

# **New Indian Homes**

An Architectural Renaissance

# New Indian Homes

An Architectural Renaissance

Sarbjit Bahga Surinder Bahga Yashinder Bahga

New Indian Homes: An Architectural Renaissance

Copyright © 1997, Sarbjit Bahga, Surinder Bahga and Yashinder Bahga

All rights reserved. No part of this work may be reproduced or used in any form by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems—without the prior written permission of the publisher.

The preparation and collection of the material included in this book has been made possible by the generous support from Saakaar Foundation, Chandigarh

ISBN No.: 81-85989-05-2

Project coordination: Pankaj Chhabra

Presentation drawings: Data Ram and Neeraj Khurana

Edited, designed and produced by Y.N. Arjuna for Align Publications Pvt Ltd

Published by Ashok Galgotia for Galgotia Publishing Company,

6 A/4, WEA, Karol Bagh, New Delhi-110 005

### Foreword

Building houses is the most civilising activity of man and it is through such endeavours that historians and archaeologists attempt to understand the very essence of culture. *New Indian Homes* is a document of our times which expresses the social and geo-climatic conditions of the subcontinent. Along with *Modern Architecture in India*, the first publication of the Bahgas, this volume covers a wide range of architecture and locales and represents the creations of an eclectic group of architects. Through the case studies a collective image takes shape in one's imagination.

Among the fifty-one homes presented, nine belong to the architects themselves. All of them symbolise a common search for a truth about India: What is the essence of Indian architecture? With the waning of the Mughal influence and the departure of the British, young architects had no well-defined model of architecture to guide them. The onslaught of the international style offered little inspiration or guidance. For over five decades Indian architects have struggled to understand what is truly their own. The burden of the mystique of India's past haunted them while an "angst" to be original, to "do new" gnawed at their hearts. Being both the oldest culture and the newest society on earth, all at once, was an overwhelming reality, difficult to confront. If there is any chaos in the collective image, it is due to this inherent tension.

Taken together, the efforts presented in this volume represent a form of fundamental research: What is the soul of modern India? What is so different about us that makes us yearn to be free? Afloat on our own, what do we have to say to the world which is both a profound contribution and is also ours and ours alone? While no 'single', comprehensive answer has emerged, generic elements have begun to unfold.

What is so important about this collection of creative energies? For one, the middle-class house, unlike any other building type, is most typical of the post-Independence era. Previous eras saw palaces, colonial bungalows, village houses, slum huts, and chawls reach their final form. But it was only in the 1960s that these little boxes began to sprout an Indian spirit. From mere functional buildings, or at best foreign clones,

they have become highly individualised statements about the aspirations and even achievements of their inhabitants. If the Nehruvian dream of the new industrial state was not questioned in the halls of the Parliament, then the rows of little houses and homes became India's Greek chorus, warning of, and applauding, deeper desires.

More than anything, these creations represent not only the hopes and ideals of their designers but also those of the elite from different walks of life who live in them. These structures are neither the prototypes for India's masses, nor the shelter solutions of the poor. Every era has its own elite who carry upon their shoulders the great burden of lyricism. It bears the onus to illustrate the unique poetry which is the ideal towards which a civilisation moves. Yes, we planners wanted to increase calorific intake and boost steel production. But to weave all of that effort into an ethereal goal worth all the suffering, some ideal image was required which would be as visible and diverse as Indian miniatures. Just as miniatures idealised the possibilities of existence to one era, the constructed microcosms of brick and cement herein represent a composite image of a paradise within our grasp. It is in this manner that the personal property of the few becomes the common possession of the many.

It is my hope that as new and younger architects take over the mantle from us, they will express creatively this greater vision of their apparently miniature efforts. These are not just the homes of individuals, these are the dreams of a civilisation.

Let us see in these works not only the self-conscious exhibits of individualists but also a celebration of what is mundane in our daily lives and whimsical in our natures. It is within the strains of these whims that a subtle poetry lies. And this poetry is a significant part of India's unique gift to the world.

Christopher Charles Benninger Architect and Founder-Director

Centre for Development Studies and Activities Poona, India

## Acknowledgements

We would like to thank all the architects who gave us access to their projects, although we regret to say we were unable to use all the materials.

We are indebted to Prof. Christopher C. Benninger, Dame Jane Drew, Dr. S.S. Bhatti, Achyut Kanvinde, Peter G.H. Dale and Dr. Parkash Syal for their guidance and encouragement in accomplishing this work. Particular thanks are due to Amar Rajinder Singh, R.S. Mann, S.S. Sohi and Late Prof. M.C. Bharadwaj for their valuable and timely comments.

We are grateful to Ms. Brinder Aulakh-Anand for editing our manuscript and offering her insightful suggestions.

We sincerely appreciate the help rendered by our friends, especially architect Manmohan Sharma, Sonika Verma, and Sukhvinder.

Our grateful thanks to architects Parveen Chopra and Archana Chaudhary for their unreserved support at every stage of the project.

Thanks are also due to R.S. Malik, Manohar and Gurpal for their fast and accurate typing and to Puran Bisht for his endless cups of hot tea.

We must record our thanks to our wives Gurdeep, Seema and sister Suminder and children Arshdeep, Supreet and Sanyam for their constant cooperation.

We are obliged to Ashok Galgotia of Galgotia Publishing Company and Y.N. Arjuna of Align Publications Pvt Ltd for translating our idea into reality.

Authors

### Photographic Credits

Photographs are courtesy concerned architects except the following:

D.P. Rayat, pp. 8, 52, 76, 96, 118 Parveen Chopra, pp. 85, 145 Sarbjit Bahga, pp. 47, 51, 65, 69, 75 Yashinder Bahga, pp. 21, 41, 63, 93, 117 Suresh Sharma, pp. 29, 31 Uttam Chand, pp. 35

## Introduction

Since times immemorial man has always needed shelter for protection against inclement weather and security in a hostile environment. Using his ingenuity and resources, he has fulfilled his needs, provided himself with comfort, rest, privacy, relaxation, freedom of action and facilitated social interaction among family members. A shelter or house is thus a physical manifestation of the life-styles of people, their skills and technological achievements and sensitivity to builtforms. In the contemporary context it expresses the creativity of the architect and the emergence of a new coherent architectural style. Domestic architecture as compared to other types of architecture incorporates more intelligently and clearly the aspirations of people, their social needs and ways of life. Crucially, it reflects the development of trends in house design.

