid out to include, inter alia, the

following data (see copy at Appendix) :

- (a) Name
- (b) Location
- (c) Ownership
- (d) Usage
- (e) Special features
- (f) State of preservation and Structural Stability
- (g) Age, date
- (h) Grading : Architectural Value
 Archeological Value
 Historical Value
- (i) Photographs, sketches, plans etc.

The compiled data for each item was later transferred to a final profoma which was used for inventory.

The grading was done on the basis of the Architectural, Historical, Archeological values. The question of the architectural interest of a building which is perhaps the most important criteria that is subject to more controversy than any other, was assessed in terms of design, plan, materials used, structural and constructional systems, also the richness of detail and ornamentation, which is perhaps especially relevant to the old architecture of Bhopal. Some buildings stand out as fine example of art and

architecture, while others exhibit a particular style or a structural innovation.

The following three grades were defined to show the relative importance of individual buildings :

- Grade 'A' : These are of exceptional architectural and/or historic interest, and must be preserved.
- Grade 'B' : These are of special architectural and/or historical interest, which warrant that every effort be made to preserve them.
- Grade 'C' : These are of sufficient architecture and/or historic interest to be considered for protection. Some may possess a special local interest or group value.

The criteria used in this study, in selecting buildings of cultural interest, were based on factual and objective considerations. These include its architectural or historic interest, locational significance, group value, structural stability and restorability. It must be emphasised, however, that the scoring system devised for this purpose does not any way claim to be

an accurate method of representing the true qualities of the selected buildings. It must only be used as general guide and regarded as a fairly crude approximation.

It should be noted that the twelve buildings which were visited by the author, are a result of consultations and directions from local experts in Bhopal. This means that, there are still a lot of magnificent old buildings that need to be discovered in the city itself. This is not a comprehensive survey, but a case study to indicate the quality of the better known buildings. There is an urgent need for a full scale survey of more buildings to cover whole of the old town of Bhopal. The twelve buildings are an example to show how the Bhopal's historical buildings are important.

CHAPTER VII

THE SEARCH FOR CHARACTER

7.0 A city can be defined on the basis of its recognition as a distinct physical form, yet another ideal definition should include the socio-cultural context. It has been considered expedient, that before covering on the description of the study area, a general narration about the city and its people, be incorporated to provide the reader with a frame of context, which will permit better comprehension of the description of Bhopal itself. Accordingly, we will first provide a socio-cultural, religious background of the city, highlighting socio-economic structure, and religious mores of its inhabitants, climatic and other related physical factors.

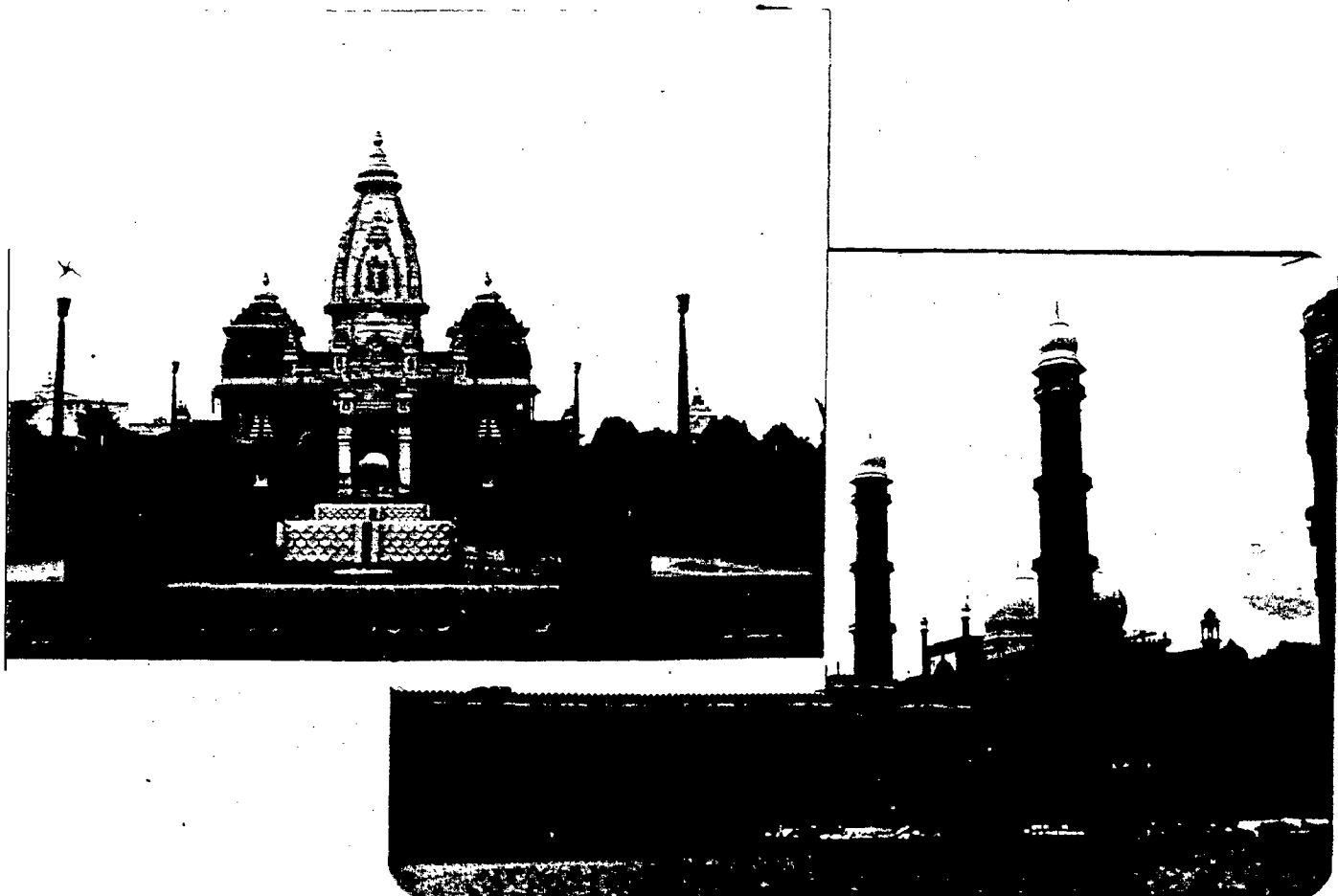
7.1

SOCIO-ECONOMIC RELIGIOUS CLIMATIC

INFLUENCES :

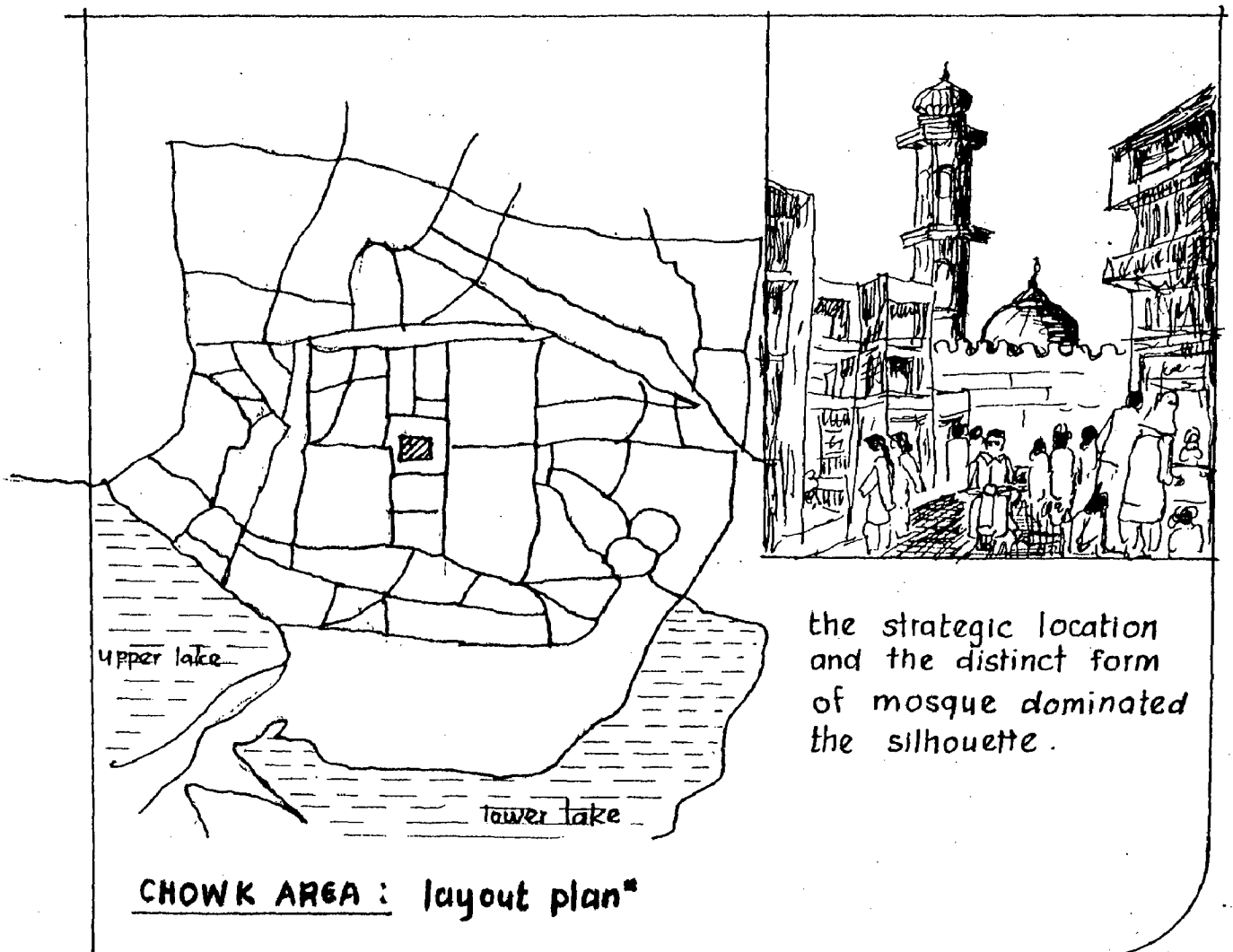
Islam exercises a spectrum of influence on the city so does the influence of physical location and climate. Guided by these factors, the city possesses a character, a personality and urban form and an atmosphere of its own.

Bhopal is still unique religious town in its urban tissue and pattern, It is full of activities like Istima (a religious fair in which a huge number of



participants from the muslim countries of the continent are participating), Mosques, religious schools (Madarasa), Libraries, Orphangaes, etc.

In the structure and anotomy, it is very similar to a traditional town. The mosque dominated the silhouette of the virtue of its size, location and distinct architectural form, and strategic location. This focus



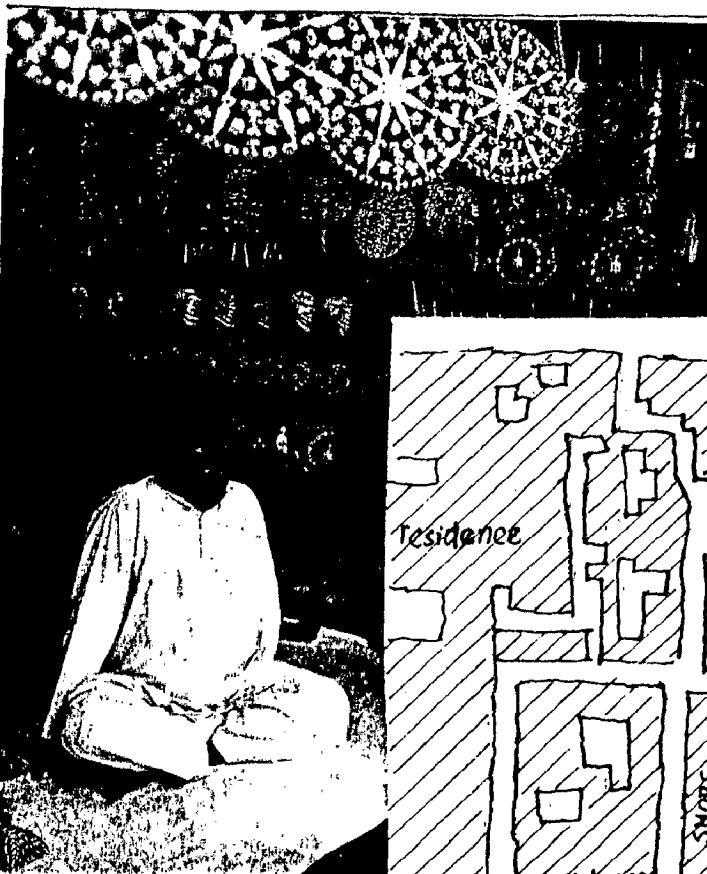
source: Bhopal Development plan.



did not originate from any specific focus in the Quran. The form of minarets is another characteristic. Their primary function was to facilitate the Azan or the call to the dignitaries to attend the prayer, they, however, served another vital purpose that of orienting a distant traveller to the town and once in the town to the mosque or the bazar.

