

## Yamuna Apartments, New Delhi

**Project Data**

Yamuna Apartments, New Delhi.

Clients: The Yamuna Co-operative Group Housing Society Ltd.

Architects: Ranjit Sabikhi and Ajoy Choudhury, The Design Group

Design Team: Ajoy Choudhury, Pravesh Jethi and Yogendra Garg.

Structural Engineer: T.S. Narayanswamy.

Completion: 1981

**D**elhi, the capital of India and a seat of political, educational and medical centres, attracts a large number of people from the whole country.

Being a fast growing metropolis, housing is one of the problems it is facing. To accommodate this fast growing population, the Delhi Development Authority in addition to selling constructed flats on a self financing basis, allots land to group housing societies. These societies are given land, at the rate of 90 square metres per member or an average of fifty dwelling units per acre. This has resulted in numerous stereotyped multistoreyed apartments or four storeyed walk up apartments, where no thought has been given to the creation of a community.

Yamuna apartments belong to a group housing society, which has been designed for the lower middle income group. The design concept however, distinguishes it from other housing developments in the city. This society consisted of two hundred members, most of which came from south Indian states of Kerala Tamil Nadu and Andhra Pradesh, constituted a fairly cohesive group with specific living requirements. Taking these factors into consideration, the housing was designed as an integrated community settlement, where the traditional housing elements were incorporated to create an "urban village" in a city.

The site allotted for the housing complex was 4.25 acres (1.72 hectares), but due to planning regulations an area measuring 0.5 acres (0.2 hectares) was required to be left as open space, at the north east corner. The intention of this open space being, to form a continuous green space with adjoining residential

complexes. This green space has enabled the housing to have a nice playground, though it has made the project more challenging, as now two hundred dwelling units were to be accommodated in an area of 3.75 acres (1.52 hectares).

The design concept revolves around a typical Indian village, with its lively narrow *galis* or pedestrian streets, where the womenfolk and children would pull out their *charpai* (a bed to sit on) onto the *gali*, so that they were able to share experiences and conversation with each other while they continued with their household chores. This has been achieved by designing a traffic free complex, where the vehicular traffic is restricted to the periphery of the development and contained in a basement. The pedestrian movement is along four radial *galis*, where children can play undisturbed by the vehicular traffic. Plants planted along the sides of the *gali*, present a refreshing contrast to the external walls of the unit and liven up the *gali*. In the Indian village, the *galis* would converge to a *chopal* or village square, which housed either the village well or was a market centre, essentially being a place for communal interaction. As in the urban context, the village well no longer plays an important role, a similar concept has been adopted where the *galis* converge onto an asymmetrically placed central square, which forms the focus. It is here that the re-