New Indian Homes is a well illustrated document of changing trends in architectural tune. It is not only a reflection of contemporary Indian architecture but also a source of reference material for architecture historians. Moreover, it fulfils the needs of architects and other professionals engaged in house construction activity along with those general readers who wish to keep themselves informed of what is happening in the field of creative design. For instance, before getting their houses designed, prospective house owners, particularly the urban elite, would find in this publication interesting material on the latest trends in domestic architecture.

In order to give shape to their abstract ideas or have access to a wider range of house designs and building materials available, they are always in search of relevant information, be it in books, popular magazines or professional journals on architecture and house design. Unfortunately very little material which can be productively used is available. However, what is available has relevance mainly in the foreign context and contains information regarding unbuilt houses which is irrelevant to our climatic and social conditions. This material is very often in the form of magazines or architecture digests containing glossy pictures of the interiors of lavishly furnished houses. However, the lack of explanatory drawings or photographs of the external aspect of the built-forms makes these glossy visuals serve no purpose. In India a few journals of architecture and design have tried to fill this lacuna but the result is not satisfactory because the material is scattered and it is difficult for a general reader to have access to it or collect it. Consequently, there was a need for book containing a representative range of house designs.

New Indian Homes discusses fifty-one architect-designed built-up houses selected from different parts of India. They display the diversity of needs, tastes and building materials in the context of different weather conditions and social trends. Different architectural appearances or external expressions have determined the classification of the houses into five sections. This grouping keeps the reader's growing interest in the external aspect of a residential structure. The emphasis is on the built-form rather than on the interior and its decor.

Each house is accompanied by an explanatory text and supplemented by appropriate drawings and photographs to present a comprehensive picture of India's many-splendoured domestic architecture.

All the drawings have been uniformly redone from architects' blueprints. The plans delineate the aspect of the house circulation patterns, the distinctive shape and character of each room, its location in the house and its relationship with the surrounding open space. The three-dimensional aspect of the built-form is exemplified by a typical section of each house. A legend indicating position of rooms is attached to each plan. The external expression of the houses which displays a wide range of house-designs and an interesting variety of construction materials is highlighted through photographs which focus only on essential visual information.

The houses selected to illustrate this book are not the sole representatives of prevailing trends in residential architecture in the country, nor are they claimed to be the best examples. Moreover, due to restrictions of space, a large number of innovative houses could not be included in this book. We do hope, however, that those shown in this book illustrate well the rationale and aesthetic vision of the different approaches to house-design. Each house has its own central theme and distinct individuality which have been underlined in the text as well as in the captions.

We feel that ideas are meant to be shared, adopted or adapted according to individual needs and aesthetic concepts. In this context, it is hoped that prospective house owners, architects and other professionals involved in building houses will find this book useful not only as an index of architectural styles and construction materials but also as a point of departure for evolving a built-form which is illustrated by structural fluidity and harmony.

# Architects Represented

Achyut Kanvinde, New Delhi

Anant Raje, Ahmedabad

Ashok Desai, Surat

B.S. Bhooshan, Mysore

Biswajit Sengupta, Sen and Lal Consultants, Patna

C.S. Menon, Enarc Consultants, Trichur

Dalbir Singh, Amritsar

Lakhbir Singh and Harish Saini, Designers Consortium Pvt Ltd, Chandigarh

Dhansukh Bhatt, Ahmedabad

Dulal Mukherjee, Calcutta

Gurdev Group of Architects, Chandigarh

H.S. Kohli, Architects Atelier, Chandigarh

Hasmukh C. Patel, Ahmedabad

Iqbal Chaney, Pune

Jaffer A.A. Khan, Bangalore

Kishore Trivedi, Rajkot

Kulbhushan Jain and Minakshi Jain, Ahmedabad

Manmohan Sharma, New Delhi

Naveen Vij, New Delhi

Rumy Shroff, Bombay

S.D. Sharma, Chandigarh

S.S. Bhatti, Chandigarh

Saakaar Foundation, Chandigarh

Sandeep and Kirsty Chakravarty, Dehradun

Sanjeev Mokashi, Bangalore

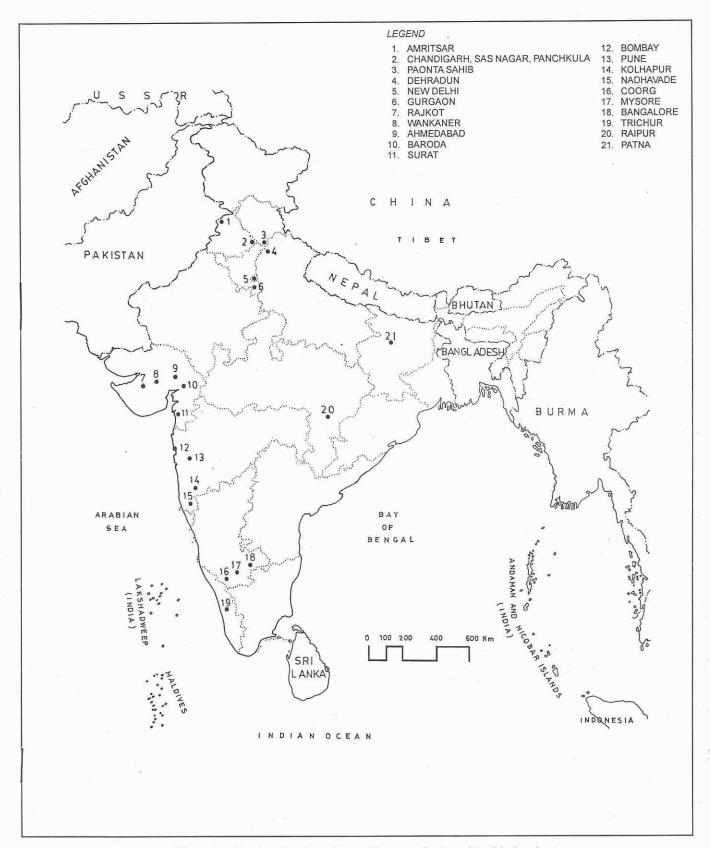
Satnam Namita and Associates, Chandigarh

Shirgaonkar and Associates, Baroda

Shirish Beri, Kolhapur

Thimmaiah and Prabhakar, Bangalore

## Home Sites



### Contents

Foreword	V		
Introduction	vii		
Architects Rep	resented	viii	
Home Sites	ix		
The Metamo	orphosis	of the Ind	ian House 1