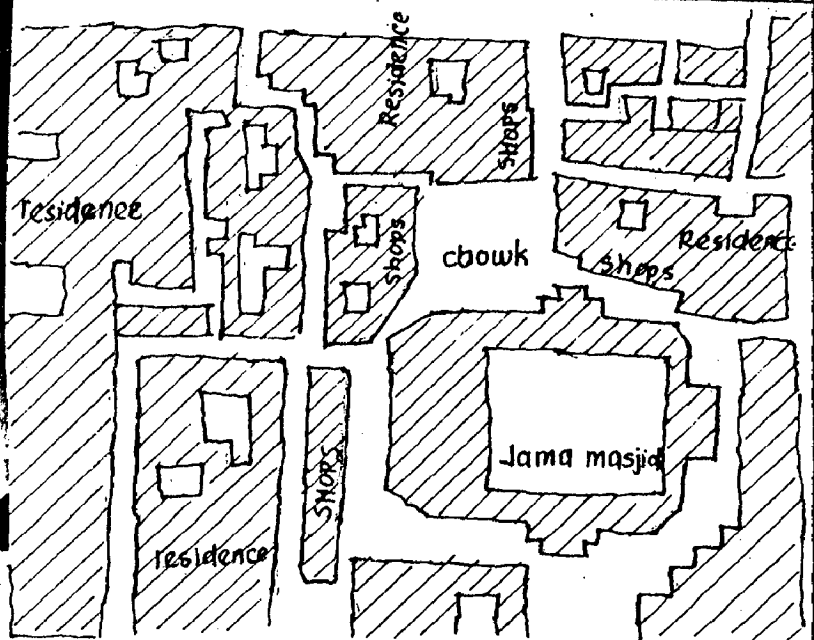
The traditional urban form was a light cellular matrix, responded to social mores, climate conditions,

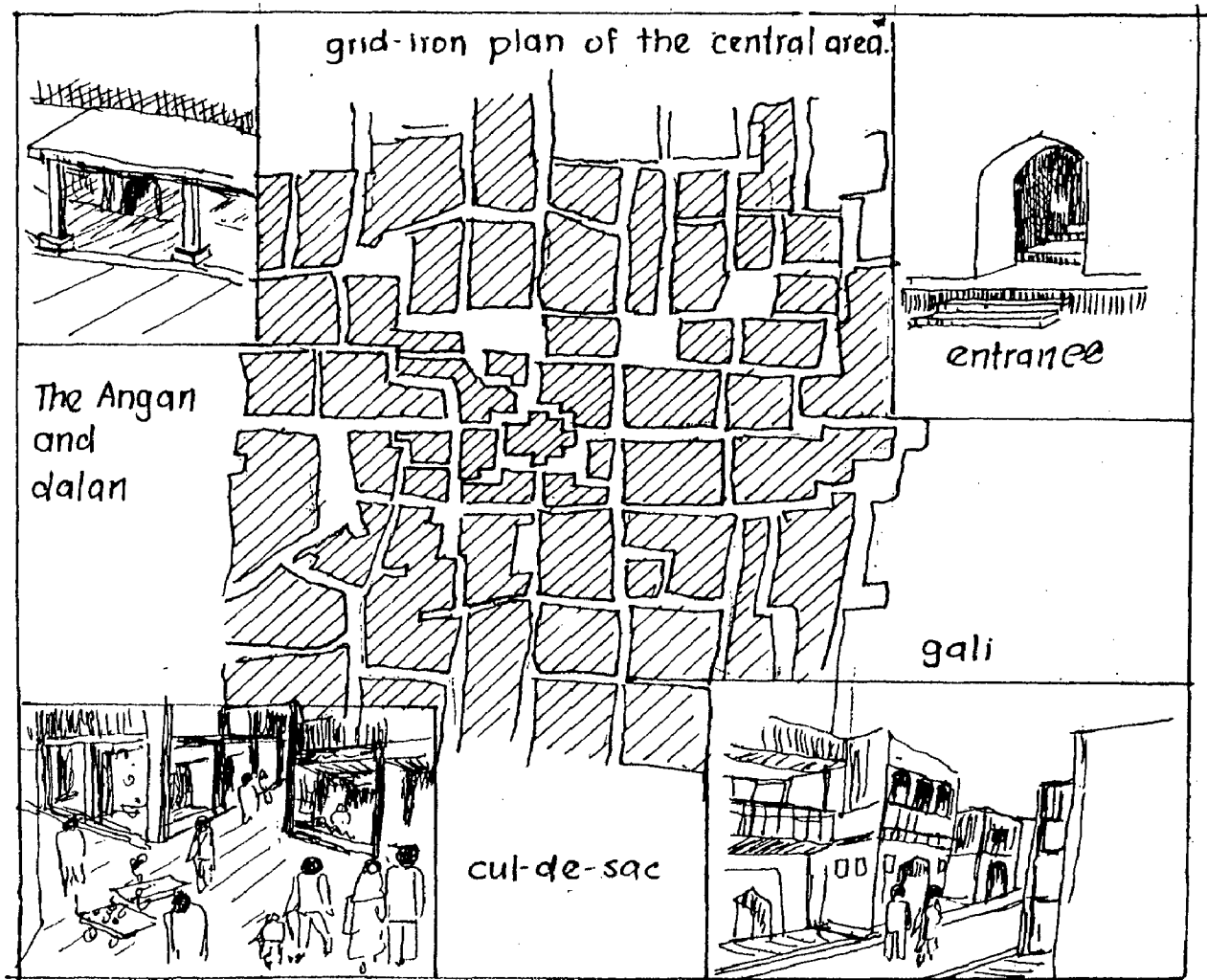
available technology and building materials. The layout of the city has a mosque as the central point and winding pedestrian routes, that connected to the other important building complexes and vital activity nodes. Off the pedestrian routes branches minor cul - de - sacs and walkway alleys leading to house entrances, thus forming a cluster of often interconnected residential entities with very strong social ties. Closely built building masses protecting one another from direct



Bhopal's jari work.

pedestrian galies, minor cul-de-sacs forming entrance to housing units.





solar radiation while introverted courtyards have been used for light and ventilation of the houses.

The later period of Bhopal is earmarked for its Nawab Begums, female rulers, At the same time, the low ratio of participation as workers amongst women was evident, because of strict PARDA system. The old area which is predominantly inhabited by Muslims represents a typical culture with its distinct 'Tahjeeb' or manners. Special significance in this

* Source : Bhopal Development plan.

respect is given to the spatial organization, i.e., narrow lanes, small openings into courtyard planning and lack of public open spaces, chowks, gardens, etc. in the spatial structure of the city. Even to the special detailing of building element - the 'Patia', the overhang one of the surface drain on the side of a road at plinth level. Most of the houses have this element, which can easily be identified as the predominant area for social interaction, playing, shatranz (Chess), choupad, and for gossiping.

7.2 ACTIVITY PATTERN AND NATURE OF BUILT UP AND OPEN SPACES :

The inner walled city had a rigid and geometrical square plan with gridiron spatial configuration of the channelled spaces, which are invariably connected with the areas possessing strategies and important location, such as chowks and squares which may be said the node points. These nodes may be classified as commercial activity nodes and religious activity nodes.

The height of the builtforms within the old area itself is either ground plus two or three. The F.A.R. in average is approximately 1.7 and the average width of linking streets is about 8 M. The average height of the ground floor is nearly 5 M from ground. An

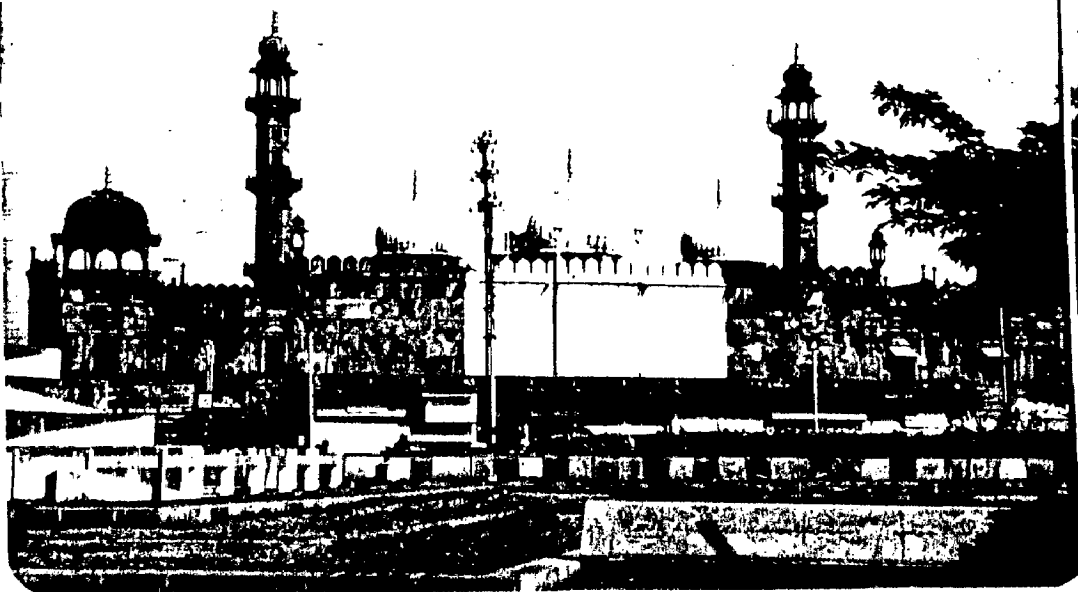
arched entrance 'Dyodhi' and a few fenstration, use of introverted courtyard for dining, meeting, washing and other domestic purposes, so that it became the entity around which the social life of the muslim family revolved.

Streets are basically acting as channelled spaces effectively used as transformation and linking spaces. The climatic considerations and 'PARDAH' result into narrow channelled spaces, small and few openings, introverted courtyard. The major channelled spaces are invariably associated with local landmarks which may be classified as the commercial channelled spaces and the residential channelled spaces.

The spatial organization of central area of old Bhopal can be divided in 38 identifiable 'Mohalla'. These areas are identifiable on the basis of ethnic groups living there, occupation physical characteristics, social status, historical significance etc. Each Mohalla is inhabited by a predominant ethnic group, ranges from Pathans to Marwari or a low cast Hindu. Thus, the public life was basically governed by the religion and occupation. Thus most of the public spaces are found, in the form of small chowks attached to religious buildings, small punctures along channelled spaces.

The built form of the city is a direct impact of economic status, social standing, culture of the people as well as climatic considerations. The inner core space, which has a bold gridiron pattern has very compact and geometrically rigid built form and open spaces.

The spatial structure originated by the built form evolution consists of a hierarchy of spaces ranging from closed room to the semi open 'DALAN', the courtyard, the cut - de - see gali, the link gali, the linking streets, the bazar streets, the main roads and the public open spaces.

