

Student Project

BUILDING A SCHOOL OF MUSIC

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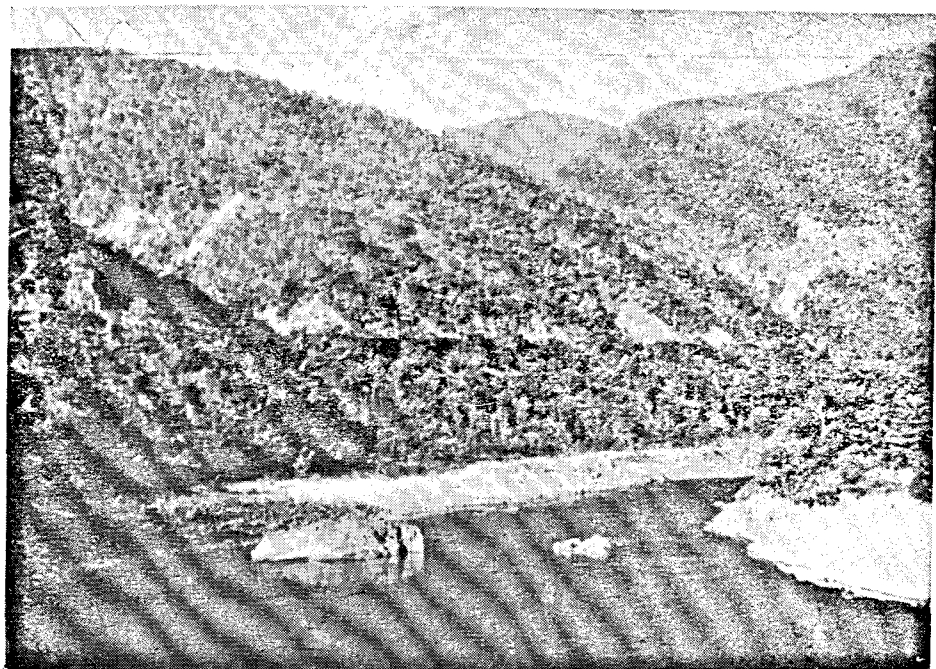
To encourage students and young professional artistes to experiment with new ideas we hope to publish outstanding student projects whenever possible. The extracts given here are from the thesis of the author who has recently graduated in architecture, from the University of Delhi.

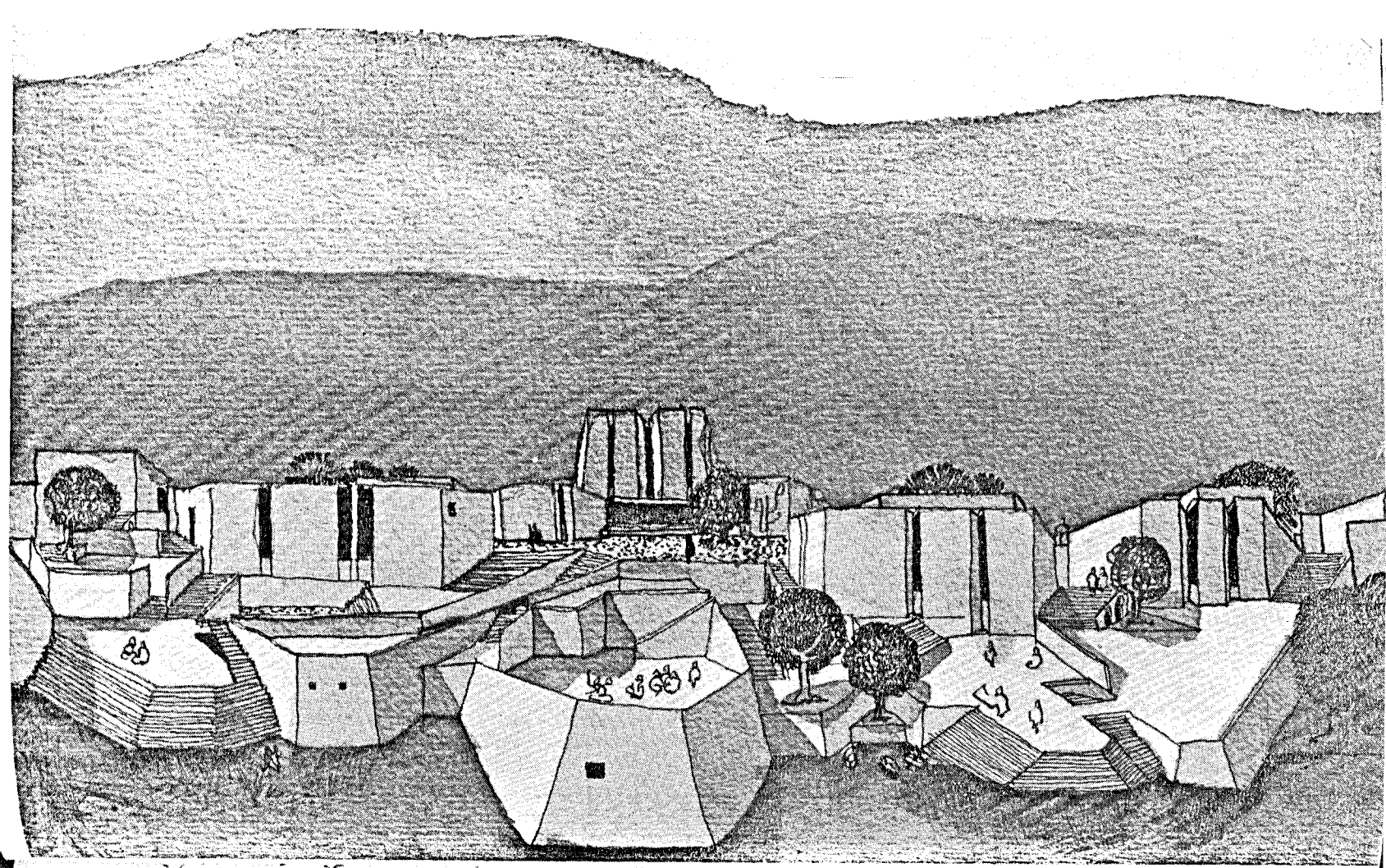
Although to all outward appearances, architecture and music may seem to exist in independent realms—one in space and the other in time—there is a very vital relationship between the two. Both for instance, are governed by the same principles of order and rhythm. It is the realisation of this underlying unity in these two arts that has inspired von Schlegel to call architecture “frozen music”. Nowhere is this relationship deeper than in India where both these arts have charted almost identical paths in the course of their development.

