Projects

THE UNIVERSITY OF THE PUNJAB



Detail from Jahangir's Tomb



Naulakka Pavillion, Fort Lahore

Concerning the Punjab

The path to the understanding of the Punjab and its culture winds through the remote passes of the Khyber and the wilderness of Hindukush and continues along the existing ancient road, bisecting the whole of the subcontinent and linking this country with Iran and the rest of the world. Along this road one still sees the remains of fortresses, caravan-serais and inns lying at distances of one day's riding on horseback. Following this road, one notices a progressive transition in the architectural morphology. To the eyes of the modern architect this morphologic transition starts from the warlike austerity of the Khyber fortresses, changes to a more peaceful rural character in the plains, and finally evolves into the composite and intellectual architecture of Lahore. This is the road to true understanding. At the cross-roads of Central and Western Asia, the Punjab is one of the oldest cradles of culture. Having absorbed belligerent invasions and cultural infiltrations, it finally established itself into a highly refined and culturally radiant centre for the whole country.

LAHORE

Lahore, the capital of the Punjab, is one of the legendary cities of the East with its origins lost in antiquity. During the last stages of Mughal administration it was second in importance only to the national capital, and was adorned with monuments, mosques, palaces and edifices of grandeur.

The climate is one of extremes, ranging between long dry seasons and Monsoon downpours, intense summer heat and cold winters. These conditions produce a lush and indigenous verdure characteristic of the Himalayan Area. The contemporary architect is faced with diverse challenges and his technical ability must be utilized to cope with these variants of nature and create within the buildings appropriate climatic and light conditions for the metabolism and physiological build-up of man. These aspects were studied in their absolute and abstract values and were placed against the conditions which had to be ideal for man's well-being. Half-way between the extremes we had to invent the operating pattern where the contradictory elements would eventually be transformed to become part of the architectural expression.

BACKGROUND AND PERTINENT DATA

After its founding in 1882, the University of the Punjab first functioned as an examining body. In 1912, when



Location Plan



Detail of the Site



Sirkap, Taxila: plan of excavations in the lower city



Fort Lahore



General Layout Plan

teaching premises began to be erected, the University assumed its proper academic role. With the passage of time and as student enrolment increased, its allotted area became crammed and the capacity to satisfy the academic requirements proved insufficient. Some of the departments had been constructed outside the campus limits, because adjacent real-estate interests restricted expansion. An acute need for a new environment with freedom of movement and expansion became apparent in 1950, although the idea of acquiring a new site goes back more than forty years.

The matter of actually acquiring a new campus site was initiated in 1944 when the Lahore Improvement Trust suggested the present location. Then partition intervened and the question was left dormant until January 1969, when the actual area and boundaries of the new campus were delineated. A later adjustment resulted in its present acreage and defined location.

ISSUE OF THE PROJECT

In April 1959, Doxiadis Associates were commissioned by the University to undertake the design work of the project. On the 16th of May an agreement was signed. The determining principles on which the total project was to succeed was the preparation of a master programme and plan which, within its long-term framework and as funds became available, would allow independent projects to develop in an evolutionary and additive way. The preparation of the above, which formed the foundation of all the subsequent work, occupied the rest of the year. In 1960 began the materialization of the first phase of the project, the largest single architectural undertaking in Pakistan and probably on the Southern Continent. What followed was the preparation of final drawings for a phased programme of works and the routine procedures toward construction.

THE PROBLEM

The problem presented to Doxiadis Associates by this highly cultural region with a deep-rooted tradition was one of the most complex ever handled by this office. The various tools, methods, processes and executive policies were to be employed to create an operating pattern the dynamics of which would cater to and satisfy:

a. a partial and progressive materialization of buildings and services; b. the transformation of traditional skills and experiences (as inconstruction) into contemporary techniques;

c. the preservation of the true essence of traditional patterns;



The complex of the new University of the Punjab



A part of the Social Sciences and Humanities Group

d. the climate, site conditions, etc.

The investigation and analysis concluded with the adoption of a modular reference pattern on which the incorporated sequences would eventually unfold.

The mechanism of planning the various departments and integrating them into a cohesive and continuous pattern was analogous to the plan of ancient Taxila, whilst the design of colleges follows a pattern characteristically similar to the palaces of the Mughal period, a sequence of closed, semi-closed and completely open spaces. A particular building sacrifices its individuality to become part of a broader and evergrowing complex, in the same way that a dwelling unit is integrated into the overall pattern of the town.

THE SITE

When one reaches the point where Ferozephure Avenue crosses the canal and looks southwest, one will see large groups of children bathing in the waters of the Bari Doab canal which recedes into perspective under the foliage of trees. The scene is one of extraordinary beauty. A pathway on the right hand side and an unpaved road on the other follow the water course through dense vegetation.

Taking either of these pathways, one will arrive at a vast construction site : the new University of the Punjab. Thus 5 miles from the heart of Lahore between Kutcba Mult An road and the Model Town, the site, bisected by the Bari Doab canal, lies in close proximity to the centre of the city.

A broader consideration of the urban pattern of Lahore, its zoning, and trends of growth indicates the suitability of the location of the site and opens up the possibilities of its successful integration into the developing city Its grounds cover an area of 800 acres which are to accommodate the new complex of the university town. The contemplated road system in the area and the dynamics of growth in Lahore will eventually make the site accessible from all parts of the city, by public or university transport.