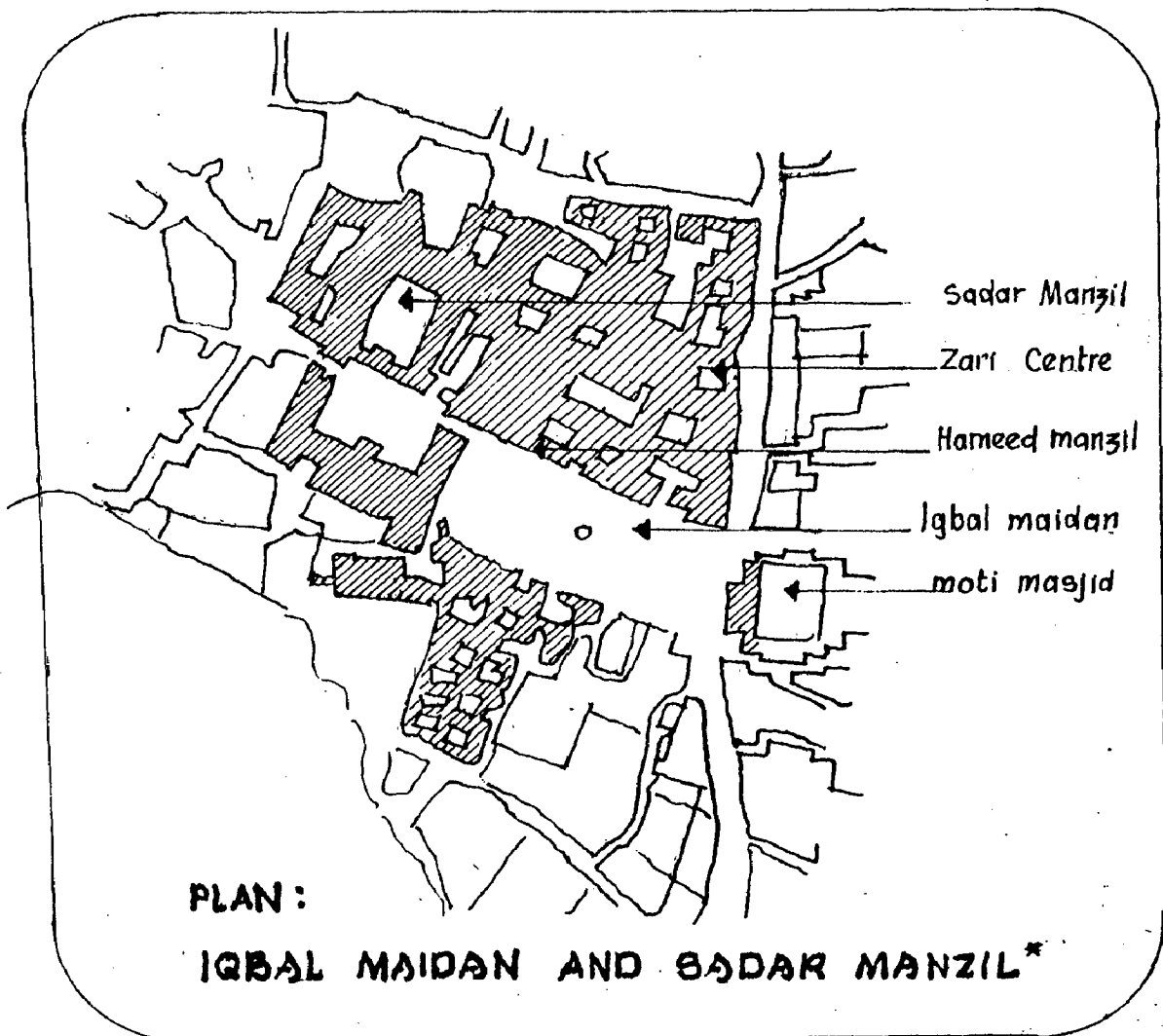


IQBAL MAIDAN [KHIRNIWALA MAIDAN]

The solid blank masses of MOTI MASJID with the bulbous domes and flanking minarets dominates while the landscaping elements at the foot of SHAHEEN softens the visual impact created by solid dead building masses.

east banks of the upper lake. It was constructed in 19th century, over a span of 63 years, this long period of construction probably explains the changing vernacular character of buildings. The 'Khirniwalli Maidan', now known as 'Iqbal Maidan' in the honour of

poet Mohd. Iqbal, who once stayed here, was in the past a well laid out garden, a part of the palace complex. The sadar manzil which houses the local authority, the Municipal Corporation, has an exquisite Darbar Hall which is semy open, where even now 'Mushairas' are held. Other buildings in the complex house residences, schools, offices, record rooms and a vocational training institute called Zari Centre. These buildings are historically very important and hold an emotional value to the people.



* Source: Bhopal Development plan.

URBAN SPACES AND ACTIVITIES AROUND WATER BODY

It is evident from the history and heritage of the city, that past rulers, architects and planners were very sensitive towards the utilitarian and aesthetic aspects of the numerous water bodies, large and small, within the city. They took lot of care in planning the activities around the water. The orientation of development, was integrated with water, with great care and skill.

They constructed palaces, fort, religious buildings, ghats, gardens, play ground, bazaar, offices, schools etc. around, or along these water bodies. The physical development of Bhopal can be broadly divided into four parts :

1. Creation of upper lake and evolution of the town form in early eleventh century.
2. Fortification of the town and formation of Bhopal State, in early eighteenth century by an Afgan Sardar Dost Mohd. Khan.
3. Sprawl of the city settlements beyond the fort walls, development of military areas in Jahangirabad and planned settlements, and new seat of power in Shahjahanbad area (Taj Mahal and Noor Mahal area), after the State was merged with the East India

Company.

4. Development which took place after the State was merged with Govt. of India, and became capital of Madhya Pradesh in 1955. There were three nos. large water bodies; Motia Talab, Siddiwuitalab, and Talab Munshi Hussain Khan in the old area.

They were originally created to collect the rain water of 'Idgah hills' for protection from floods and to use it for irrigation purposes. Later on, they were developed in beautiful water bodies. A number of historically and architecturally significant buildings and places, have been situated around these water bodies. Some of these are :

Taj Mahal Palace which was the royal residence. The heavy walls of this place were used to abut the water body. The spacious, beautifully located terraces facing the talab were used for recreational purposes. Benazir Nursury, which was a garden situated between Ali Manzil and Benazir Palace, Benazir Palace, Baradari and Ghats, Tajul Masjid, Noor Mahal area, Talab Munshi Hussain Khan, Hanuman Mandir, in the old area of Bhopal, while Bharat Bhawan, Lake view drive, Van Vihar in new Bhopal. Shahpura lake and Kaliasot dam area is also developing in this area.

7.3 SADAR MANZIL : CASE STUDY

7.3.1 INTRODUCTION :

Sadar Manzil Complex : the study area

Dost Mohammed Khan shifted his capital from Islam Nagar on 9th Zil Hijja 1135 .A.D. (6th July 1722) built the Fatehgarh fort here due to strategic location and to commemorate his victory. He connected it with the old fort of Raja Bhoj by a wall. The area so enclosed is still known as Shahar - i - Khas or city proper. An important feature of this area is the Sadar Manzil Complex which has been the centre of socio - cultural and administrative activities, for a long time.

The Sadar Manzil proper was used as the Darbar hall by the Nawab of Bhopal State. The open space within the complex was used by the State army to give guard of honour to the Vice-roys of British army as well as an area for army and public to assemble. This complex has been the city centre for last 300 years and land mark in the city itself.

Sadar Manzil Complex may be said the most significant area, playing an important part in the evolution and growth of Bhopal. It is situated on the north -



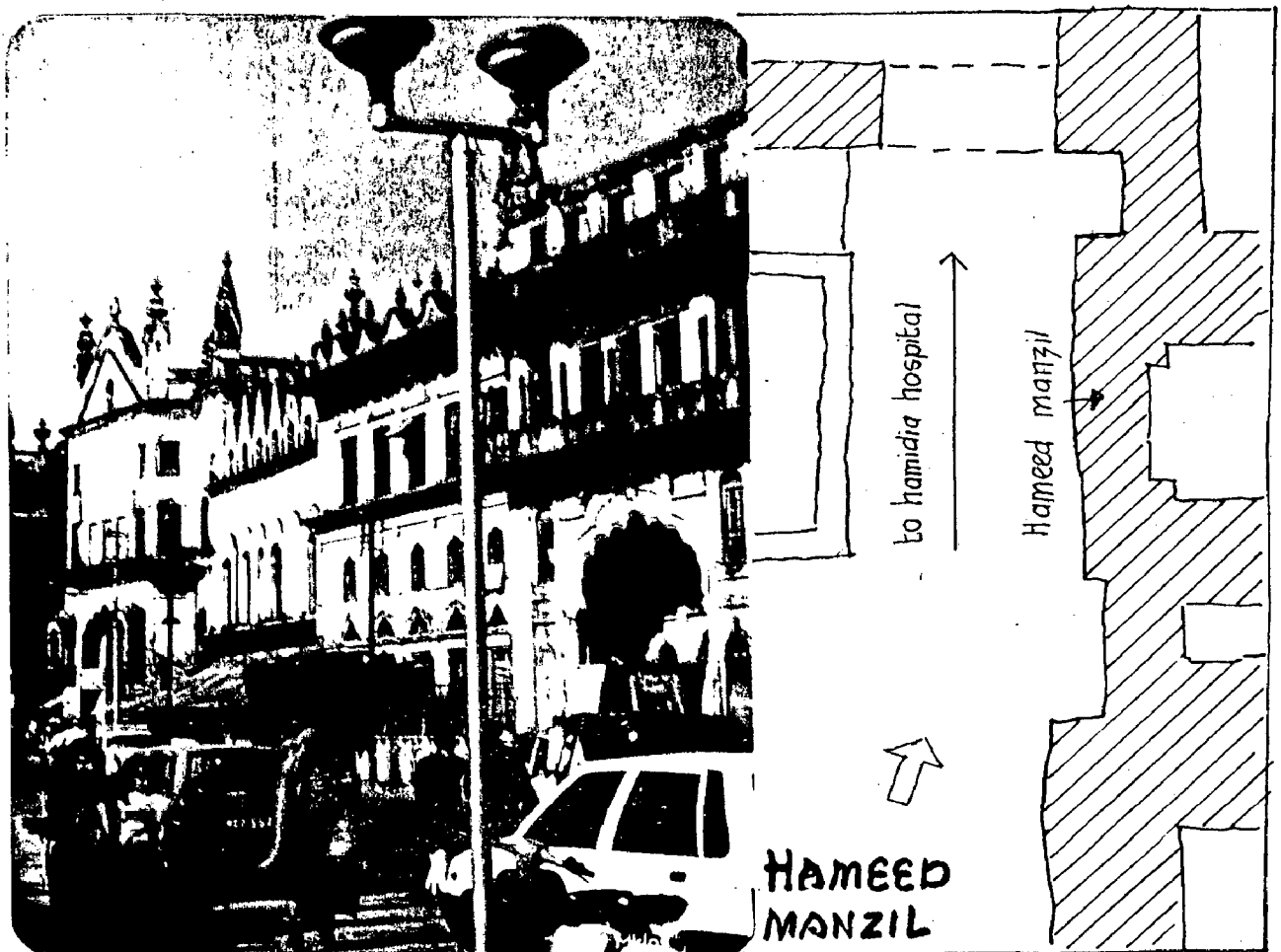
SADAR MANZIL: *The elegant and welcoming entrance of the office complex.*

7.3.2 SADAR MANZIL:

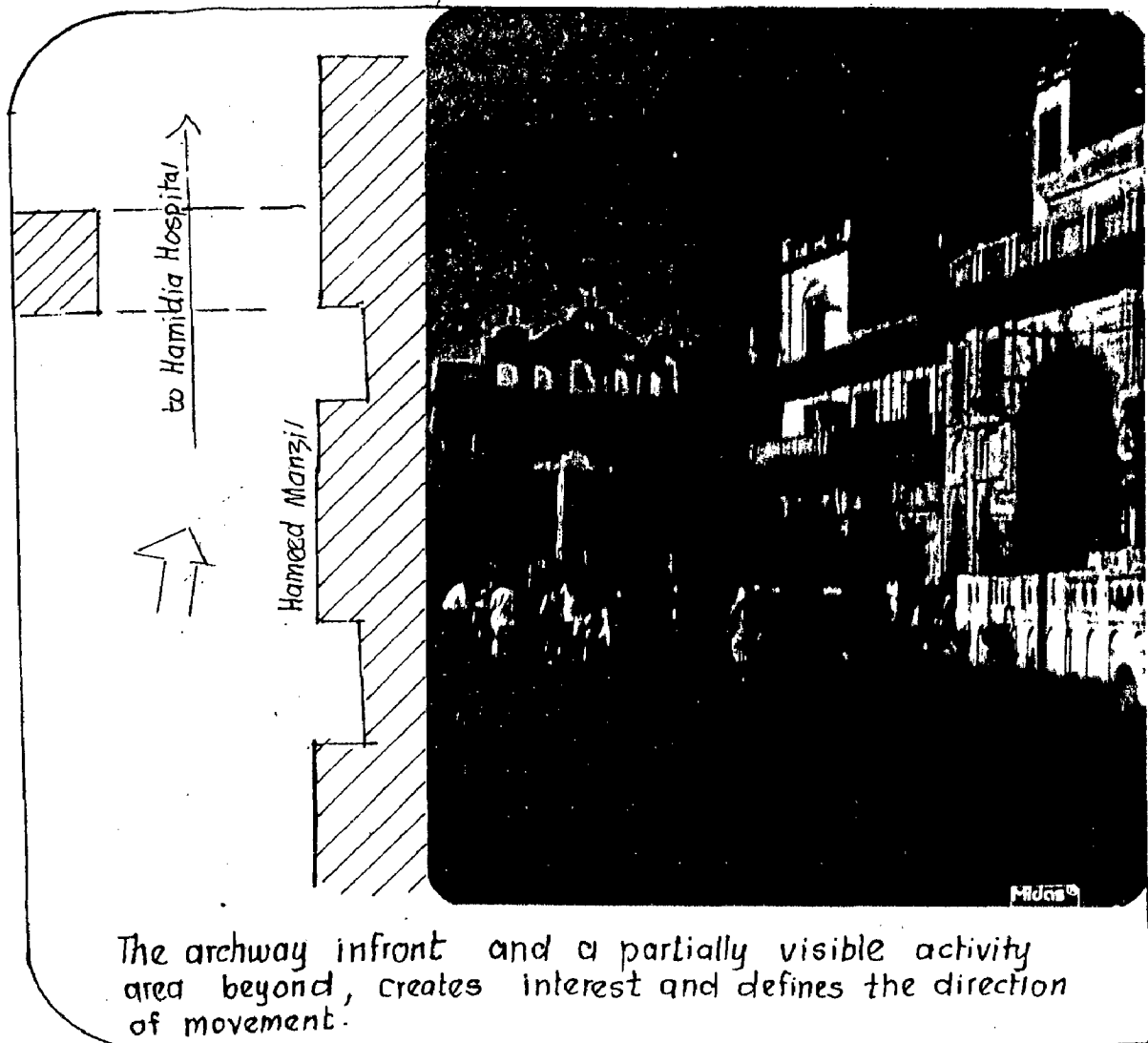
Perceptual analysis (serial vision): as the movement starts from the slope of reit ghat the narrow, busy road on the both sides of which are hardware shops widened suddenly and a large open space is in the view. The facade flanking accross the road captures the attention of the observer.