TA #			-	o 1
1//11	cina	c in	1 Kr	ICZ
MIG	sing	$\sigma$ III	ועו.	ICV

19

- Cartesian Craftsmanship 20
   The Khannas' House, Gurgaon, Haryana
   Architects: Naveen Vij and Manmohan Sharma, New Defhi
- 2. Geometry in Brick 24
  Architect's own House, Panchkula, Haryana
  Architect: Harish Saini, Designers Consortium, Chandigarh
- 3. Expressive Signature 26
  House for Hasenibhai Barodawala, Baroda, Gujarat
  Architect: Hasmukh C. Patel, Ahmedabad
- 4. Designer Dreams 28
  Architect's own House, Panchkula, Haryana
  Architect: S.D. Sharma, Chandigarh
- Patterned Perspectives 30
   House for Gurkirpal Singh, SAS Nagar, Punjab Architect: S.D. Sharma, Chandigarh
- Traditional Ambience 32
   House for Mridulaben Patel, Baroda, Gujarat Architects: Shirgaonkar and Associates, Baroda
- 7. Elegant Discretion 34

  House for Surjit Kaur Takhar, Chandigarh

  Architect: S.S. Bhatti, Chandigarh
- 8. Balanced Beauty 36
  Architect's own House, New Delhi
  Architect: Achyut Kanvinde, New Delhi
- 9. Bold Splendour 40
  House for A.S. Chauhan, Paonta Sahib, Himachal Pradesh
  Architects: Saakaar Foundation, Chandigarh
- 10. Regal Elegance 42
  The Joshis' House, Ahmedabad, Gujarat
  Architect: Anant Raje, Ahmedabad
- 11. Tones in Brick 44

  House for Kamal Mohan Singh, Chandigarh

  Architects: Designers Consortium Pvt Ltd, Chandigarh
- 12. Octagonal Majesty

  House for Jugal Arora, Amritsar, Punjab

  Architect: Dalbir Singh, Amritsar
- 13. Brick by Brick 48

  House for S.R. Das, Panchkula, Haryana

  Architects: Satnam Namita and Associates, Chandigarh
- 14. A Simple Poem 50

  House for S.S. Sahota, Chandigarh

  Architects: Saakaar Foundation, Chandigarh

## Poetry of Stone

53

- A Turreted Dream in Stone 54
   House for Savita and Satish Gopi, Pune, Maharashtra Architect: Shirish Beri, Kolhapur
- Sprawling Grandeur 56
   The Aggarwals' House, Ahmedabad, Gujarat Architects: Kulbhushan Jain and Minakshi Jain, Ahmedabad
- Cloistered Quiet 58
   House for Hira Chand Jain, Ahmedabad, Gujarat Architects: Kulbhushan Jain and Minakshi Jain, Ahmedabad
- 18. Stone Symphony 62
  House for R.P. Pathak, Panchkula, Haryana
  Architects: Gurdev Group of Architects, Chandigarh
- 19. Exquisite Restoration 64
  House for Badri Nath, Amritsar, Punjab
  Architect: Dalbir Singh, Amritsar
- 20. Textures in White 66

  House for H.S. Ahluwalia, Chandigarh

  Architects: Designers Consortium Pvt Ltd, Chandigarh
- 21. Space Continuum 68

  House for Karnail Singh, SAS Nagar, Punjab

  Architects: Saakaar Foundation, Chandigarh
- 22. Contextual Creativity 70

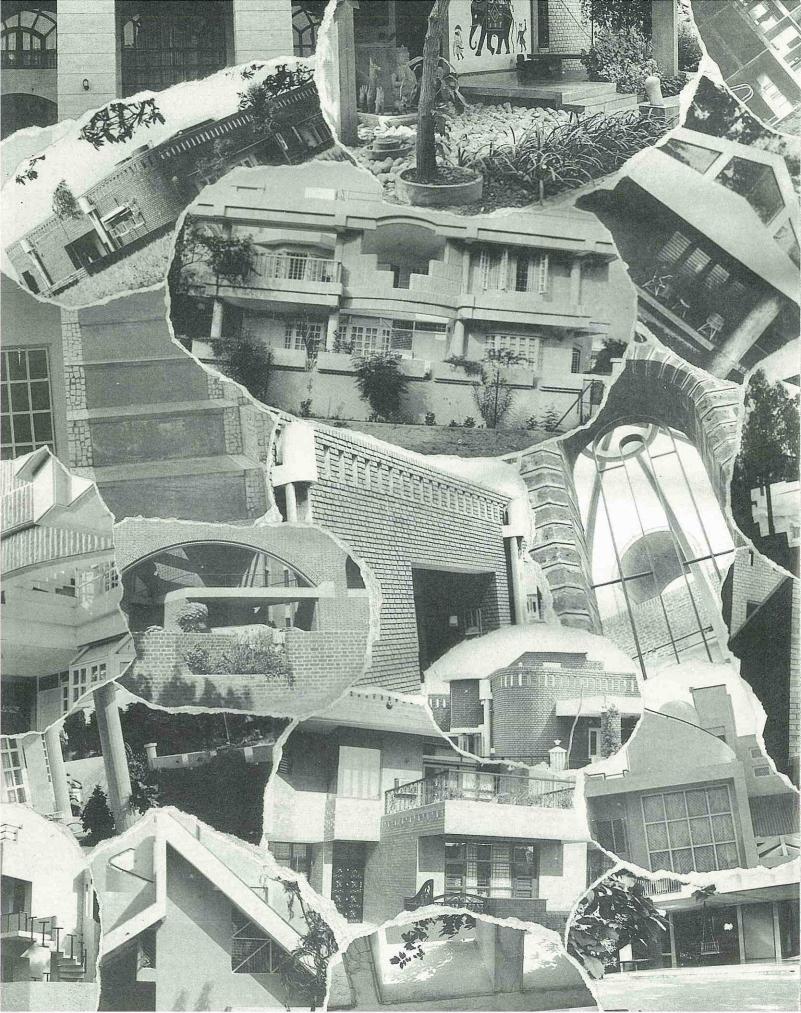
  House for Ashwinbhai Doshi, Wankaner, Gujarat