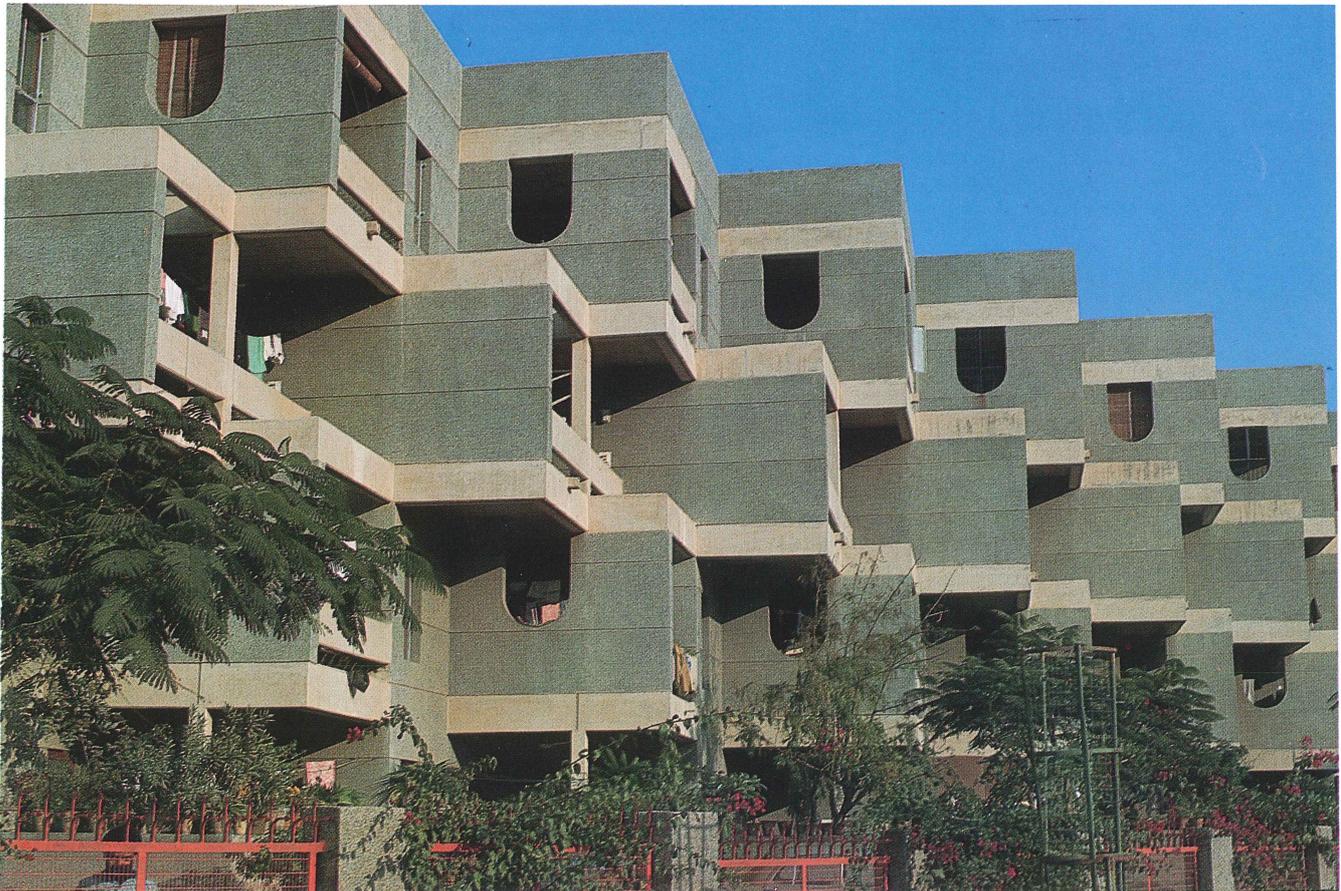
*Below: The housing as seen from a distance.*