In order that students should have the correct atmosphere for the study of Indian Music, I have attempted to design the ideal School of Music.

The school will have a total capacity of thirty spread over a three year course. The Classical styles of North Indian music, particularly the Dhrupad, Khayal, Thumri will be intensively taught. Instruments like sarod, sitar, tabla will also be in the course.

There will be six *ustads* to teach groups of five students each. This will be a residential school for both the students and the teachers. Owing to the single-mindedness of purpose and dedication of both students and teachers it will have to be so located and constituted that the students will remain in the school for very long periods far away from the hurly burly of towns. This is necessary because the students have to maintain an equipoise, and the environment of the school will have to aid this.





This necessitates that the school is a self-sufficient unit not too dependent on the town for supplies. Thus vegetable gardening, flower gardening, will form a part of the students duties. Since there are only four servants the students will have to help in maintaining the school.

Since the main function of the school is dedicated to the service of Indian music it will have also to provide opportunities for research work and study. Under its sponsorship conferences for musicians will also be periodically held.

Table of Requirements

1. One hall for 50 to 70 people : 1,500 sq. ft.
2. One small workshop : 400 sq. ft.
3. One library with reference, reading, rare manuscript and record collection sections : 1,200 sq. ft.
4. One recreation room with record collection section : 900 sq. ft.
5. One dining room for 50-70 people : 1,500 sq. ft.
6. One kitchen and pantry : 800 sq. ft.
7. One seminar room for 50-70 people : 1,000 sq. ft.
8. One lecture room for 50-70 people : 1,000 sq. ft.
9. One auditorim : 1,500 sq. ft.
10. Six class-rooms for 5 students each : 400 sq. ft.
11. Six teachers living units with living, dining, kitchen, two bedrooms and one bath each : 1,500 sq. ft.
12. Six living units for students : each with five bedrooms, with two closets and two common baths per unit : 2,500 sq. ft. including court
13. Six living quarters for domestic staff (4), one caretaker and one gardener : 150 sq. ft. each
14. Bicycle and tool shed
15. Registrar's living unit—living, dining, kitchen, two bedrooms, one bathroom : 1,500 sq. ft.
16. Registrar's office with assistant ; 200 sq. ft.
17. General office : 250 sq. ft.

The Site

The site lies a few miles north of Rishikesh in a large tract of land known as Tapoban. This site overlooks Lachman Jhoola and is situated in the foothills of the Himalayas. It is covered with terraced fields sloping gently—on an average of 1 in 20—towards the Ganges to the east.

Opposite : The design

Near the river there is a steeper fall—about 1 in 2. This land is suitable for cultivation and vegetable and flower gardens may be cultivated here.

The wind direction is east. The breeze therefore comes from the river.

The overlooking foothills lend the whole site a dignified serenity. The river Ganges which flows past adds not only to the atmosphere of the site but also to visual interest. Rivers are necessary for the cultivation of Indian music because they evoke a meditative mood ; Indian music has a deeply meditative character.

The location of the site away from any major towns has the advantage of keeping the students isolated in the campus by reducing the temptation of going out, which might distract them.