  Architect: Kishore Trivedi, Rajkot
- 23. A Geometrical Sculpture 74

  House for Paramjit Singh Anand, Amritsar, Punjab

  Architect: Dalbir Singh, Amritsar

Re	flections in Stucco 77	Drama of Slopes 119
24.	Sculptured Stateliness 78  House for Amubhai Malvi, Rajkot, Gujarat  Architect: Kishore Trivedi, Rajkot	40. Rural Ambience 120  House for Nandita and Pravin Ghatge, Kolhapur, Maharashtra
25.	Square Cubes 82 Architect's own House, Rajkot, Gujarat Architect: Kishore Trivedi, Rajkot	Architect: Shirish Beri, Kolhapur  41. Tiled Aesthetics 124  House for K. Ramachandran, Trichur, Kerala
26.	White Shadows 84 House for Ajay Sandeep, Panchkula, Haryana	Architect: C.S. Menon, Enarc Consultants, Trichur 42. Royal Space 126
27.	Architects: Saakaar Foundation, Chandigarh Kahnian Vocabulary 86	House for P.S. Bajwa, Chandigarh  Architects: Designers Consortium Pvt Ltd, Chandigarh
28.	House for Kannubhai Patel, Ahmedabad, Gujarat  Architect: Anant Raje, Ahmedabad  An Architect's Den 88	43. Cascading Silhouettes 128  The Jatwanis' House, Surat, Gujarat  Architect: Ashok Desai, Surat
20.	Architect's own House, Pune, Maharashtra Architect: Iqbal Chaney, Pune	44. Geometric Insights 130 The Javads' House, Bangalore, Karnataka
29.	Colonial Expression 90 House for R.K. Bhaduri, Raipur, Madhya Pradesh Architect: Dulal Mukherjee, Calcutta	45. Of Architecture and Antiques House for L.K. Kataruka, Patna, Bihar
30.	Double Delight 92 Houses for C.P. Dawar and A.K. Joshi, Gurgaon, Haryana	Architect: Biswajit Sengupta, Sen and Lal Consultants, Patna 46. Patterns of Light 134
31.	Architect: Manmohan Sharma, New Delhi Stepped Elegance 94 House for Jagan Nath, Mysore, Karnataka	The Hanumanthus' House, Mysore, Karnataka  Architect: B.S. Bhooshan, Mysore  47. Opulent Space 136
חרון.	Architect: B.S. Bhooshan, Mysore	The Gurus' House, Mysore, Karnataka  Architect: B.S. Bhooshan, Mysore
	ne Mystique of Nature 97	48. Flights of Fancy 140  House for Sanjay S. Sandhu, Dehradun, Uttar Pradesh
32.	Rural Retreat 98 Architect's own House, Nadhavade, Maharashtra Architect: Shirish Beri, Kolhapur	Designers: Sandeep and Kirsty Chakravarty, Dehradun 49. Brooding Bird 142 House for R.S. Sharma, Dehradun, Uttar Pradesh
33.	Stillness Set in the Garden 100 Architect's own House, Ahmedabad, Gujarat	Designers: Sandeep and Kirsty Chakravarty, Dehradun 50. Fabulous Forms 144
34.	Woodland Retreat 102 House for P.B. Vittal, Coorg, Karnataka	House for S.D. Chakravarty, Dehradun, Uttar Pradesh  Designers: Sandeep and Kirsty Chakravarty, Dehradun  51. A Sculpture to Live in 146
35.	Architects: Thimmaiah and Prabhakar, Bangalore Of Vistas and Views 104 House for Reliance Industries Ltd, Surat, Gujarat Architect: Rumy Shroff, Bombay	House for R.C. Sampat, Bangalore, Karnataka Architect: Sanjeev Mokashi, Bangalore
36.	Traditional Tones 106 The Shettys' House, Bangalore, Karnataka	
37.	Architect: Rumy Shroff, Bombay Sprawling Spaces 108	
0.0	The Shroffs' House, Bombay, Maharashtra  Architect: Rumy Shroff, Bombay	Notes 149
38.	Architect's own House, Mysore, Karnataka	Glossary 149
39.	Architect: B.S. Bhoc han, Mysore Manmade Harmony 116	Select Bibliography 150
	Architect's own House, Chandigarh  Architect: H.S. Kohli, Architects Atelier, Chandigarh	Index 151



# The Metamorphosis of the Indian House

The procession of the Indian house has been like a ballad or a folk song, the lines, texture, fibre, tenor, timbre and the rhythm of which have been metamorphosed at the hands of the succession of generations. Though the basic theme of this ballad "shelter" remains inevitably intact, yet its contours, shades, nuances and flavour have undergone changes due to turns and twists of life and its styles.

Today's house is much more than the four walls and a roof which, conceptually, it once was. It is the centre of family life and provides space and context for a whole range of family activities which include domestic chores, rest, recreation, family interaction, entertaining and socialising. Contemporary architecture facilitates pleasant, comfortable and organised family life. The present-day house makes easy such activities as preparation and serving of meals, washing dishes, laundering, cleaning and garbage disposal. Domestic space generally has three distinct activity areas: (i) Social or public areas, (ii) space for privacy or rest, and (iii) service or work areas. The juxtaposition of these areas ensures clear traffic lanes from one activity zone to the other. Apart from the internal functional efficiency, modern houses reflect the changing character of the Indian society from a highly introvert to an extrovert aspect. The availability of new materials and their imaginative use have dramatically changed the external expression of the Indian house.

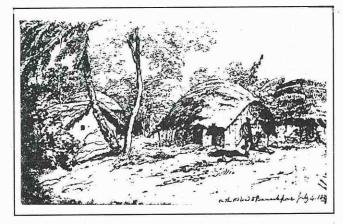
There is no denying the fact that the design of modern dwellings has undergone a complete metamorphosis from its older forms. To trace the structural developments of domestic architecture is a complex task which demands painstaking research. However, an understanding of the recent developments will prove fruitful. Starting with the Bengali prototype, the house-form underwent a complete change to emerge as the Anglo-Indian bungalow which later evolved into its modern form.

#### THE BENGALI CONNECTION

The contemporary villa or a bungalow is a house which is set apart from adjacent constructions. The word 'bungalow' itself traces its origin to India. The present house-form is the product of a long process of adoption and adaptation of the traditional domestic structure known as *bangla* in Bengali. The term *bangla* is used to describe the simple hut of the Bengali peasant. During the three odd centuries of British rule in India

the bungalow became the official architectural signature. These typical, detached, suburban dwellings were built either in the cantonments or elsewhere and served the dual purpose of residence and a workplace.