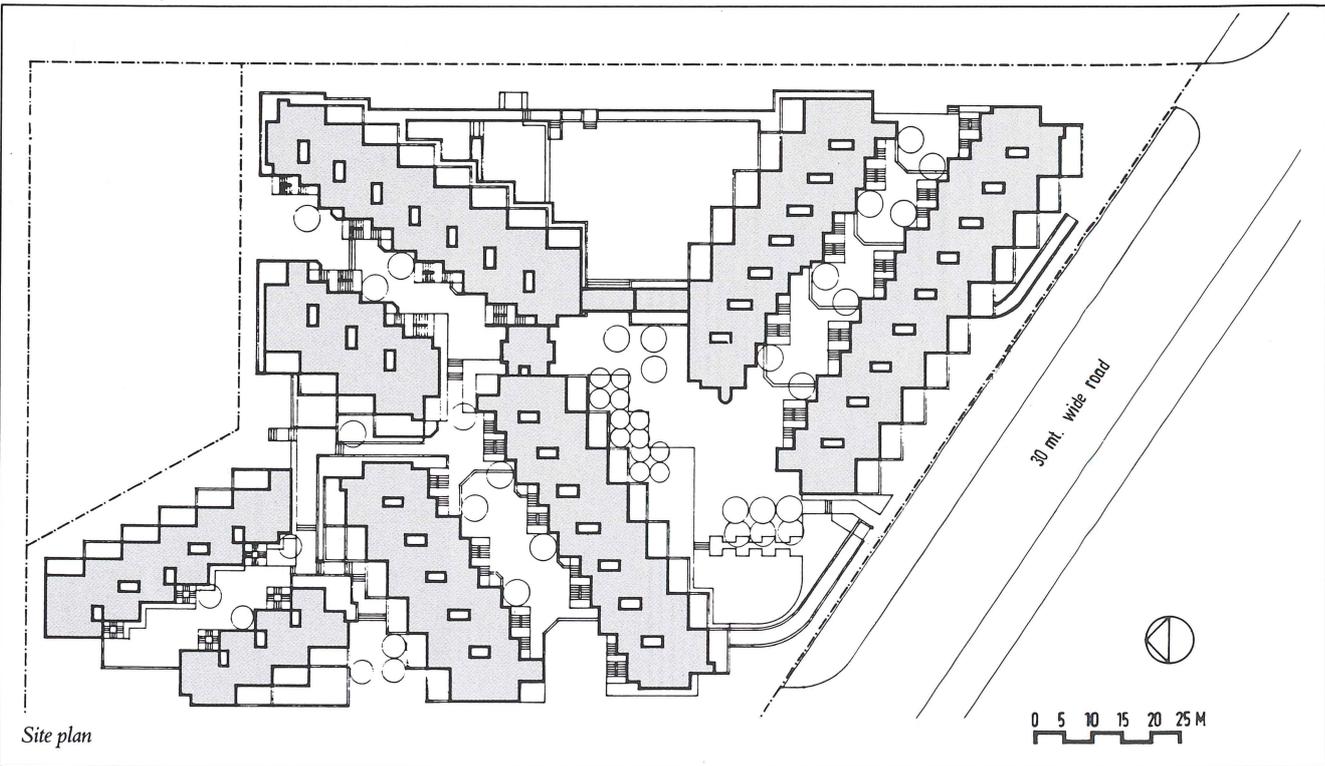
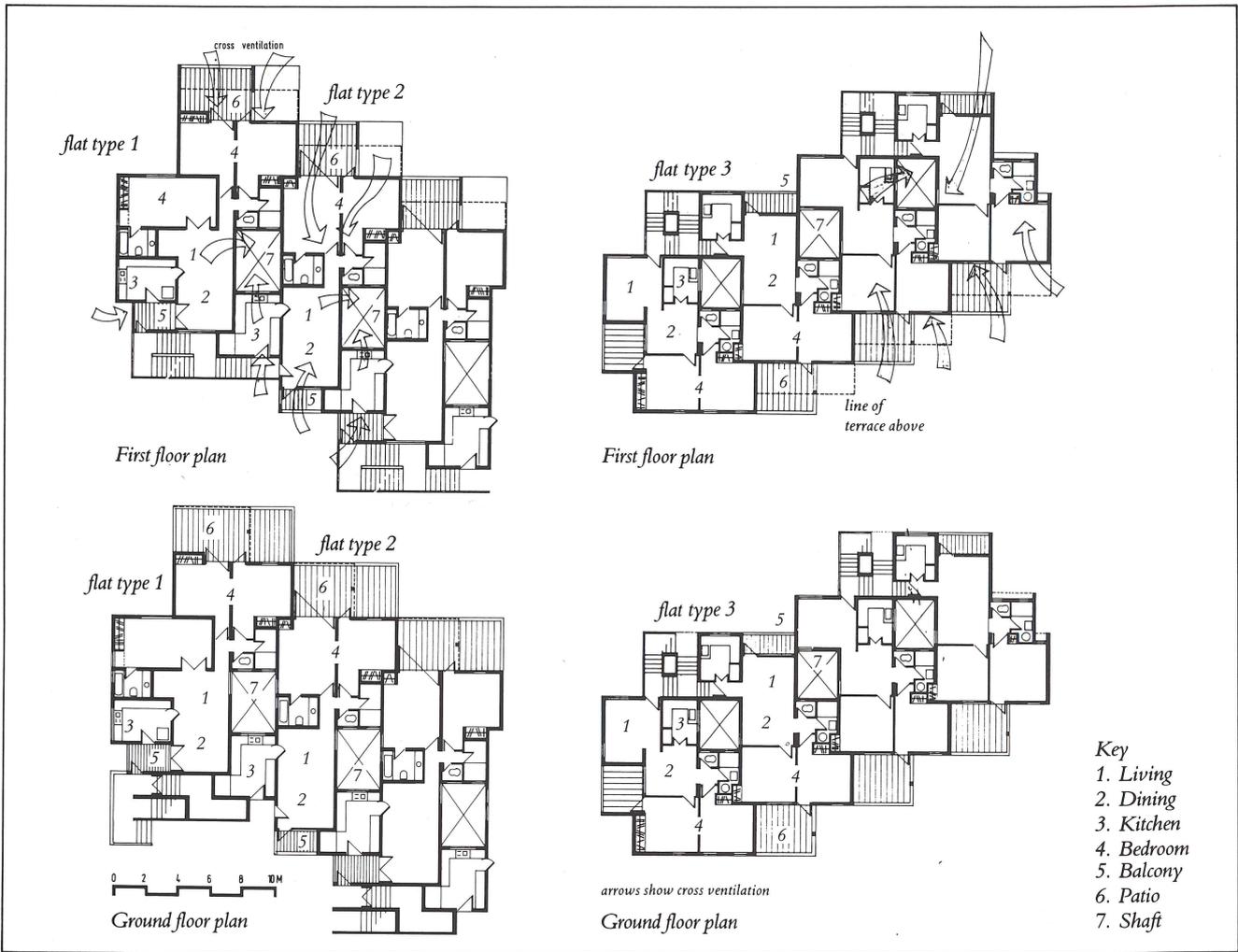
*Right, above: The external walls finished with stone aggregate along with reinforced concrete bands at terrace levels provide a refreshing contrast against the landscape. Photograph: Madan Mehta.*