The land is flat and arid except for the verdure flanking the canal and some insignificant patches of cultivation randomly scattered on the site. Its elevation is well above maximum flat level of the River Ravi, but with indications of increasing water logging. This aspect, as well as the rest of the site conditions with respect to its soil-bearing qualities, drainage and orientation of buildings, were examined and no insurpassable problems were encountered.

GENERAL PLANNING PRINCIPLES

View of the main plaza from the canal

The main covered walkway

View of the main plaza from the canal

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The Institute of Education, the ground floor plan

a. The general planning theory for the University of Punjab, to be executed in stages over a number of years to come, is illustrated diagrammatically in the sketch. In broad outlines it involves a multi - phased development along the longitudinal axis parallel to the canal and is called "Direction of addition". Each new academic department being built is added to the existing complex, directly united to it and developed along this axis. Individual department blocks will later be expanded along the transverse axes of "Direction of expansion". This expansion, conditional and local, does not interfere with the longitudinal development.

b. Into the aforementioned plan fits the student body, whose circulation is directed along a central axis provided by the main covered walkway that forms the spine of the complex. All movement perpendicular to this axis leads directly to the various departments which in turn are interconnected. Thus all pedestrian traffic is defined, channeled and unified.

c. Cars are excluded from the interior of the complex, and access is restricted to the fringe of the built-up area. Secondaries from the main vehicular road, at a certain distance from the buildings, channel traffic to this perimeter from where the pedestrian enters the building complex on foot. Non -interference and segregation of the human and machine circulation and their respective scales are therefore maintained.

d. In summary, the dynamics of growth and the mechanism of circulation, aspects of vital importance in an academic community of appreciable magnitude, are truly the basic major factors of comprehensive planning. The principles of these factors, successfully translated into architectural planning language form the starting point of an adroit approach. These aspects found their solution in the operating geometry of the pattern employed. It is true that the buildings themselves partly lose their individuality when viewed as part of the total homogeneous and interconnected fabric. But the individuality becomes apparent within the confines and immediate environs of the building in the microscale and localised planning and assimilates itself to the pertinent functions contained therein.

THE MASTER PLAN

The design concept for the creation of this modern university complex is based on the same functional rules that governed planning in the past.

THE INSTITUTE OF EDUCATION



The Institute of Education, the ground floor plan



The Institute of Education, view from the canal



Staircase detail



Internal walkway



The Entrance to the Auditorium



The Student Hostels under construction

The first building constructed on the new university campus was the Institute of Education and the adjacent Auditorium. Designed for expansion and a maximum degree of flexibility in internal reshuffling within the skeleton of the building, it caters up to 1,000 students at a time. Its objectives are aimed primarily at fostering and conducting educational methodology, curriculum development and testing.

Eventually it will therefore function as an information centre for general educational development.

It simultaneously furthers liaison with the colleges and teachers' training institutions for guidance in pedagogic and instructional methods.

In general composition the Institute of Education consists of a hollow rectangular three-storey block with an open landscaped court in the middle, and attached thereto are some two and one-storey wings. Very generally, regarding the subdivision of functions, the ground floor comprises the administration, the multi-purpose room, research laboratory and special vocational spaces, while the two upper floors contain mostly lecture rooms, the library and staff offices. The auditorium with its contemporary acoustical and air-conditioning treatment seats 1,000 persons.

THE STUDENT HOSTELS

The problem of housing the students was based on the assumption of standardized hostel units which will be selfcontained and will provide for all the students'. Standardization was employed because of its evident qualities of economy and quick construction by mass production through repetition. The great number of hostels to be eventually constructed in the years to come was an additional justification for proposing standardized units. Architecturally, the hostel as a building is laid out in a compositional pattern allowing for the standardization of individual common and general facilities, maximum possibility in combinations of the basic elements so as to give different arrangements, and capacities and expansion of construction in stages. To this effect the hostel has been laid out on a site divided into three basic functional areas: the area of the dormitories or bedrooms, the area of the communal spaces (administrative and general facilities), and the area of the gardens where plots of land are isolated for the construction of houses for the staff. Every bedroom cubicle in the dormitories is standardized and provides the basic facilities, while an extension of the room forms a covered balcony, partitioned from the rest and with a private outdoor sitting or sleeping area. Each individual hostel unit houses about 160 students and may accommodate exclusively either male or female students. THE STUDENT UNION



Bird's eye view



The Student Union, ground floor plan



Cafeteria and Student Union proper under construction

The Student Union, or Teacher-Student Centre, is intended to contribute to the strengthening of a sense of academic community. In specific terms it is designed to foster a closer, informal relationship between teachers and students; to encourage a more sustained academic effort by providing facilities that permit both teachers and students to spend a full day on the campus; and to ameliorate some of the causes of student unrest and frustration by developing a programme of constructive activities which absorb their interests and energy. The Centre must be viewed, therefore, both as a physical area providing facilities for relaxation, recreation and informal contacts, and as the focal point of an expanding programme of student activities that will bring an evergrowing number of students within its orbit. In its physical layout it is composed of a three-storey block with a central square lightwell which houses the Student Union offices and organization rooms, a one-storey games wing, a cafeteria-dining block whose long-span vaulted roof makes it an inspired compositional contrast to the more formal three-storey block, the guest-room wing, and the nearby bazaar connected to the Student Union complex by a covered walkway.