The typical Bengali peasant hut (bangla) had a sloping thatch roof with two gable ends. The average low-income Bengali peasant lived with his livestock in the same hut. The more wealthy farmer had several such huts identically designed. Generally, the hut walls were made of mud but wherever good quality soil was not available, straw, grass or split bamboo were used. For more sturdy huts, mats were used instead of straw or cow-dung plastered straw. Alternatively, clay was used. The poor peasant used bamboo frames, whereas the more affluent farmer used unpainted wooden posts and beams without nails. A timber beam was laid across mud walls to which rafters were attached. Thatch was used as roofing material which extended a little beyond the walls and protected them. The only opening in the hut was a door which could be shut by a handle. Windows were a rare fixture. Privacy was ensured by keeping the openings at a higher level. Chimneys were unheard of as food was generally cooked outside the hut. The external wall surfaces were untreated so that cow-dung cakes could be dried on them for fuel. Internal wall surfaces as well as flooring were plastered with cow-dung. Wall niches were provided for oil lamps.



Indigenous "bangla" (India Office Library)

#### THE COLONIAL INFLUENCE

Based on the prototype of the Bengali hut, the British developed a new type of domestic structure by the end of the eighteenth century. Its well-delineated features distinguished it from the city house. The Anglo-Indian bungalow, as it was termed, was a free-standing, single-storeyed structure with raised plinth, sun-dried bricks and mud-plastered walls, with a sloping thatched roof and an encircling verandah. Easy availability of local masons, construction labour and building materials not only facilitated the construction of this type of house but also ensured low construction costs.

In spite of major modifications and alterations, the bungalow maintained a striking visual similarity with the Bengali hut. This was due to the fact that local masons and labour experienced in the construction of small houses and huts helped build bungalows too.





Colonial Influence on Indigenous Dwelling (Grant: Anglo-Indian Domestic Life, 1849)

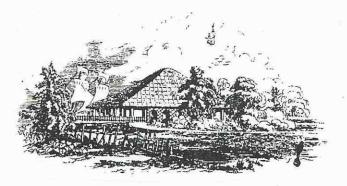
City houses, on the other hand, were densely clustered and reflected the socio-economic bonds and trends of the Indian society. The inner courtyard was used mostly by women in strict *purdah* who rarely went out. It was the only place where they could breathe in fresh air. The outer walls had hardly any windows and the few which were installed ensured complete privacy. The residents of the *mohalla* or neighbourhood were usually of the same caste and professed the same religion.

As the British residents of the bungalows had no social interaction with the local people, their bungalows were set in well-demarcated, large-sized compounds usually away from other settlements. They preferred this form of habitation because it ensured privacy and helped maintain their distinct cultural identity as well as authority and dignity as colonial rulers. The area inside the compound was used for a variety of social, cultural or political functions. The bungalow design in its three-dimensional form was completely different from the three- or four-storeyed residential structures in the city. In city houses, all the rooms were oriented inwards to a central courtyard

which provided light and ventilation. The typical bungalow, on the other hand, was generally a single-storeyed structure with an outer *verandah* extending into the lawns. The verandah, a typical feature of tropical architecture, was probably brought by the Portuguese to Asia in the fifteenth century. It was used for sleeping outside in summers or to provide accommodation for domestic servants.

As the British became increasingly conversant with the local climatic conditions, they evolved ways and means to find relief from the scorching summer heat. Tiles were used over thatched roofs and to keep out the heat and the glare, chicks, a type of roll-up blinds made of thin strips of split bamboos, were fixed to the lintel openings and rolled out when required. Another device fixed at ceiling height of the verandah was a heavy wooden screen which could be raised or lowered with the help of a wooden pole. Water-cooled khus screens hung across doors and windows, cooled the hot wind entering the house. The British also used the punkhah, a heavy cloth fan, which was in vogue during the Mughal period, to provide further relief from the oppressive summer heat. It was fixed to the ceiling and operated by pulling a rope to ensure circulation of air. Since manpower was needed to pull the fan, only the affluent few could afford it.

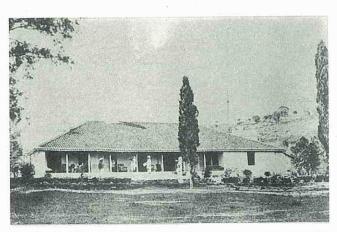




According to Grant, Europeans Partitioned Corners of Verandah for Bathing or Sleeping

By the end of the eighteenth century, the concept and design of the Anglo-Indian bungalow had sufficiently matured and crystallised. The changing needs of its foreign occupants modified the internal plan of the bungalow incorporating more refined functions and the latest trends in architecture. The external appearance, however, retained the Bengali "bangla" look. The new bungalows were used for a variety of activities. Locations shifted from suburban to more far-flung, remote areas on new sites and in new settings. In its revised version, the bungalow was

used mainly as an exclusive guest house, as hotels were uncommon in India during that period, and also as a summer vacation house in the hills or an exclusive storage depot. The early nineteenth century was witness to a proliferation of such houses wherever the colonial rulers lived in India. They became the symbol of British presence in the country. To make the British officers feel "at home" during their inspection tours, a chain of "dak" and "inspection bungalows" was built throughout the country. Courier boys delivered mail (dak) at the dak bungalow where it was sorted out. Besides acting as post offices, the dak bungalows offered European style facilities for boarding and lodging. As a result, British officers preferred to stay there rather than in Indian dharmashalas. As the British Government further expanded its activities 'forest' and 'canal' or 'irrigation' bungalows came into existence. Architectural changes redefined the roof shape from slanting thatched or tiled roof to a flat one with a lowheight verandah all around the house. These innovative details were introduced by the British engineers who were responsible for construction of official and residential buildings. However, there were no concrete changes in the sanitation as there was no water-borne sewage system during that period. The bathrooms were situated towards external walls through which piped water was made available. Local caste considerations demanded discreet and independent entry for sweepers to clean the toilets and bathrooms.



The Typical Commissioner's Bungalow of Later 19th Century (Photo: Samuel Bourne)

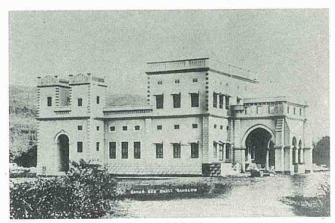
With the emergence of a distinct Anglo-Indian society, the Indians completely adapted themselves to the blueprint of the typical bungalow. However, there was an uneasy relationship between the special functions of the bungalow's orientation towards a western lifestyle and the Indian tradition. For example, Indians had their meals sitting on the floor in the kitchen or in the furnitureless dining-room, unlike the Britishers who sat at the dining-tables to have their meals.