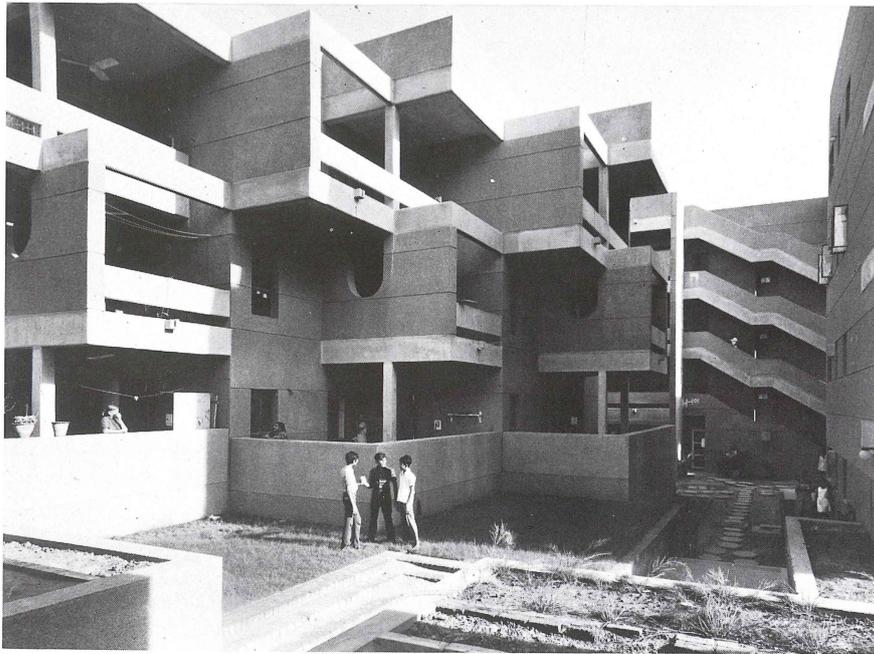
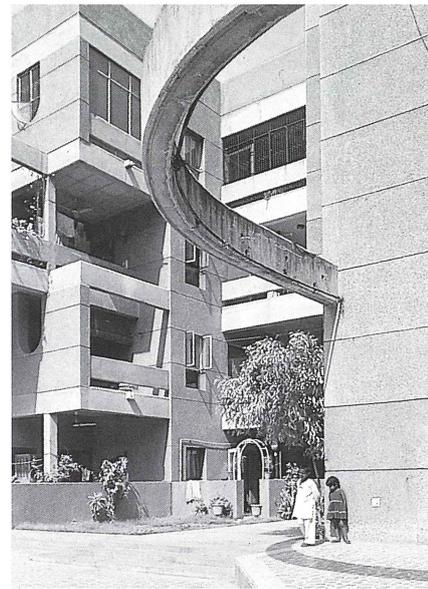
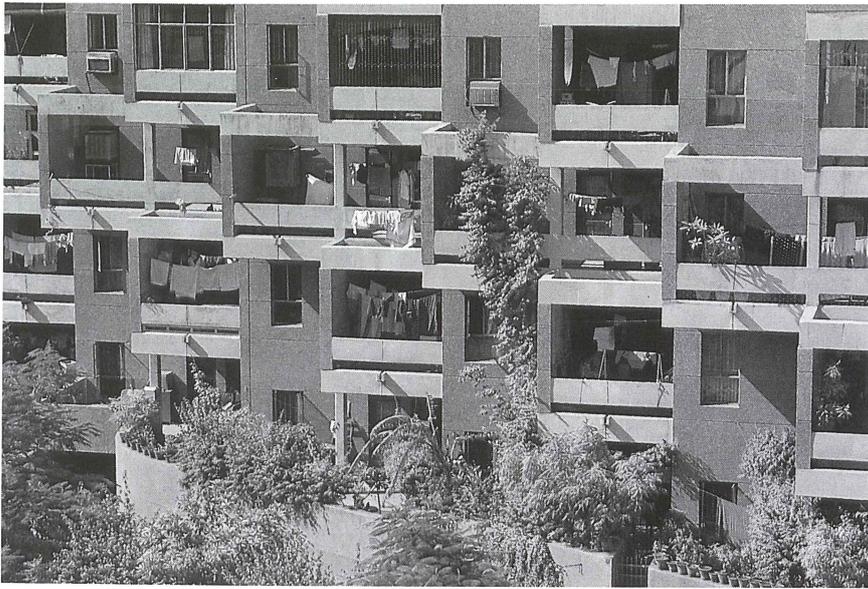
*Right: The change in the shape of the terrace — from square to rectangular — on alternate floors provides considerable variation to the facade and strong geometric frame work.*