The most unusual detailing, of the Hameed Manzil, its conical pinnacles, triangular parapet are piercing the skyline. Huge archway with multifoiled arch leading to the interior of the building seemed to be extremely welcoming.

After passing through the road having an array of built masses on one of its sides, an arched gateway set deep along them. A partially visible activity area



from Jgbal maidan . . . accumulation of a number of building elements

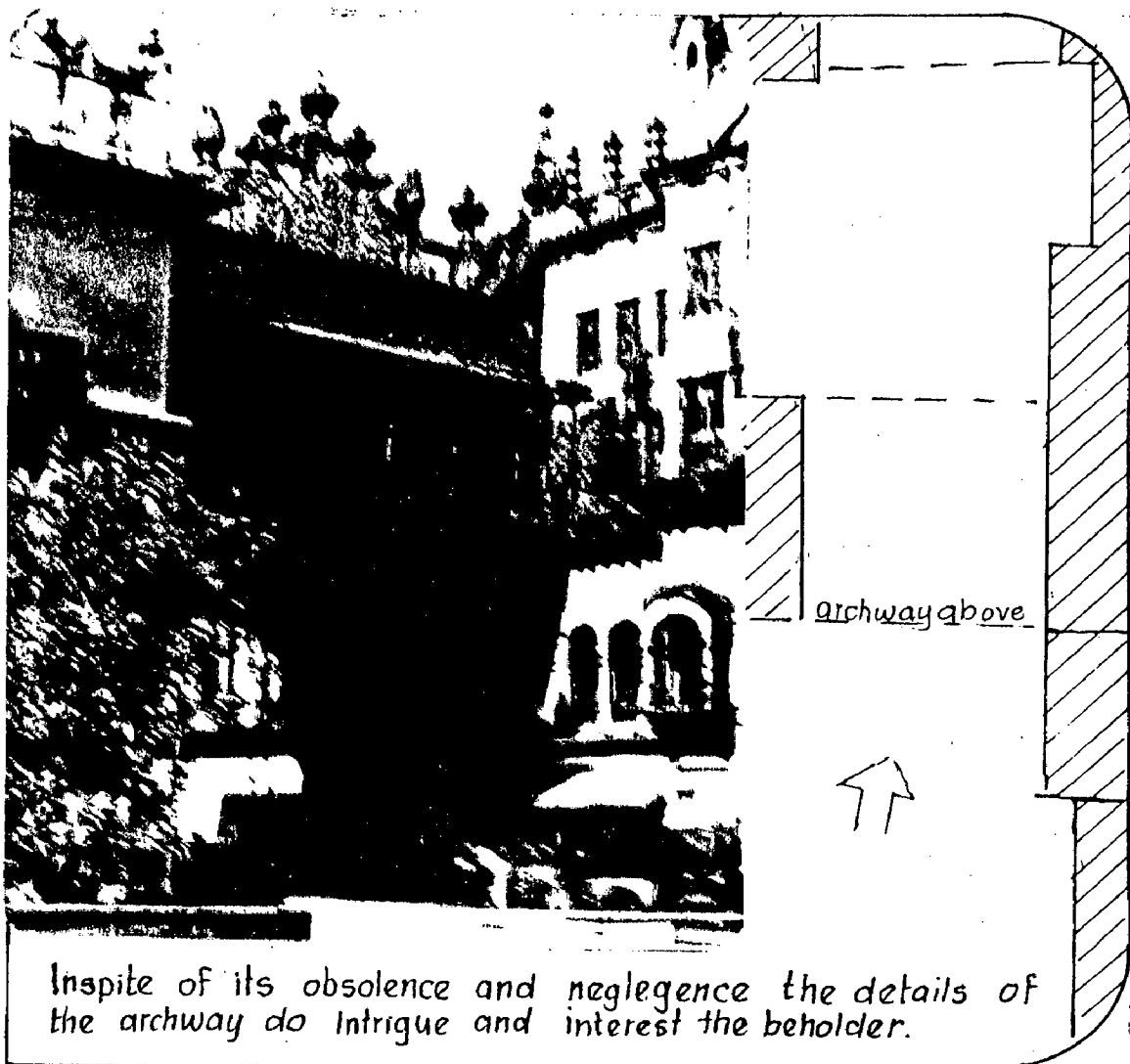


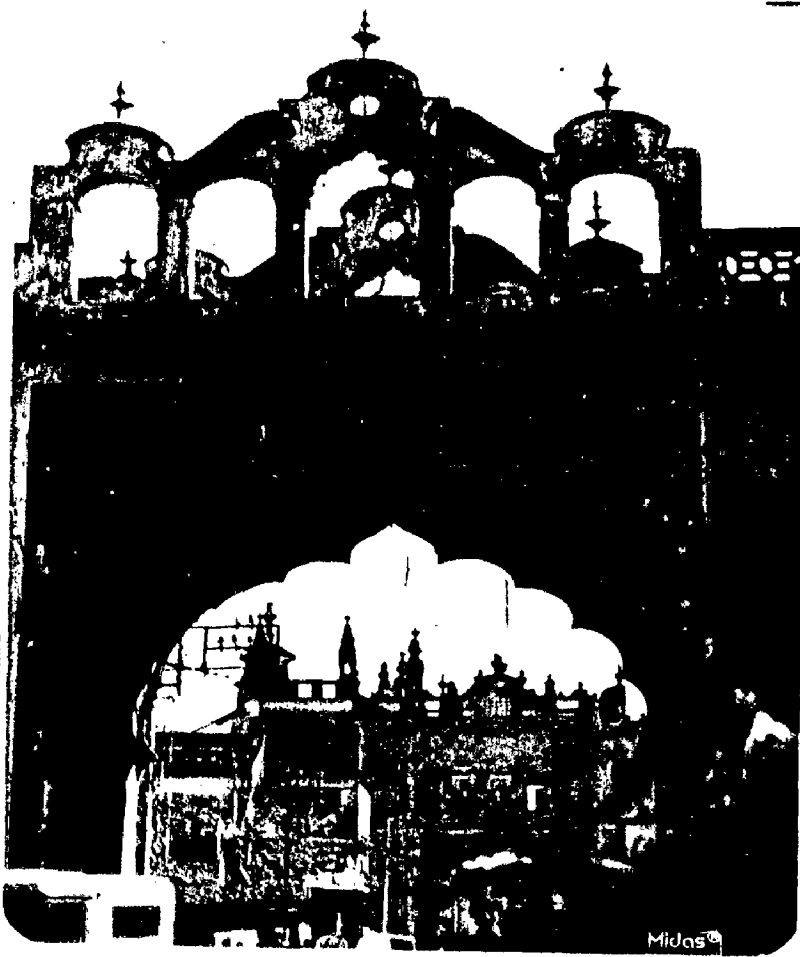
beyond this, creating curiosity. The glimpse of arch defines direction of movement and provides a sense of dignity and importance to the place, which otherwise could have been considered unimportant.

The cornice lines of the buildings on the right hand side lead slightly towards massive verticality of the archway. The well defined curves of facade screen on top of gateway infuses with vast

sky. The plastic flow of skyline winding to concavity emphasise the skyline. The multifoil arch defines the frame of vision through its profile with deeply recessed heaviness of shadows. The distant cornices and wall facade creating mystry enhancing anticipation. At the curiosity continued towards expected exposures infront.

The nearby details are over viewed due to high visual potential of the archway. Vision rises along





The archway creates the sense of belonging, intimacy and dominance.

with the gateway profile, and through the plastic outlines of the towering arch the sight lost into an infinite expanse of the sky. Then the angle of vision lowered to certain degree and the observer is used to register the presence of another distant archway. Dilapidated structures and ruins create a disturbing effect. After entering through the archway one faces a large square enclosed on four of its

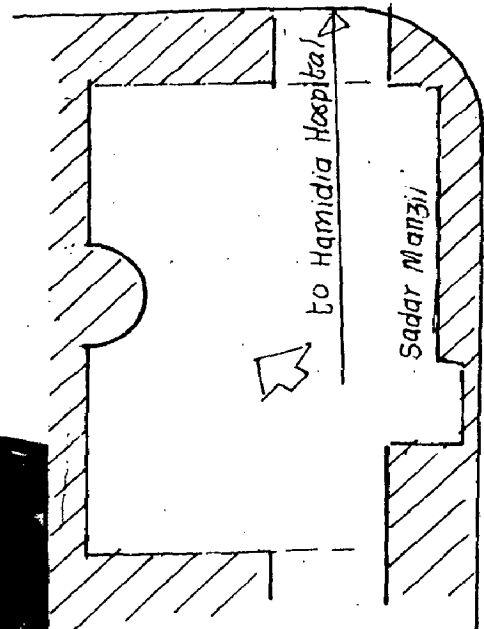
sides with built masses an another arched opening
infront.

Inspite of its obsolence and negligence the
details to intrigue and interest the beholder.

The space is seemed to be comparatively quiet,
calm and informal with a number of semi circular arches,
treated in a very simple manner, on the left hand side,
the building facades are seemed to be simple but elegant.



The wide open space
infront of the office
of Municipal Corpora
tion , which is used
for parking. The calm
quiet and intimate
space demands
maintenance .



The distinct form of the built masses, with their harmonious juxtaposition, and simple but neat detailing is

an important feature of the space

A Projected circular mass in sharp contrast with the rectangular mass of the elevation acts as a centre of interest. The harmonic juxtaposition of built masses, solids and voids creating an extra ordinarily interesting elevation. A large open terrace next to the circular mass provides spaciousness to the space itself. This space is now used as parking and is used for relaxing, gossiping, having snacks during lunch hours by the persons working in the offices nearby.

The interesting or rather strange composition of building elements like low parapet walls, different types of openings, different materials, techniques and principles of construction marks a contrasting confusion. The junction of four major channeled spaces emphasized by a round about, channelizing, in and out going movement.

The vertical mass of minerals of Moti Masjid providing the place, a distinct and dominant character. The blank red solid faces at different angles with bulbous domes and flanking towers, dominates in the area. The greenery at the foot of shaheen with a huge khair tree on the side is introducing an interesting landscaping feature, within the space, and softens the visual impact created by very bold solid stone built masses. The detailing of the building is excellent and its rhythmic proportions creating an extraordinary aesthetically pleasing environment, archway creates an exceptionally dominant sense of belonging and intimacy in the place. ✓

A set of urban construction with intricate and plastic detailing is the characteristic features of the space in particular where horizontal dynamism created by civil buildings. The vertical profile pierced by arched openings and projected balconies presents a zig-zag skyline. Different textures, colours, silhouette, contrasting masses, and geometrical patterns, providing

an everlasting variety and keeping the interest of the observer intact throughout the journey.

The strategic location of open spaces and strong sense of enclosure are characteristic. Creating a very informal and intimate atmosphere within the office complex, and it seems to be a lively centre of activity. Freely floating spaces, elegant but human in scale elevational treatments, presence of well conceived architectural elements provides a sense of belonging to the observer and he feels homely within the environment, created by the intelligent juxtaposition of open and built masses, their intricate detailing and organic character. High arched openings and elevated plinths providing grandeur and elegance to the complex, while inside these gateways are very informal, environment is created by small courtyard, corridors, balconies, rooms, all human in scale and located strategically, resulted in extra ordinarily functional plans in which every inch of the space is used profitably, according to its potential.