By the beginning of the present century, educated Indians had started abandoning their traditional lifestyle and had begun to furnish their houses in a newlyacquired taste for a western way of life. In the metropolises, besides the use of typically western furniture, for example, dining tables and chairs, sideboards and other European objects of daily use, space was re-arranged and re-defined according to the changed needs. The local nobility and the affluent class had already adopted European fashions in furnishings. In consonance with a growing sense of individualism, people had boundary walls built around their houses.



PWD Type Bungalow, 1860s. (India Office Library)

The early twentieth century witnessed rapid urbanisation and an increase in the number of government jobs available, and establishment of a variety of educational institutions. In the changing socio-economic context, the media celebrated European culture and life-style as a sophisticated and desirable experience. This resulted in marked changes in domestic architecture and interior decor.



Detached Bungalow of Late 18th Century (India Office Library)

In an endeavour to orient this change, the wellknown industrialist Jamshedji Naoroji Tata constructed about one hundred residential units on the outskirts of Bombay. These European style single-storeyed houses were designed by a British architect and offered concrete evidence of urban Indian society's conscious departure from a conservative way of life to a more modern one.

Besides Bombay, the twenties brought in significant cultural changes in other metropolitan cities like Calcutta, Madras, Bangalore and Delhi. In 1912, the capital of India was shifted from Calcutta to New Delhi. A complex of government buildings was needed. The design of the new city was heavily influenced by the British values and assumptions about architecture. The new residential development in the so-called Civil Lines area was dramatically different from the old walledcity with its meandering network of streets and dense structures. It was a well-planned, spread-out area with wide metalled roads. Luxurious bungalows were built on plots varying in sizes from one to five acres. This new house-design and architectural orientation changed the character of the bungalow from a mere residential unit to a status symbol reflecting the interests and values of the leisured and powerful class.

#### BEFORE INDEPENDENCE

By the 1920s, the low density Civil Lines areas could not provide sufficient accommodation for the increasing number of government officers as well as the growing population. The urban elite was not inclined to live in the walled city and wanted spacious houses. Also, British architects had realised that if their work was to be relevant and creative in the Indian context it would have to mirror the divergent life styles of the Indian people. They made a conscious effort to harmonise their designs with local perceptions, modes of expression and cultural dynamics. This adaptability and openmindedness resulted in creative architectural trends.

Low and middle-income housing in New Delhi offers concrete evidence of this endeavour. The Gole Market low-income housing complex and the middle-income housing complex on Ferozshah Road both designed by Henry Nicholls during the twenties reveal the British concern for an architecture rooted in local needs and aspirations and nurtured by it. Peter Serenyi,

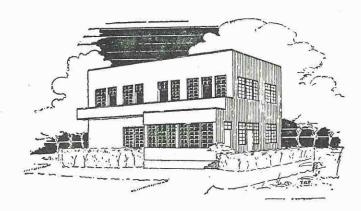


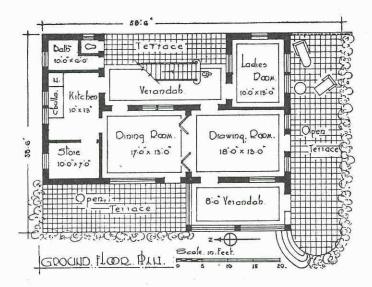
Sujan Singh Park Housing, New Delhi Architect: Walter S. George (1942)

an American architecture historian, has remarked that both these housing complexes "share certain essential characteristics: they follow a classical U-shaped plan and they respond effectively to climatic conditions. The latter is best exemplified by the use of verandars in the front and walled-in courtyards at the back, and by good cross-ventilation and high ceilings in the interior." Another such example is the Sujan Singh Park housing complex designed by Walter Sykes George. Built in the early forties, the complex encompasses a large community space reflecting local socio-cultural needs.

Technological developments in building materials and accessories brought in pre-cast and pre-fabricated metal components like staircases, hand-rails, grills and frames, which had a far-reaching impact on external and internal house design. For instance, the ceiling height of Indian houses was considerably reduced with the introduction of electric fans. Reinforced concrete emerged as a popular, convenient and sturdy building material and gave further impetus to this rapid change in expression. British modernists like Robert Cable strongly advocated its use in construction of buildings. Cable, who worked in India in 20s, predicted that concrete was the building material of the future. He described it as, "a material that defies all the accepted canons of architecture and which is going to upset all the traditional forms which have grown out of the expression of construction, a material, moreover, the universal use of which will tend to produce throughout the world one, more or less, universal and international style of architecture."2

In India, R.S. Deshpande, an engineer, wrote a series of well-illustrated books on house-design with detailed guidelines for the layman to plan and build his own home. The first few editions of this series published in the early forties presented designs of traditional bungalows. However, after a trip abroad in 1936, Deshpande completely changed his concept and philosophy of house-design. In the editions which followed, the model house reflected his changed perceptions and clearly expressed the influence of the international style. He was convinced that "it was not a revolution which was sweeping over the western countries, but a natural, inevitable evolution."3 Working well within the conceptual framework of the modern movement, Deshpande emphasised that, "the 'esprit moderne' consists of functionalism and simplicity and devising new methods of construction to suit new materials .... To copy productions of historical periods is not to maintain traditions of those periods at all. They were suitable for those times only."4 Deshpande insisted that "architecture must be in harmony and synchronise with modern life-styles and reflect the changing trends that have taken place in our food, dress, habits and social customs; so many new discoveries and new inventions have been made such as the railway, the telegraph, the telephone, the television, the gramophone, the radio, electric



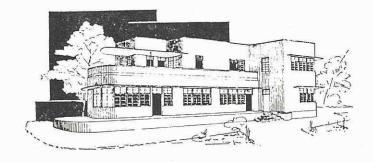


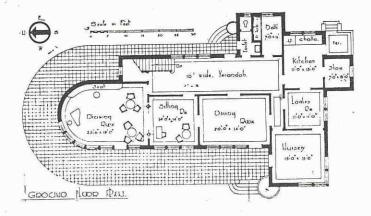
Model House Design (Modern Ideal Homes for India, 1939)

appliances, aeroplanes and air-conditioning that our entire outlook on life has undergone a metamorphosis."5 In his opinion, "modern architecture seems to transcend not only the limitations of time and space but also of national traditions and bias. It is not the property or patent of any particular body or of any one nation, but a universal art offering boundless scope for development."6