Text by **Mridu Hans**.  
Photographs and plans  
courtesy of the architects  
unless otherwise indicated.







*Left and left, above: Each unit has a courtyard or terrace for outdoor activities — outdoor sleeping, drying balcony for laundry, etc. — which is partly open-to-the-sky.*

*Above: A view of the units grouped around the central square. The open air stage is in the foreground. Photograph: Harpreet Singh.*

creational facilities have been placed. The club is located at the first floor level forming a bridge across two housing blocks. Shops, canteens etc. are also close by.

The dwelling units comprise of three basic plan types of varying floor area, which are grouped together in a repetitive basis, to form individual housing blocks.

The access staircase leading to the unit takes off from the *gali*, thus maintaining a continuity and acting as a transitional space, between common public areas and private areas of each house. It has also enabled residents to converse with each other and maintain contact with the surroundings while they work.

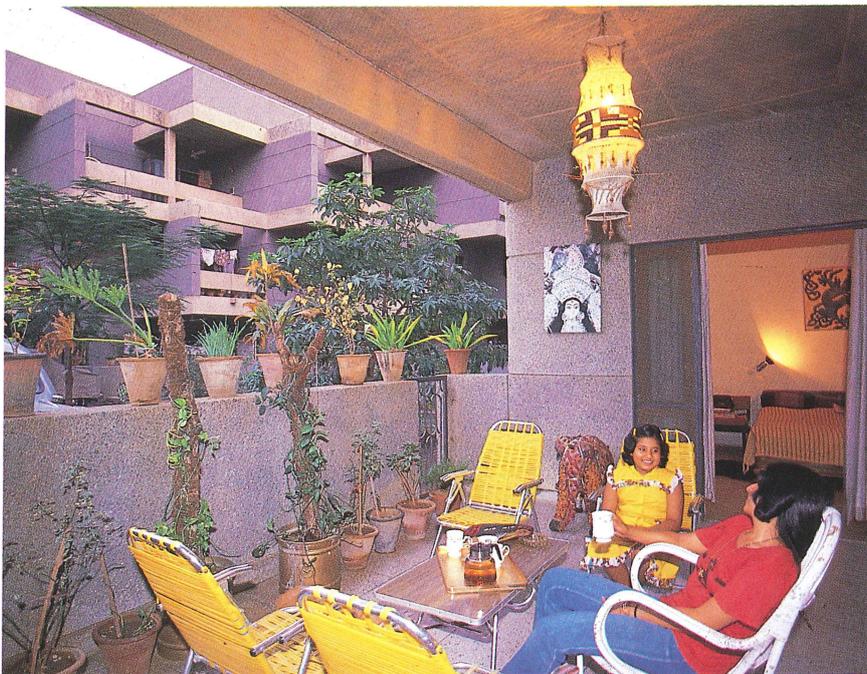
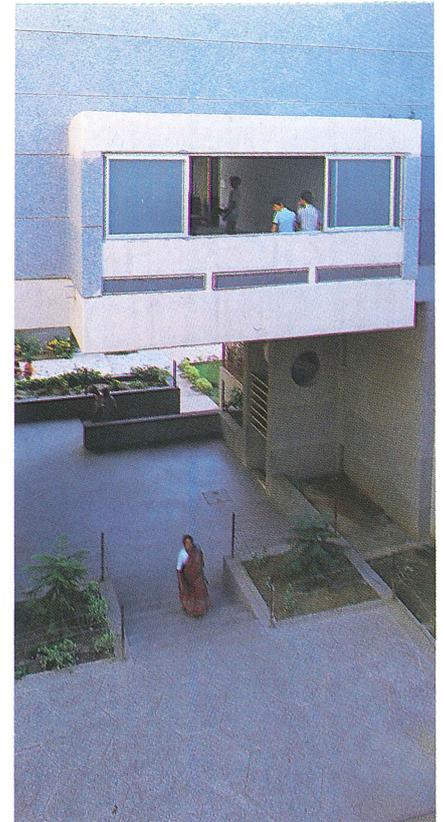
Unlike the West, Indian neighbour-

hoods are open and privacy is not given too much importance. Houses were designed overlooking each other's semi private areas. Thus, in addition to sharing experiences while the womenfolk performed the daily chores, it also enabled assistance in time of an urgency, as looking after the neighbour's child or aged parents. This is reflected in the unit plans where the semi private area or living room of each unit has been consciously designed towards the pedestrian spine to enable communal interaction and acknowledgement of one's neighbours. The living room has an attached balcony which overlooks the pedestrian spine. This enables the residents to share and exchange social contact at various levels,

thereby retaining the lively character of the *gali*.

The private area or the bedrooms are to the rear of the house opening onto a terrace for outdoor sleeping. According to the norms of this community, the kitchen is considered a holy place and is kept spotlessly clean, shoes too may not be taken inside. It is for this reason that it had to be kept away from all normal circulation routes within the house. The units have been designed with one/two bathrooms, depending on the floor area, where at least one bathroom has an independent access from the bedrooms and living area. Both, the bathroom and kitchen open onto the internal ventilation and light shaft, on which they are dependent for their light and ventilation. Though the shaft is an ideal means for maintaining adequate movement of fresh air, it poses certain problems in terms of its maintenance. With units grouped around it, it becomes "no man's land" and no single resident becomes responsible for its maintenance.

Delhi, being in north India, experiences a hot and dry summer, with temperatures soaring up to 45°C and cold winters at 3-4°C. Cooling devices as "desert coolers", which is a relatively inexpensive method of cooling, becomes a necessity.