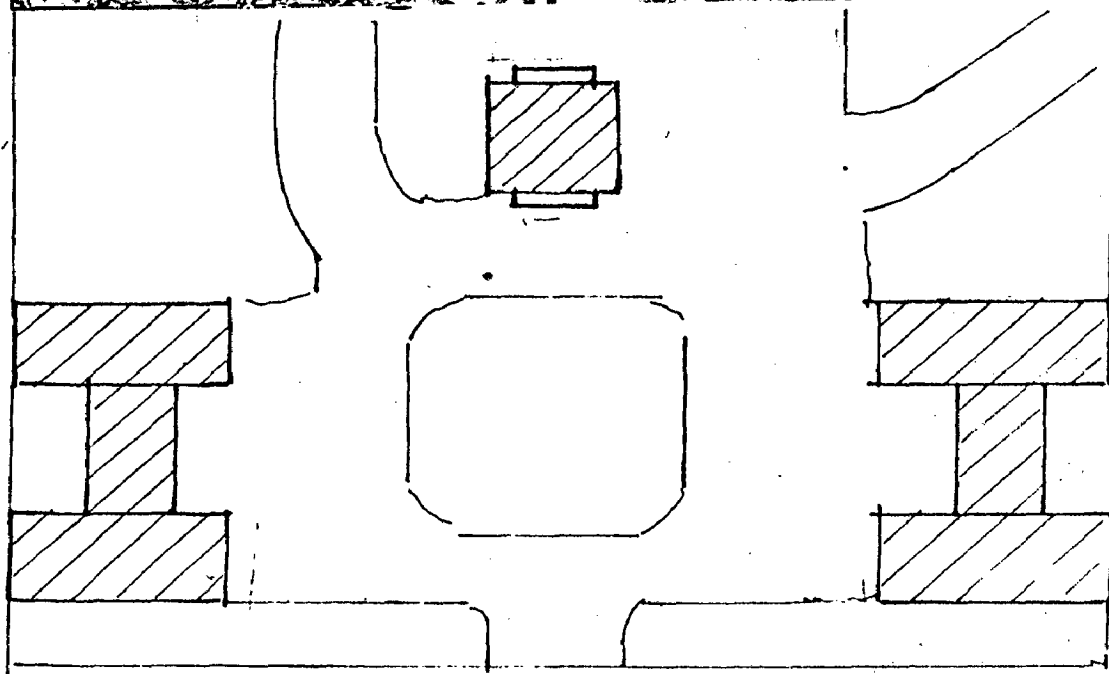
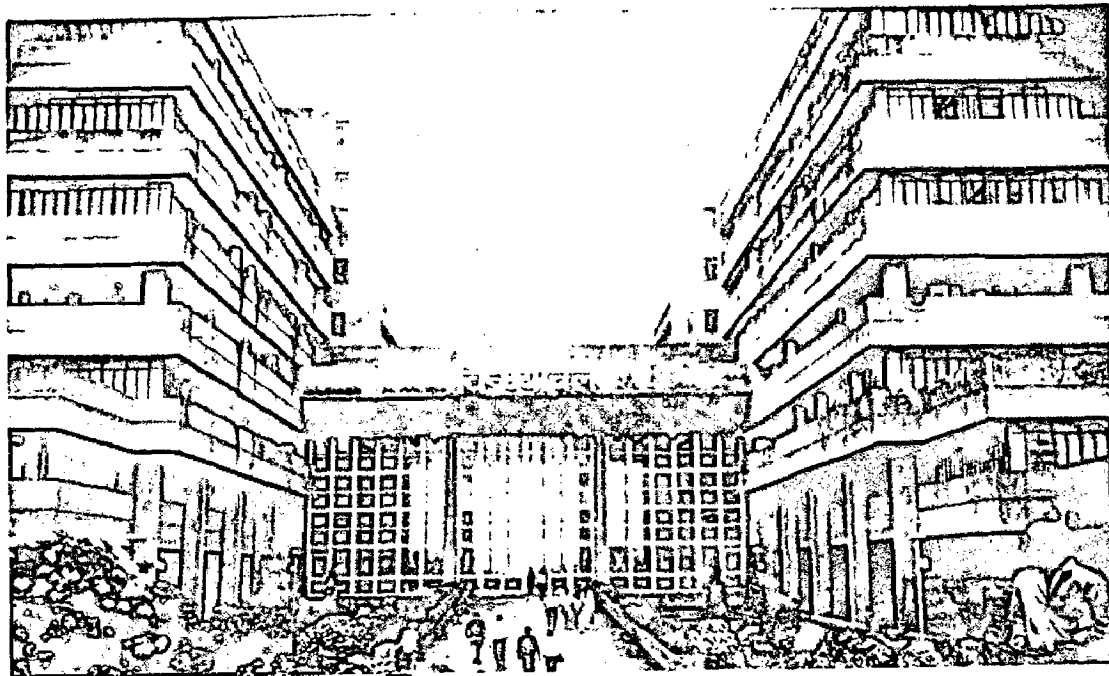
ARERA HILL COMPLEX :

The new administrative centre of Madhya Pradesh State Government is situated on the Arera hill, at the Centre of the city. The dominant feature of this complex is the total rejection of facade architecture of past, with its rows of builtmasses running the whole length of the street. Here a number of buildings in which three are more significant are in being. These free standing buildings in which — the two (Vindhychal Satpura) are identical and another differ both in form and size are grouped around a main central axis. Such an arrangement of buildings is seemed to be impressive at first sight, lacks the element of surprise in visual experience and can become very tedious, particularly as one proceeds along the axis at pedestrian pace.

The huge, tall, building masses have failed to use the full potential of the topography and landscaping characteristics of the site. The vast spaces between them are often a windy, unfriendly no man's land. The ground plus six storeyed structure on the top of the hill is seemed to an attempt to dominate the skyline of the city. The aim of the designer is seemed to create an advanced twenty first century's structure irrespective of the town environs. Resulting in an outstanding, large, modern structure, a rectangular

prism with repetitive fenestration more and more use of glass and other high quality material.

The large open space in front of the Vallabh bhawan remains unused, is considered as an enlarged, landscaped, round about, for channellizing traffic.



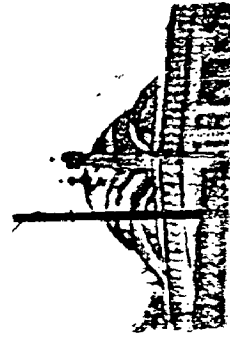
CHAPTER VIII

SIGNIFICANCE RELEVANCE AND APPLICABILITY

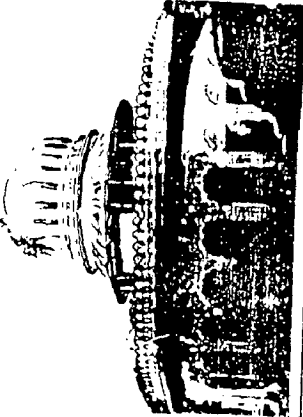
8.1 HERITAGE: THE CITY OF ARTIFACTS

ANALYSIS OF THE BUILDINGS OF HISTORICAL AND ARCHITECTURAL INTEREST

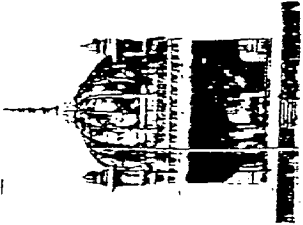
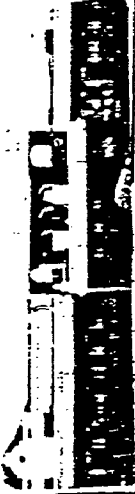
S.No.	NAME OF THE BUILDING	ARCHITECTURAL SIGNIFIANCE AND VISUAL APPRECIATION	CHARACTERISTICS, ELEMENTS AND APPLICABILITY
1.	TOMB OF SARDAR DOST MOHD. KHAN	Peaceful, Passive and restful roof form depicting serenity of the building, whose function is a tomb. It holds an important place in the history of the city. Its presence enriches the visual experience of the surroundings and it	Distinct roof form, simplicity of details and the use of locally available materials primarily stone.




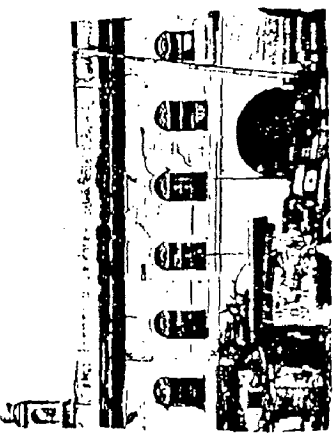
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<p>2.</p>	<p>GOLLEGHAR</p>	<p>should be preserved as an important monument.</p> <p>This building which was designed as a recreational pavilion is to be preserved for its distinct form and symbolism behind the design concept as its shape is symbolize the concept of universe metaphysically.</p> 	<p>Distinct form, excellent composition of circular and rectangular form creating an extraordinarily balanced composition. Delicate detailing of parapet and plasticity provided by means of sleek tubular columns placed around the circular portion.</p>
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continued.

3.	TOMB OF NAWAB VAZIR MOHD. KHAN	<p>A freestanding structure elegantly standing in the surrounding providing them importance and a sense of dignity. It possesses religions and sentimental values and required to be preserved for historical identity and socio-cultural significance.</p>	<p>A perfect example of balance and harmony achieved by the correctly proportioned built masses.</p> 
4.	DARUL SHAFAKAT	<p>Articulated sleek arches, focal crowing on the top, and delicate detailing of parapet designs are most identifiable element which need to be conserved in terms of its design, scale and panoramic</p>	<p>Symmetrical and harmonious juxtaposition of built masses, linear continuity sustained by rhythmic succession of sleek arch forms.</p> 



Continued -

5.	EMPLOYMENT EXCHANGE	value. The simple flat facade depicting the utilitarian concept behind the design of the building whose function was a treasury. Being situated in an important area the building is to be preserved for its locational value as well as historical and architectural significance.	 <p>Use of distinct structural techniques, unsymmetrical composition of facade which is simple but elegant.</p>
6.	LAL MASJID	The form of the building with flanking minarets dominating the place and is an important element of the	


Continued

7.	<p>BENAZIR</p> 	<p>Picturesque setting excellently exploited topography, harmonious juxtaposition of differently shaped built masses, Remarkable design concept used in its construction providing it an important architectural value. The building is merged in the surrounding landscape, taking the best possible advantage of the view of the lake in front, the split levels are leading towards a non-building concept. To be preserved for its religious and historical value.</p>	<p>Domes, freestanding focal arches and multi level variation of roof forms giving a feeling of level variation of contour site (although the site is not so). Composition emerges out of complexity of levels, rather through a determined approach to achieve the same. Excellent proportions and composition of horizontal and vertical building elements. Nicely treated parapet and simplicity with elegance is achieved remarkably.</p>
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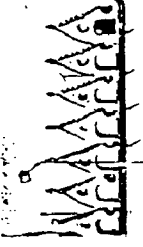
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8.	NOOR-US SABAH	<p>A Number of building elements derived from different architectural styles. The juxtaposition of square, rectangular and octagonal building masses with a conical structure on terrace is giving it complexity.</p>	<p>Composition of different built forms, Distinct conical form on the roof.</p> 
9.	TAJMAHAL	<p>Elegant imposing facade, in excellent symmetrical composition creating harmony and balance. Required to be conserved because of its great historical value.</p>	<p>Detailing of the archway, the use of a distinct element in the top of facade to provide it elegance and grandeur, excellently carved niches.</p> 

continues

10.	SADAR MANZIL	<p>One of the most important building complex and landmark in the city itself the building is to be conserved and preserved for its high historical and architectural value.</p>	<p>Excellent articulated open spaces, flow of movement, plasticity of detailing, successfully created intimate, friendly environment and excellent placing of built masses.</p>  <p>Typical shape and decorative features used in roof construction, detailing of parapet.</p>
11.	SUFIA MASJID	<p>Remarkable composition with excellently placed horizontal and vertical built masses different from a typical mosque, the building is required to be preserved for its uniqueness of distinct concept and form.</p>	

Continued

12.	HAMEED MANZIL	<p>Highly decorated facade, which is seemed to be a collage of a number of architectural elements creating a very complex effect and confusion. It is required to be preserved for distinct visual characteristics and uniqueness of detailing. It processes an important place in city's history and also holds a locational value.</p>	<p>Use of different decorative elements like triangular parapets arched ventilators, freestanding arches, and a distinct freestanding form on the top as a crowing element.</p> 
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8.2 HERITAGE:THE CITY OF LAKES

ANALYSIS OF URBAN SPACES AND ACTIVITIES AROUND WATER BODY

S.N.	Area/Space	Original Status/ Activity/Physical condition	Present condition	Conclusions
1.	Taj Mahal Palace	This was the royal residence. The deal walls were used to about the water body, the spaces on the	The royal palace is being used now, by refugees for residen- tial purpose, and in the absence of proper	Residential use should not be located near the water bodies in the old area where there is lack of

continued

2.	Benazir Nursery	terraces of the palace facing the talab were used for recreational purposes. Originally it was a garden between Ali Manzil and Benazir Palace and was active for recreational purposes by family members and residents of Ali Manzil.	sewerage and services, all sewerage and drainage is disposed in the lake. The water is retreated in the outer areas because of this. Because of lack of maintenance the garden is converted into a nursery only.	proper sewerage and drainage system. Garden or landscaped area does not affect the environmental condition of water.
3.	Benazir Palace	This was used as state offices.	Institute and uses does not affect much the statue of the water bodies.	