Deshpande felt that the aesthetics of the international style was more suited to the Indian context. First, it was in harmony with the Indian philosophical ideal, that is, to say 'plain living and high thinking'. Second, in a land of intense sunshine smooth elegant lines expressed best, its bold, clearcut, sparse architectural features, in a patterned play of light and shade. He was an ardent proponent of western furniture. He argued that dining on tables is definitely more comfortable than sitting on floors and having meals. He preferred built-in cupboards and advocated the use of new materials, e.g. the use of bakelite and glass for table surfaces, "teapoys", shelves and window sills among other things. He recommended furniture with the framework of stainless steel tubes or chromium-plated ordinary steel because it was lightweight, looked elegant, was rust proof and could be easily cleaned and handled. Deshpande's influence was felt in every aspect of architecture and interior design. He played a major role in revolutionising the layout of kitchens. He opposed the traditional method of cooking while sitting as prejudicial to health and recommended strongly that standing was less stressful as it simplified all movement and provided easy access to things required. He placed the chulah range at higher level which allowed easy circulation of air and created sufficient storage space below it. Also, he designed easily accessible and well-organised storage units. Their vertical arrangement minimised the risk of accidents by fire. Deshpande wrote: "I introduced this system of cooking in my own home, and also persuaded several friends to adopt it. Thus, I speak from experience, though in the beginning ladies offered some resistance to this deviation from age-old tradition, later they found great ease and comfort in it."7

Through his model house design Deshpande pointed out the necessity of more natural light and fresh air by means of well-placed windows and ventilation fixtures. Tuberculosis, the dreaded disease which was then rampant in the congested urban areas of India, found its victims in dark, dingy and poorlyventilated buildings. The tradition of 'purdah' confined women within the four walls of the house. Consequently, women were a high-risk group, more likely to succumb to this fatal disease. Deshpande emphasised that "the high death rate, particularly





Deshpande's Model House Design shows Western Influence (Modern Ideal Homes for India, 1939)

amongst infants and women, has its origin in overcrowded rooms and lack of fresh air and light in ill-built, congested houses."8 There was a crying need for light and for spacious, well-aired buildings.

The Indian Home Exhibition organised by The Indian Institute of Architects in 1937 promoted the use of modern furniture in India. Generally speaking, there was hardly any furniture in Indian homes. The British brought in the concept of domestic furniture for a variety of functions, in several styles. By the late thirties, people had beguan to appreciate the clean lines and pure forms of tubular steel furniture.

#### AFTER-INDEPENDENCE

The fairly long spell of British rule in India drastically eroded traditional values and life styles. And the British way of life slowly but irrevocably impressed itself on the Indian society. After Independence, India inherited a state structure created by its colonial rulers. The Western school of architecture valued only those architects who had been trained in the framework of British architecture and design. Official patronage was denied to the descendants of traditional craftsmen or sathapaty (architect) who designed and built India's celebrated monuments like the Khajuraho temples, the Taj Mahal and Fatehpur Sikri, among others. Their services were utilised only by religious sects, landed nobility and unauthorised developers.

Architects trained in the western tradition of architecture drew their inspiration from the pioneers of the modern movement: Le Corbusier, Louis Kahn, Walter Gropius, Frank Lloyd Wright and Mies Vande Rohe, to name a few. After the partition of India in 1947, the most dramatic development in architecture was the Chandigarh experience.

Chandigarh, originally meant to be the capital of Punjab and later of Haryana too, is one of the greatest experiments in the areas of town planning and architecture. It was conceived in 1950 and still retains its original design layout.

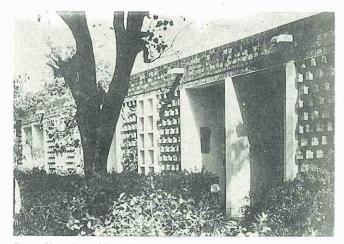
New thoughts and trends after the Independence paved way in reducing resistance to the impact of western ideas, and India took deliberate decision in favour of a techno-industrial mode of development, moving away dramatically from Gandhi's path of grassroot development using indigenous technology. The then Prime Minister, Jawaharlal Nehru, was the patron of the Chandigarh project. The city was designed by a team of foreign architects. The French architect, Le Corbusier, designed in detail the capitol complex and the art gallery while Pierre Jeanneret, Maxwell Fry and Jane Drew handled the residential complexes.

The Indian administrators collaborating on the capitol project went to Oxford to streamline and finalise the plans, and on their return influenced the team of architects who were designing government housing

complexes. The Oxonian blueprint comprises thirteen categories of individual dwellings, from Type I for the Chief Minister to Type XIII for peons. Type XIV offering minimum accommodation was designed for the poor. The architects were constrained to follow the state planning directives regarding the cost and type of accommodation. To economise on the builtup area and construction, the lower categories of houses were planned in rows with common side walls. Type VII, a fairly high category, is semi-detached while others further up the scale are fully detached. According to Maxwell Fry, "the housing in Chandigarh offers a character derived directly from the new urban way of life in India, from the climate and from the economics of the particular situation."

The severe winters and scorching summers of north India underline the need for warmth in winter and an adequate protection against heat and glare in summer. Indigenous devices were developed to suit the tropical climate and give a distinct character to the houses. Sunbreakers and jaalis (lattice work) diffuse the heat on the one hand, and provide sunlight and air, on the other. These elements add considerably to the aesthetic appearance of residential units. The wellthought out orientation of the houses keeps out summer glare and heat while the winter sun warms up the rooms. Verandahs, courtyards and terraces for sleeping outdoors have been included in most house types to provide comfortable space for various activities and functions. The high cost of glazing coupled with the unsuitability of using large expanses of glass in an extreme led to the designing of welllocated small openings to provide natural light and effective ventilation. The flat roof which is a feature of traditional architecture was incorporated because of its utility as a terrace to sleep on and for other activities requiring open space.