The complex of buildings constituting the school is situated on the edge of the river (where the land drops sharply to the river in a fall of 50 feet). This makes it possible to utilize the environment generated by the river for the purpose of maintaining the atmosphere of the school.

Conception of Musical Style in Architecture

In deference to the Indian artistic tradition, I have attempted to give architectural expression to the character of Indian music.

I have attempted to maintain in this scheme one continuous flow of space. No space is completely enclosed and thus complete in itself but forms a part of the total spatial composition of the scheme. The quality of each space is such that nowhere is there any contrast between two succeeding spaces—only a gentle transition from one to the other is effected so that throughout there is a complete unity of spatial quality. No one individual space is given any particular importance and each space is a complement to the other spaces. But in spite of this no two spaces are identical ; within this unity there is an attempt at infinite variety. Attempt has been made to impart into this variation rhythmic qualities.

Even in the building masses the same unity as well as variety is attempted. Unity by the use of similar shapes and the same material; variety by avoiding absolutely identical blocks in size and shape, placing of openings, variety of fenestration.

The variations that are a part of the design have however been controlled so that they do not shatter the pervading atmosphere of quietude, introspection and peace that has been attempted.

Analysis of the Design

The School campus may be divided into 4 units : the teachers residential area, the students residential area, the school and the auditorium, which form the core of the complex. It can also be used for concerts. The individual classrooms are grouped around it. This gives the school unit a sense of cohesiveness. The students' residential unit and the teachers residential units fuse into the school area.

2. Shape of Units. There are 3 reasons for the choice of this shape (roughly hexagonal) of units. (a) It makes possible a variety of shape spaces owing to its irregularity. (b) This shape also makes it possible to bring about a flow in the space as owing to it, it is possible to avoid sudden and sharp corners. (c) With battered walls a certain dynamism is imparted to the buildings because of the shape.

3. Courtyards and Terraces. These form the back-bone of the whole scheme, which is built around the open spaces that they constitute. They have been so located that they may be used for group singing or group activity or even sometimes solitary meditation. Each teacher's unit (residential) is built around a court. In the case of students, five residential units are built around one court which in turn has around it a central terrace. No two courtyards and terraces are of the same size and shape. Courtyards are more sheltered and private and have to provide for specific groups, terraces are open and for more general use. The two large terraces—one next to the classrooms and one next to the students residential units—are meant for the whole school to assemble.

4. *Ghats*.. These extend right down to the river from a height of 20 feet above it. They lend character to the whole scheme since owing to them the whole building complex seems to rise above the river. The *ghats* are provided with a number of terraces. The emphasis however is on steps of which there are 3 main arrangements ; (a) *Ghats* which jut out into the river and which are almost entirely surrounded by water giving them a look of islands. (b) There is one *ghat* which forms a bridge linking directly one terrace at building level with one at water level. (c) A series of steps so arranged as to form small change rooms underneath them.

These 3 types are arranged so as to give an impression of unlimited variety.

5. Steps. These are used along the building complex to gain access from one level to another. There are 4 such levels, with 2 more subsidiary ones. These steps are exposed and seem to be a continua-

tion of the *ghats*. This further enhances the visual impression of the whole building complex growing out of the river.

6. Retaining walls. Since the scheme has a lot of terraces of different levels there are also a lot of retaining walls. These are made to merge with the walls of the buildings, at least visually, to create an impression of solidity and strength.

7. Teachers' Residential Unit. Each has been designed so that it is built around a court. The internal arrangement is flexible so that on occasions when there is a necessity for group singing it can all be made into one large space opening out into the court.

8. Ventilation has been given special consideration. Since each unit faces a court and since also each unit is at different levels there is ample cross ventilation. Since the direction of the wind is from the river and each room has been so designed as to get view of the river, flow of breeze through each room is ensured.

(a) Ventilators. These are used in walls which have an adjoining block at a lower level.

(b) Opening with *jali* at floor level. This ensures breeze where it is most necessary since the students will be sitting on the floor.

(c) Openings at window level are fixed with wooden louvers which may be adjusted, thus the direction of the air movement may be changed. These louvers also ensure that the sun is kept out.

9. Climatic control. Since the area has a tendency to get hot in summer measures have been taken to counter the heat. The roofs are all constructed of hollow concrete blocks. This protects the interiors from the direct heat of the sun. Further, all openings have been deeply set-in and so direct sunlight is not allowed to enter. Besides thick stone walls provide adequate heat insulation.

10. Construction and materials. The hollow blocks of the roof are supported by T-beams of R. C. C. Walls are of rough uncoursed stonework laid with a batter to give a more solid appearance.

11. Furniture. Since Indian music is played sitting on the floor and the *ustads* and *pundits* are accustomed to sitting only on the floor while performing, no seating arrangement has been provided in the classrooms. In the library and dining-room, however, stone platforms have been made right along the walls with arrangements for a *gada* or mattress. In these two rooms the floor has been sunk.