continued

4.	Benazir Play ground	<p>This place was used for public gatherings and functions in front of the royal officers.</p>	<p>At present, this is a play ground and is extensively used by the local residents and college students.</p>	<p>Organized open spaces and playgrounds keeps the edges of the water body active and does not effect on environmental conditions.</p>
5.	Baradari and Ghats	<p>Originally this was conceived to be the part of Taj-ul Masjid and supposed to be used by the Namajis for washing themselves before prayer but since it was left incomplete, therefore, it could not be used for the required purpose.</p>	<p>Since the space was not used for the purpose for which it was designed and also not easily approachable it became inactive and now-a-days is being used as Dhobi Ghat.</p>	<p>Unorganised or Unplanned urban spaces near water bodies tend to breed incompatible uses which degrade the environmental status of the area as well as the water body.</p>

continued

6.	Tajul-Masjid	Strong religious magnet. It was left incomplete.	The mosque is complete now. This is quite an active are particularly during its annual festival 'Ipstima'. 3-4 lakhs pilgrims from all over the world and 3500 temporary shops are accumulated in this area. Absence of basic services infrastructure. Threat to environmental and ecological balance of the area.	Though religious activities near the water bodies does not affect much, but proper infrastructure and services should be provided to meet the demand of religious functions/gatherings.
7.	Noor Mahal Area	Vacant/Open unplanned land.	This vacant unplanned land between the water bodies and the palace was developed in unauthorised res.	Open/vacant unplanned areas near the water body are dangerous to leave like that, which attracts

8.	Talab Munshi Hussein Khan	Open vacand land	houses. The sewerage of the area is being disposed in the lake. Lake is being used as a big septic tank. Slums are developed in this, which are polluting the water, dumping of garbage, washing of clothes, animals, disposed of sewerage are some of the objectionable acts which are being in practice.	haphazard growth and pollution to the area. -do-
9.	Hanuman Mandir	This was a beautiful religious place. The open area was a beautiful garden which used to be	Mismanagement and non-interference of the Govt. has encouraged the office bearers to misuse the	No residential activity should be permitted near the water bodies. Religious institutions near the water bodies

continued

<p>10.</p>	<p>Roads and the edges of the talab.</p>	<p>The roads between the water bodies and edges of talab were once upon a time well defined and set to be the most pleasant and active area in the city.</p>	<p>Heavy traffic has not only destroyed the image and characters of the road but the edges and the corners of the talab are being developed in auto repair workshops.</p>	<p>land on the edge of the talab. Kuchha houses with no basic facilities of services have sprung up. Sewerage is disposed in the lake.</p>	<p>should be strictly controlled.</p> <p>Heavy traffic on roads along with the water bodies should be discouraged and these roads should only be used as link roads for internal circulations. Edges and corners of the water bodies should not be left without treatment or landscaping.</p>
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CHAPTER IX : CONCLUSIONS & RECOMBENDATIONS

9.1. CONCLUSIONS : THE HERITAGE

It is a fact that every city needs, as an expression of the varied facets of its community activities, a number of spectacular buildings, whose materials design and appearance reflect the importance, dignity and authority of the functions it houses, and for which it was created. Bhopal is still a unique religious city in its urban tissue and pattern, it is full of activities and is famous for its Estimas, religious institutions, and administrative activities. It possesses a character, a personality and urban form and an atmosphere of its own, which must be preserved. The Sadar Manzil complex, Benazir, Ahmedabad palace complex, Tajmahal area are some of the major histotical centres within the city worth preserving.

CHARACTER AND IDENTITY

The past builders excelled in achieving simplicity pleasing proportions, and a compelling architectonic aesthetic. It has a tone of poetry and aesthetics, to its beauty, which can be seen in a number of old buildings, monuments. A number of building elements, derived from these buildings, can be utilized in todays architectural creations.

All the old well known public spaces and squares in the city possesses qualities, in which space generally designates, a three dimensional expansion of any kind. Such a space implies a structural organization, as a frame for human activities, and is based on very definite factors, including the relationship between the form of the surrounding buildings, their uniformity and variety, their physical dimensions and proportions relative to the width and length of the open area, the angle of entry of streets and finally the location of such three dimensional punctuations or accents as monuments.

IMAGIBILITY AND TRANSFORMATION

The city is almost the extreme example of grid iron pattern, and although the pedestrian can only normally usually perceive the limited range of two or three city blocks, the unending vistas, particularly of the avenue as approved in the arera hill complex often appear featureless and forbidding. The value placed on the local incidents of Sadar Manzil Complex and the open spaces around, is very obvious from the way in which people congregate at these spots, and the sense of

locality could be even further enhanced by creation of local land marks, establishing well defined foci.

THE INTEGRATION OF NATURAL AND MAN-MADE FEATURES

The natural topographical features are modified or conditioned by a number of man - made features which include, urban developments, planted areas, communication facilities, formal space and the special emphasis of individually significant architectural masses, including particular vertical tower like forms, and stabilitce horizontal structures. The combination and permulation of natural and man made features, are usually perceived in a number of distinctly different ways, by the pedestynin observers in motion, in the city itself, by the observer located in one of the urban spaces, either in movement or at rest, from vantage points affording panoramic skyline or vista-views.

The subsequent, close-at-hand view, gained by the pedestrian in movement in the city, is just as much concerned with the collective quality of architectural achievement and forms, grouping and massing. It is the, however, rather than the detail architectural treatment which is likely to have much more relevance to the cohesive, structure...

THE CITY IMAGE

It is not always be immediately apparent from within the city whether or not there is system or order until, by movement and familiarity with the larger fabric such order becomes more evident. The apparent abstraction will then give way as a consequence of panoramic vision of the T.T. Nagar area from the arera hill, or the view of Idgah hills from lake view drive way or other vantage point, to recognition of the homogeneity of the built masses of Malviya Nagar, continuity of form of the new market and Hamidia road, diversity, scale, composition, grouping, contrasts, regulation, direction and form of Sadar Manzil area, as well as many other essential elements which constitute towards the creative image of the city as a whole.

THE SKYLINE

The character of the skyline of the city is distinct piercing with its minarets and Birla Mandir on the top of Arera Hill, it kept intact it will continue to be an important feature of the city's identity and personality.

THE CITY OF LAKES

Water played a vital role in city's evolution and development. It is evident from the history and heritage of the town that past rulers, architects and planners, were very sensitive towards this gift of nature. They took lot of care in planning the activities around the water. The orientation of development was integrated with water with great care and skill. They constructed palaces, fort religious buildings ghats, gardens, playgrounds, bazars, offices, schools etc. around, or along these water bodies. Taj Mahal and Noor Mahal area of Bhopal is one of such development. The historic setting of these areas with grand buildings and urban spaces was glamorous once upon a time, but today they are in a different shape and condition.

RECOMMENDATIONS :

The following are the recommendations :

1. All the listed buildings and lot more should be identified, documented so that an effective, practicable conservation programme can be chalked out for safeguarding these valuable assets.
2. Schemes for conservation and preservation of the fine landscape of the city, its open spaces should be immediately launched.
3. Regarding water bodies following are : me of the recommendations :
 - a) No residential use should be put near the water bodies. All along and around the water bodies, landscaping is very very essential.
 - b) Services and infrastructure in the areas adjoining to the water bodies should be carefully planned and must be provided sufficient in number and extent.
 - c) Institutional uses can also be carefully proposed along them.
 - d) Best uses around the water bodies are recreational which include playground, gardens etc.

gardens etc.

4. There must be increasing encouragement for architects to respect the urban environment and to recognize the existence of an overall master strategy. Rather than showing increasing resentment to such a strategy they should be able to ensure that each individual building asserts itself reasonably within its.
5. City forms must be derived from contemporary function which may still adequately cater for similar functions in the foreseeable future. These will arise from and be influenced by aesthetic social economic and imprecise values and interests. The relevance of which has to be judged on knowledge rather than on a set of preconceptions which may be totally irrelevant.
6. The city has a unique skyline and scale which should be kept intact it may be exercised by restricting high rise development on hill-tops and all the high rise buildings should be banned from the historic core such a practice is already successfully exercised in Prague.
7. Small informal open spaces should be designed

around the building instead of vast plazas lacking a sense of enclosure.

8. All the parts of the city should be assumed to have in common the element of major, minor and subsidiary vistas views from within and without sequence of sense of enclosure or freedom from enclosure, contrasting building, materials, colours, textures and details within the overall unity of the composition and a sense of continuity. All the individual parts should be unified in scale, and in their use of building materials so that the effect of combined architectural imagination and control become apparent.
9. Building elements, forms should be used if possible and supposed to be beneficial in contemporary context, *which have been derived from historical buildings*
10. Use of landscaping elements, topographical characteristics is the heart of the architectural heritage of Bhopal which should be continued for the creation of a worthwhile urban environment and to ensure continuity between the old and new.

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SOME DEFINITIONS

1. City :

A larger human collectivity with territorial boundaries and a common political system

2. Contemporary :

It is present, which is constantly passing and yet always here.

3. Culture :

Culture is shared knowledge, concepts, rules acquired by humans through social learning.

4. Identity :

It is a commitment to normative standards, that helps observer to place us in relation to others, and to expect certain behaviour from us.

5. Monument :

Derived from Greek it means 'the thing that reminds.'

6. Urban :

Derived from Greek 'Urb = City'. It is locational setting in which the density is high, people are engaged in non-agricultural

activities. It serves as a cultural, economics administrative centre.

7. Urban Design :

An attempt to intervene or otherwise influence the process of political and economic decision making in the development of cities.

8. Values :

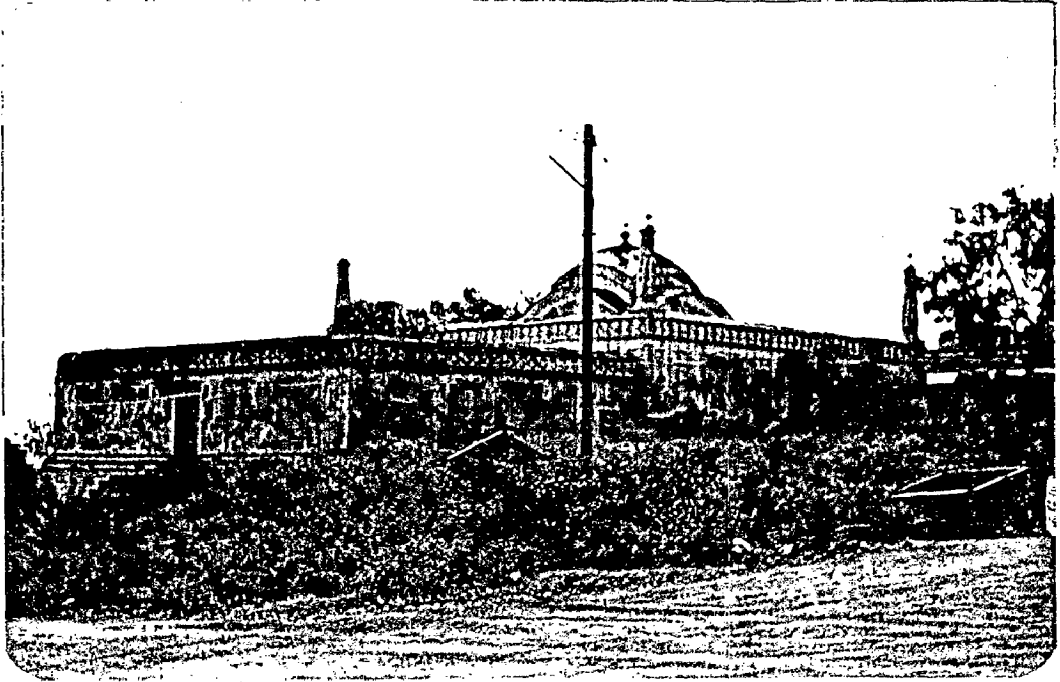
Abstract standards that persist over time and identify what is right for people in a society.

APPENDIX B : INVENTORY OF THE SELECTED BUILDINGS

List of buildings

Page No.

1. Tomb of Sardar Dost Mohd. Khan
 2. Goleghar
 3. Tomb of Nawab Vazir Mohd. Khan
 4. Darul Shafakat Shahjahani
 5. Employment Exchange
 6. Lal Masjid
 7. Benazir
 8. Noor-us-Sabah
 9. Taj Mahal
 10. Sadar Manzil
 11. Safia Masjid
 12. Hameed Manzil
-



1. TOMB OF SARDAR DOST MOHD. KHAN.

Name : Tomb of Sardar Dost Mohd. Khan

Date : Constructed before 1740 A.D.

Location : Address : Behind Gandhi Medical College,
Bhopal, M.P.