Left, above: A living room in one of the units. The interior decoration has not been done by the architects.

Left: Units on the ground floor have a private courtyard which is partly covered. It forms an important space for outdoor activities — sitting out in summer evenings and on cold wintry days etc.

Above: The recreational facilities are grouped around the central square. The club is located on the first floor level forming a bridge across two housing blocks.

Photographs: Harpreet Singh.

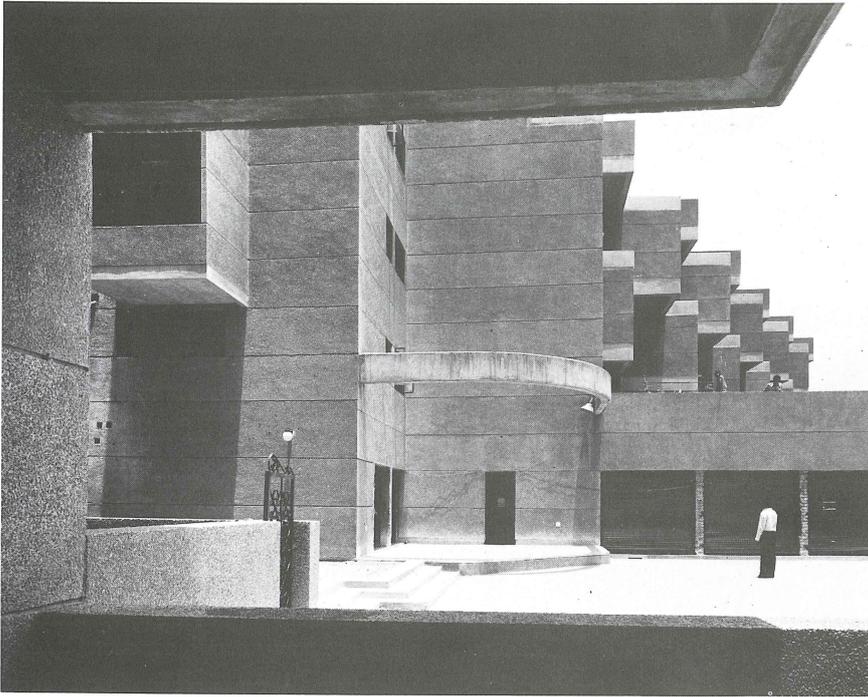
Due consideration has been given to the climatic conditions which is reflected in the unit plan. There is an integration of traditional design elements, as balconies for shading the external wall surface, courtyards and terraces for outdoor sleeping in summer, thus establishing a hierarchy of open and enclosed spaces, private and semi private areas. The unit plan has openings on two sides, thus enabling a fair amount of cross ventilation. In addition to this, an internal ventilation shaft has been provided with a space for fixing the “desert cooler”. Each unit is sheltered on the outside by either a balcony or terrace. The terrace provides space for

outdoor activities — it provides a space for outdoor sleeping in summer, serves the function of a drying balcony for laundry and a place to bask in the sun during the chilly winter days. It can be enclosed temporarily, (as has been done in many houses) to give protection from the penetrating summer sun by placing a *chic* (a bamboo curtain; alternatively a wool curtain can be used which is kept damp to cool the air). Part of the terrace is always open-to-sky which gives it an added openness. This has been achieved by changing the shape of the terrace from square to rectangular on alternate floors. The

architect has done away with the stereotyped elevation of terraces over terraces which result in monotonous facades and reduce the quantum of natural light in adjoining rooms. The elected framework provides considerable variation to the facade and a strong geometric framework.

The external walls are finished with a stone aggregate applied insitu. This requires practically no maintenance besides an occasional washing down with water to remove the dust.

It is now four years since the project was completed and the units occupied. The landscape has been established and the residents have made minor modifications to suit their convenience. The main objective of the architect to create an integrated community settlement has largely been fulfilled.