Ownership : Maintained by Guziat at Moti Masjid,
Bhopal.

Usage : Past : The mosque was used by Dost Mohd.
Khan, Founder of Bhopal

Present : The mosque is in frequent use by
the inhabitants of the area nearby.

Characteristic Features :

General Description :

The building consists of a Masjid and the tomb. The masjid was constructed by Sardar Dost Mohd. Khan, simultaneously with the construction of Fatehgarh Fort.

The domed roof of the building resembles the roof of the hats of Bengali, providing it a special character, totally different from the Syro-Egyptian mousoleums. The dome is supported on squinches, which in turn are supported on multifoiled arches. The tomb stands on a square base with arches, two in number on each of its sides.

The Jali work around the cenotaph is delicate and simple in nature. Surrounding walls containing niches, creating deep shadows.

Building Materials :

Sand stone laid in lime mortar has been used for the construction.

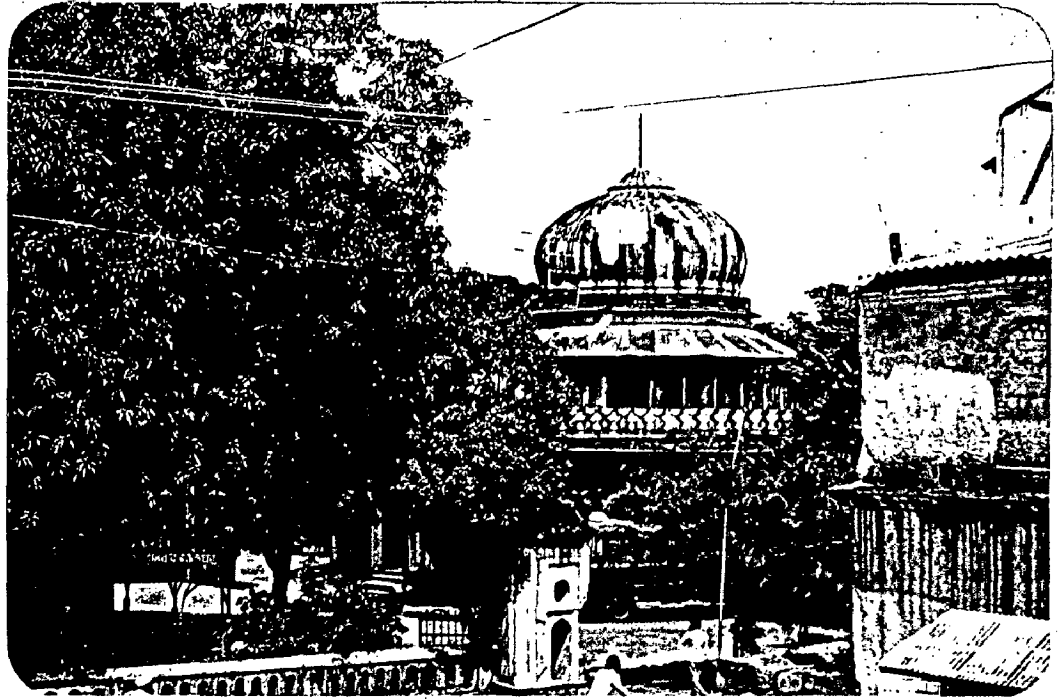
The building is structurally sound and have an excellent state of visual preservation. Except for the stone caruings and jaliwork is covered with a thick layer of Lime wash, dust and dirt etc.

Grading : A

Architectural Value : High, Because of the typical character of the roof and the intricate detailing of jalties and the use of motifs in a distinct manner.

Historical Value : High, this is historically important building as it is the tomb of the founder of Bhopal.

Archeological Value : High, because of its antiquity.



2. GOLEGHAR

Name : Goleghar

Location : Address : Goleghar,
Shahjahanabad, Bhopal

Date : Around 1892 A.D., Constructed by Nawab Shah
Jahan Begum

Ownership : The Department of Railway Police

Usage : Past : As a recreational pavilion

Present : Office and residential

Characteristic Features :

General Description :

The building as evident from its name, is in circular in shape. It is a double storeyed structure with twenty six arched openings, on the ground floor.

The building was basically designed as a recreational pavilion by Nawab Shahjahani Begum, in which the upper storey was used to keep love birds.

Sleek tubular sheet columns, supporting a deeply projected caves with the jali work of the parapet, provides a plasticity to the whole circular mass, which is covered with an onion dome.

The tritoliated arches are supported on ornate columns, of the ground floor. The design and detailing of the battlements and mouldings is comparatively simple.

Building Materials :

The rest of the building is constructed with brick while the circular portion is made of stone. The use of tubular steel columns and stucco work on the roof of the central hall are some of the distinct features.

The building is showing serious signs of deterioration, while the surrounding structures are also in a bad state of structural stability. The view of the most part of the building is obstructed by surrounding structures, only the Gole ghar part is in a fair state of visual preservation.

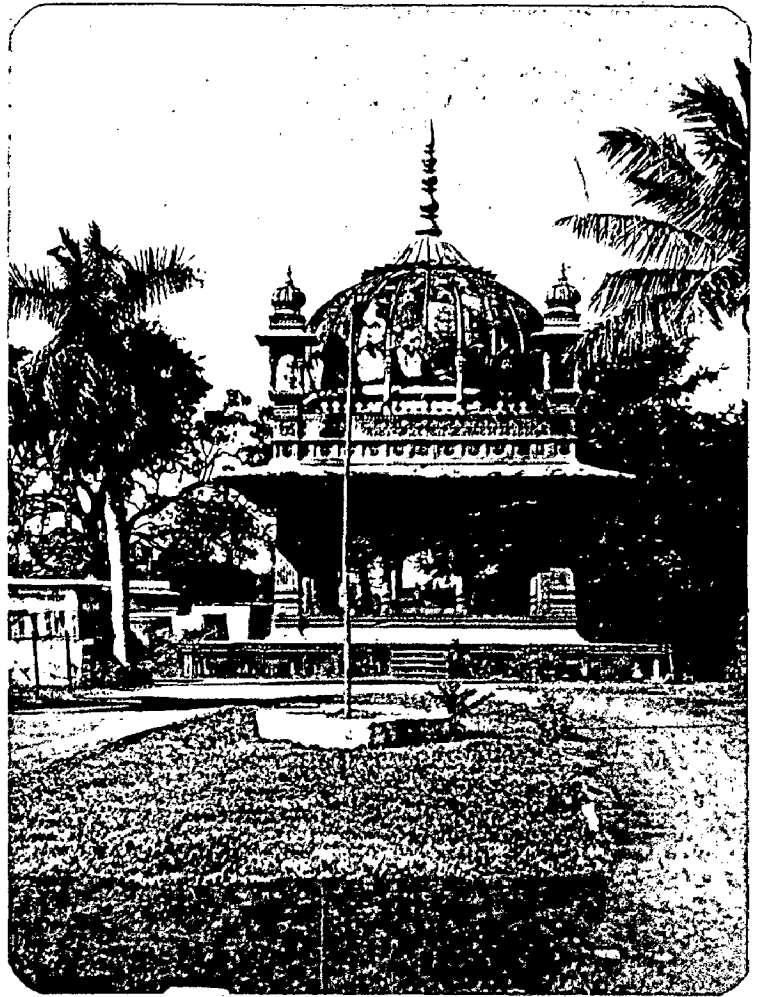
Grading : B

Architectural Value : Good. Because of its distinct from designed to represent metaphysically the concept of universe.

Historical Value : Fair

Archeological Value : Not considerable

3. TOMB OF NAWAB VAZIR MOHD. KHAN



Name : Tomb of Nawab Vazir Mohd. Khan

Date : More than 225 years old (1224 hizra)

Location : address : Bada Bagh,
Bhopal

Ownership : Public property

Usage : Past : Tomb

Present : Tomb

Characteristic Features :

General Description :

Basically constructed as a Chhatri, the building shows the use of different irons, both from Hindu and Indo-Islamic architecture. It was freestanding structure on a square, raised plinth is situated in a graveyard.

The hemispherical dome is supported on squinches sleek, ornate columns, supporting multifoiled arches. Deeply projected caves with a carved parapet above and small kiosk resembles mushal architecture.

Building Materials :

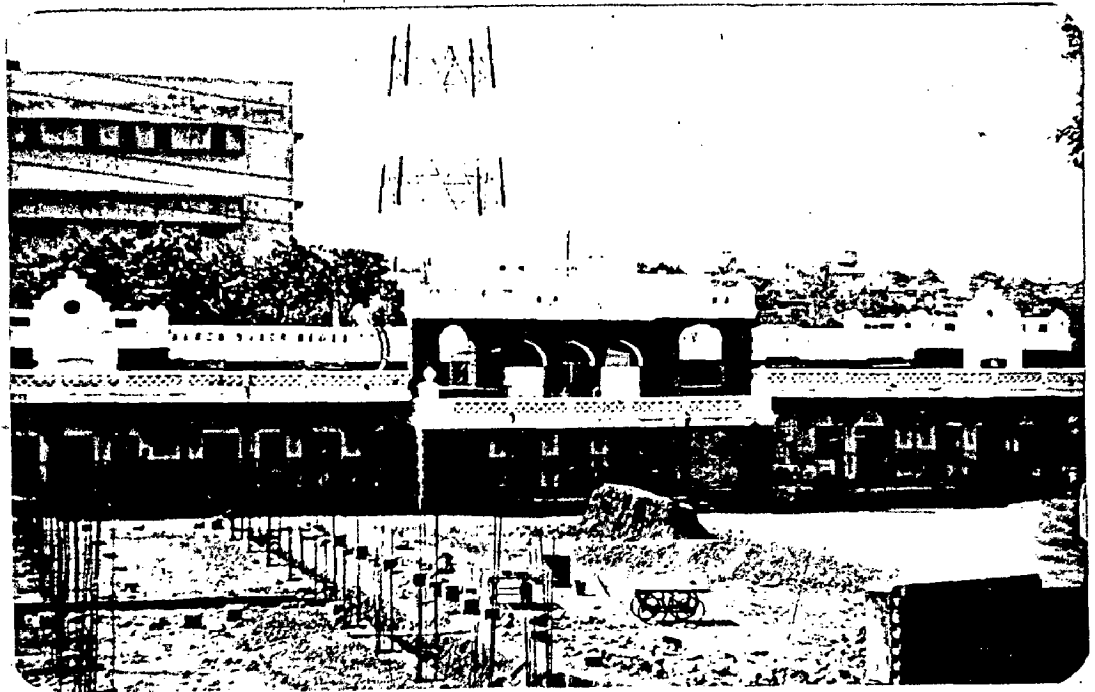
The building have been constructed with red sand stone, and lime mortar. It is showing signs of structural deterioration. The building is visually marred by bushes.

Grading : C

Architectural Value : Not considerably important.

Historical Value : Fair, it is related to one of the prominent personality of the Royal family of Bhopal State

Archeological Value : Not so important.



4. DARUL SHAFAKAT SHAHJAHANI

Name : Darul Shafakat Shahjahanani

Date : 1912 A.D.

Location : Address : Darul Shafakat Shahjahanani,
near Taj-ul Masjid, Bhopal

Ownership : Darul Shafakat Shahjahanani Board

Usage : Past : Orphanage

Present: Orphanage

Special Features :

General Description :

A double storeyed building with 13 nos. rooms for the orphans; constructed by Sultan Jahan Begum for muslim children who are orphans, for inhabitation and religions training. The built spaces are attached to a courtyard in the centre.

Except the jali work of the parapet, the building lacks details. Sleek columns and high pointed arches of the corridor, are typical in character, use of commonly in Madarsa's of old Bhopal.

Building Materials :

Roughly hewn stones laid in lime mortar, have been used. The roof is flat and steel girders can be seen from below which was used for its construction.

The building is in an excellent state of structural and visual preservation.

Grading : C

Architectural Value : Medium, Remarkable for its functional planning and composition of built forms.

Historical Value : High, It was constructed by Nawab Sultan JahanBegum for the benefit of muslim community.

Archeological Value : No archeological value.



5. EMPLOYMENT EXCHANGE

Name : Employment Exchange

Location : Address : Employment Exchange, Thandi Sadak,
Bhopal

Ownership : M.P.State Government

Usage : Past : As a Treasury

Present : Office

Characteristic Features :

General Description :

The building was designed to act as a treasury, by Shah Jahan Begum. Its plan is compact, fulfilling certain security requirements. The building is raised on cylindrical shells, and the terrace was covered with large water storage tanks.

This a double storeyed building, with domed ceinting. It is supported on three nos. cylindrical shells. Roughly treated exterior lacks detailing,

Semi-circular windows on the first floor have been provided with very closely spaced weather bars, the spacing if further decreased at the lower part of the windows, for security purposes.

Building Materials :

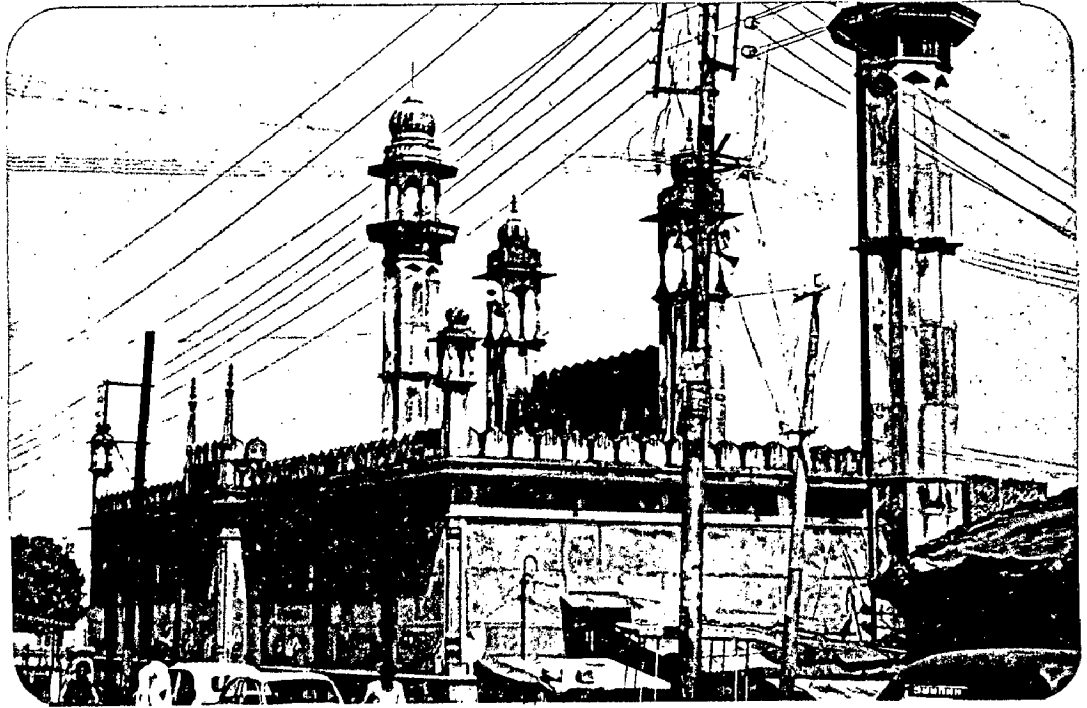
Heavy stone blocks along with bricks have been used for the construction. The building is structurally very sound, in which dome, arch and shells have been used as structural elements, although plastering is seemed to be damaged at some places. A number of unauthorized structures, posters destroying and winding its usual qualities.

Grading : B

Architectural Value : High, due to the use of distinct structural elements and innovative planning techniques.

Historical Value : Fair

Archeological Value : Not considerably important.



G. LAL-MASJID

Name : Lal Masjid

Location : Address : Lal Masjid, Munshi Hussain Khan
Muhalla, Bhopal

Date : Nearly 100 years old, constructed by Munshi
Hussain.

Ownership : Maintained by Qaziat at Moti Masjid,
Bhopal

Usage : Past : For prayers

Present : Living monument

Characteristic Features :

General Description :

The building is basically constructed in Indo-Islamic style. The building have been designed strictly following the typical mosque plan, with a central

courtyard and raised plinth.

The detailing of Jalties, Mimbar, Arches, niches, mouldings is outstanding. Tritoliated arches are supported on ornate columns. The roof is supported on semi circular arches. The deeply fluted mass of minarets giving the building a distinct character.

Building Materials :

The building has been constructed of red sand stone.

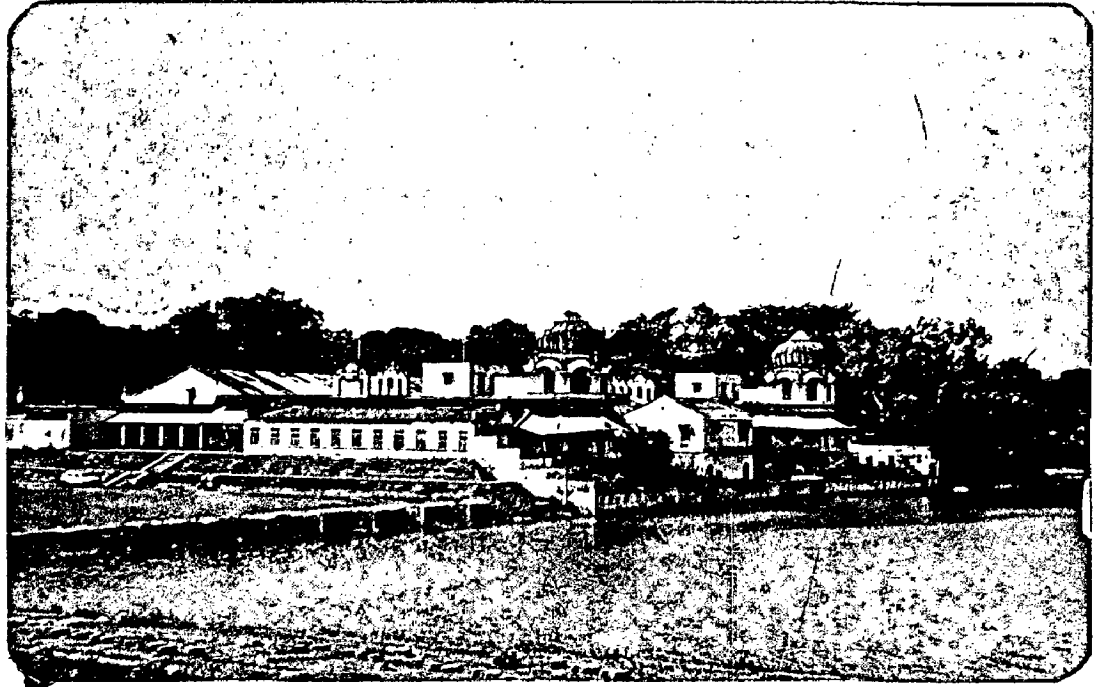
The building is an excellent state of structural stability. Visually the building is in slightly bad state, due to a number of shops adjacent to its plinth.

Grading : C

Architectural Value : High; because of the high qualities of workmanship

Historical Value : Fair

Archeological Value : Not considerable



7. BENAZIR

Name : Benazir

Date : Around 1875 A.D.

Location : Address : Benazir College, Bhopal

Ownership : M.P. State Government

Usage : Past : As a summer house and office

Present : As an educational institution

Characteristic Features :

General Description :

The building was constructed by Nawab Shahjahan Begum as a summer house. The building although constructed nearly 80 years ago, the use of traditional elements as well as modern irons can be seen.

The excellent placement of the building within the surrounding landscape, provides it a scenic beauty. The Harmonious juxtaposition of contrasting built forms and the exploitation of levels is remarkable.

Basically planned around a courtyard, the building has a central hall and two side wings, at the end of which there are two minarets, and onion domes on the top.

Extensive caruing on the walls of Hammam, and the low partition walls and coloured glass panels of the central hall, are some of the special features. The orientation of the building is excellent, and the spaces are strategically arranged, providing the means of passive thermal control within the building itself.

The building was previously known as 'Savan Bhadon'. It also had a Fern house attached to it, people believe that it has got an underground tunnel.

Building Materials :

Wood and steel have been used in addition to sand stone.

The building is structurally sound but usually in a bad state. It is being vandalised by the students and many beautiful carvings on the stone are hidden, behind a thick layer of dust, dirt and lime wash.

Grading : A

Architectural Value : High, Because of its excellent planning and constructional details.

Historical Value : Fair : Constructed by Nawab Shah Jahan Begum

Archeological Value : Not considerable



8. NOOR-US-SABAH

Name : Noor-us-Sabah

Location : Address : Noor-us-Sabah,
Ahmedabad Palace, Bhopal

Date : 1898

Ownership : Reliable hotelers Pvt. Limited

Usage : Past : Residential

Present : Deserted

(Proposed to be used as a hotel)

Characteristic Features :

General Description :

A multistoreyed structure in which a number of building elements derived from different architectural styles seemed to be used. The front and side faiaade

is totally different in character. Huge semi-circular arches on side elevations and rectangular openings in front, showing a strong contrast. The juxtaposition of square, rectangular and octagonal building masses, with a conical structure on the terrace, provide the building a distinct character. Double columns in classical style, raised plinth are some of the important features.

Building Materials :

Fibrous tiles have been used for roofing in addition to stone, marble, lime mortar and other building materials for its construction.

The building is in a fair State of Structural preservation and its usual state of preservation can be said to be satisfactory.

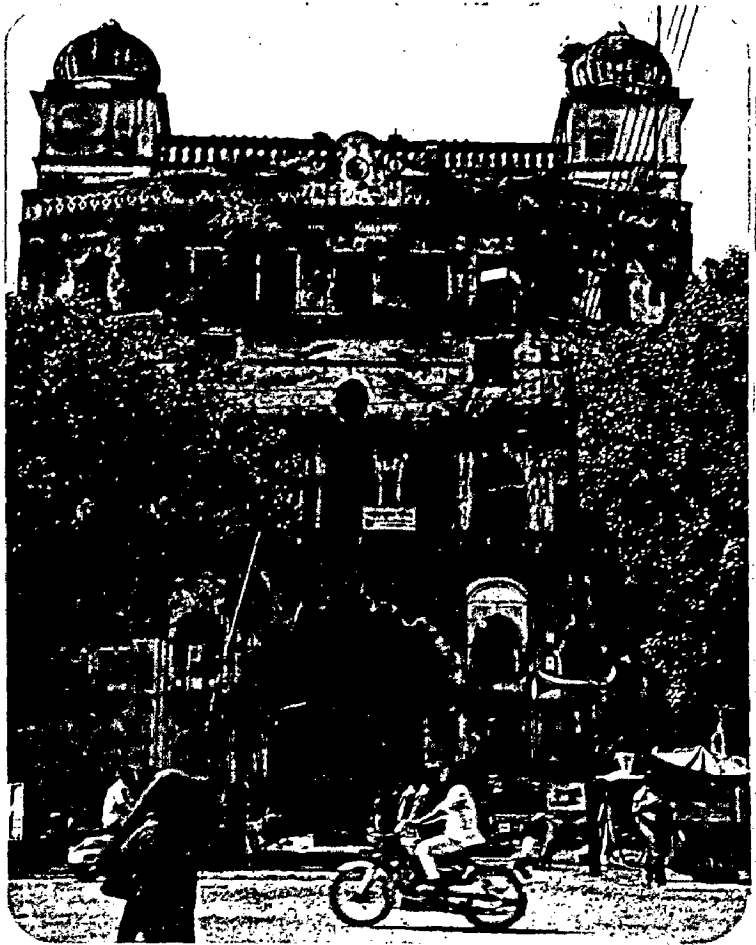
Grading : B

Architectural value : High, Because of its remarkable composition and the clever use of different fielding elements in one building.

Historical Value : Fair

Archeological Value : Not considerable

9. TAJ-MAHAL



Name : Taj Mahal

Location : Address : Taj Mahal, Shahjahanabad,
Bhopal

Date : 1892 A.D. (approx.). Built by Shah Jahan Begum

Ownership : Inhabited by muslim refugees, after
partition.

Usage : Past : Palace (residential)

Present : Residential

Characteristic Features :

General Description :

The building which was built by Shah Jahan Begum as her palace is seemed to be highly influenced by European architecture. The imposing facade is excellently

placed within the surroundings and it has got a beautiful silhouette.

The different character of openings on the facade, are arranged in such a manner, that it creates an impression of perfect balance and harmony, parapet, brackets, riches and other minor details show the artistry and skill in workmanship.

It is a five storeyed structure in which a number of open spaces are designed to act as space regulators.

Building Materials :

Bricks have been used for walls, while the columns are constructed with red sand stone.

The building is not structurally strong and is showing serious state of structural deterioration, visually the building is in a very deteriorated condition.

Grading : B

Architectural Value : High, due to its characteristic form, imposing facade and the qualities of other minor details.

Historical Value : High, as it was one of the important place where visitors were entertained.

Archeological Value : Fair

Semi-circular windows on the first floor have been provided with very closely spaced weather bars, the spacing if further decreased at the lower part of the windows, for security purposes.

Building Materials :

Heavy stone blocks along with bricks have been used for the construction. The building is structurally very sound, in which dome, arch and shells have been used as structural elements, although plastering is seemed to be damaged at some places. A number of unauthorized structures, posters destroying and winding its usual qualities.

Grading : B

Architectural Value : High, due to the use of distinct structural elements and innovative planning techniques.

Historical Value : Fair

Archeological Value : Not considerably important.