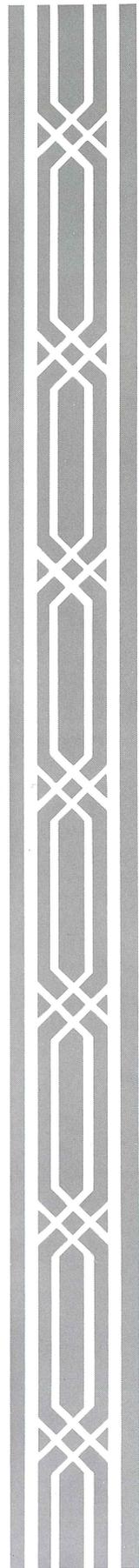


*Left: The open air stage forms a part of the recreational facilities grouped around the central square.*

*Left, below: A typical pedestrian street or gali leading to the central square with entrances to the units. Children can play in the gali undisturbed by vehicular traffic. The access staircase in each block form important design elements. They wind around a central wall panel, but at each half landing an independent flight peels off to lead directly to the entrance of the adjacent unit.*



*Mridu Hans is a graduate from Chandigarh College of Architecture, Chandigarh. She was previously with Raj Rewal Associates, New Delhi and is presently in Singapore.*



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**Additions**

I was immediately drawn to Raoul Snelder's article on the Mosque at Djene, since not only was it part of my PH.D Dissertation, but I have also dealt with a number of architectural aspects related to its style.

Your readers might perhaps be interested in pursuing the subject further, and so I enclose a set of some additional references. I think, for the benefit of the scholar, it would have been helpful if Mé Snelder had footnoted some of his own references. I for one, would have welcomed some indication of the source for the photograph transmitted by M. Hugot, so that I could pursue it further (p. 68).

Labelle Prussin

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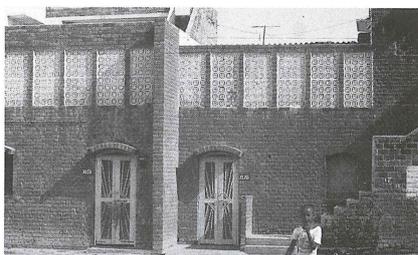
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**A student's viewpoint**

I am an ardent reader of MIMAR, the quality (layout, photographs, graphics, etc.) gives me a visual and mental satisfaction that cannot be expressed in words. I treasure each copy rather possessively!

Being a student of architecture, MIMAR is a source of comfort and inspiration to me. It is comforting to see feedback from all corners of the world... one cannot help but feel that we are not yet totally isolated by geographical, cultural or political bounds. It is educating to be exposed to the works of Third World architects and inspiring to see student projects in MIMAR.



As a Pakistani myself, intending to go back and practise in Pakistan one day, it has been a wonderful experience to be exposed to the works of Pakistani and Indian architects (being so far away I am otherwise cut off). The pieces on Yasmeen Lari and Charles Correa were enlightening and served to expose me to the fact that quality contemporary architecture is surfacing in the sub-

continent while Habib Fida Ali's work seems a clean, proven solution in a region striving for contemporary architectural identity.

I have, however, noted the dearth of feedback from students from India and Pakistan... can it be that they are not exposed to a treasure like MIMAR? I would also like to take this opportunity to ask the international student community to come together through MIMAR... Let us communicate and collectively work together towards a better architecture. Let us try to shed "styles" and attempt to "create" rather than "find" a meaningful architecture. An ambitious thought no doubt, but certainly worth an honest try! Let us write to each other and expose each other to information and "exposures" normally restricted to geographical and cultural "regions".

I would also, like to voice my support to the suggestion in MIMAR 7 to the introduction of student rates; the student economy is frail and MIMAR is too tempting to pass up!

Nasir Mahmud

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Thank you for your comments.

There is nothing better than getting students involved in dialogues about architecture. If you can suggest ways in which we can generate such involvement please let us know.

More students are reading MIMAR. We agree that the price is still high and take to heart the idea of student rates. In fact we are introducing a student discounted rate for subscriptions (US\$30.00 instead of US\$36.00) starting in 1985 in a number of countries — it is proving to be too difficult to administer for all places — keep an eye on the subscription form for details.

— Editors

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