Locally made bricks have been used for the loadbearing walls, parapets and sunbreakers. At times, walls are left exposed but often the brick-work is plastered. At roof level, brick walls support a row of



Peon Housing, Chandigarh Architect: P. Jeanneret (1952)

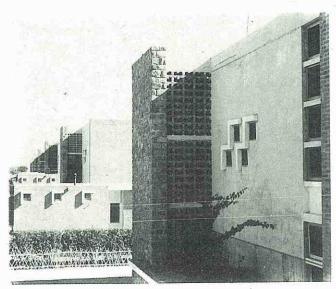


Low-Cost Housing, Chandigarh Architect: Jeet Malhotra (1958)

pre-cast concrete battens which are bridged with brick tiles. This method has resulted in time-saving construction and cut down on shuttering expenses. In some houses RCC slabs or bricks have been used for vaulted roofs.

Formerly, house owners preferred to keep bathrooms and toilets separate. The latter were built in one corner of the plot. Gradually, this arrangement gave way to combined bathrooms and toilets attached to the bedrooms. Before the Partition, water-borne sewage system was not common. After the creation of Chandigarh, piped water supply and an underground sewage system became popular all over India, particularly, in north India.

Conglomerate flooring was commonly used for dado and floors. Later, marble chips flooring became popular with the middle class. It was only in the seventies that glazed tiles came into the market. At a time when only the affluent could afford cars, most houses were designed without garages or porches. In the eighties, however, the overwhelming success of the 'Maruti', a popular small family car, necessitated provision for a garage in house-designs meant for the middle class.



Government Housing, Chandigarh (1952-53) Architect: Pierre Jeanneret

Owners of small houses too insisted on the inclusion of a porch or a garage.

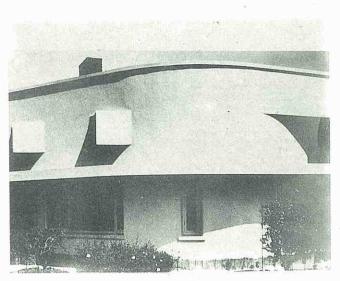
Another factor responsible for the marked change was the arrival of desert coolers, air-conditioners and television sets. Deteriorating law and order situation also forced people indoors. The advent of the television set revolutionised attitudes and life styles. The Asian Games of 1982 brought colour television to India. Higher technology and increased purchasing capacity resulted in overwhelming sales. Every household wanted to possess a television set. Television programmes were yet another reason why people remained indoors. Changing life styles were thus responsible for change in house-design also.



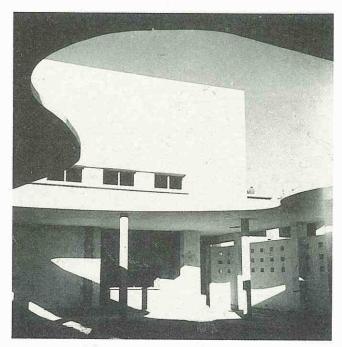
Group Housing, Chandigarh

#### ENTERS THE ARCHITECT

Before Independence, there were very few Indian architects and there was not enough public awareness about architects and their work. Most of the architects were either trained at the J.J. School of Arts in Bombay or abroad. There existed only two schools of



A Private House in Chandigarh (1953) Architect: Pierre Jeanneret



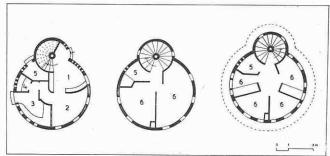
Courtyard in A Private Residence, Chandigarh

architecture which trained future architects. There were about 300 qualified architects to serve a population of 330 million people. By the mid-eighties the number had increased to 10,000 architects available for 750 million people. Today's India has about forty schools of architecture producing more than one thousand graduates every year.

The Institute of Architects which was established in 1917 acquired the status of an all-India body in the late twenties. Gradually it has expanded its operational network with several chapters and centres throughout the country. The Institute sets standards in architecture and related activities. It pioneered the Architects Act which was passed by the Parliament in 1972 and is considered a milestone in the history of the profession. It was due to the untiring efforts of Piloo Mody, an architect as well as a member of Parliament, that the Act was passed. The Act framed the rules and regulations of the profession and laid down the rule that only those architects who are registered with the Council of Architecture can practise in India. After Independence, three architects have considerably influenced house design in India: The outstanding works of Laurie Baker, Le Corbusier and Louis Kahn provided insights into the development of Indian house-design.

In 1945, responding to an invitation from Mahatma Gandhi, Laurie Baker, the British-born architect, decided to settle in India. He designed and was closely involved in the construction of several houses in south India. In the beginning, people open to new ideas asked him to design small low-cost housing projects. However, it was a while before his theories were understood and accepted. Today, he is an established and well-appreciated personality in architectural circles and is also lauded by the general public. A Baker

house is much in demand and as he emphasises, "My interest is in small houses and humble people."10 He has a life-long commitment to the cause of building houses for the poor. His drawings, techniques and use of materials reflect his personal philosophy and humanistic vision of architecture. Environment-friendly his house-designs are exceptionally simple, innovative, elegant, without unnecessary embellishment or ornamentation. M.B. Achwal, a well-known architect. notes "Laurie Baker is a 'one man institution', 'a crusade' for the right kind of housing in a poor country like India. Baker strongly believes that in any developing country which has to face shortage of all kinds of resources, all housing must necessarily be low-cost housing. In a general situation of want, any wastage of materials, money or manpower must be considered criminal. A developing country cannot afford this waste and must conserve and use effectively and to the utmost, all its resources."11 Baker's concept of a house is basically of a shelter, giving protection from the vagaries of weather, with construction costs well within the average man's budget. His buildings cost less than two-thirds of the cost of conventional structures of similar proportions. A minimalist, he simplified the construction process drastically. He cut down on the use of wood and metal, using local meterials in their stead. Unplastered walls reflected local methods of construction. He believes that lime and mud are as strong as cement. From the stone in mud-mortar foundations upwards his structures are a statement of economy and utility. For the basic framework, different types of brickwork are chosen, including the rat-trap bond which uses only a quarter of the bricks used in ordinary construction. Brick arches are substituted for concrete lintels. Varieties of jaalis replace the expensive glass windows. Suitable waste materials are used as a filler between reinforcements to reduce the quantity of concrete used. In the bathroom glass pieces are used instead of glazed tiles and waste bricks make up built-in furniture.



NAMBOODRIPAD HOUSE

1 LIVING 2 DINING 3 KITCHEN 4 STORE 5 TOILET 6 BEDROOM

A Namboodripad House (J.K. Cement Publication)

Baker's houses with their sloping tiled roofs and arches are easily accepted because they resemble a typical south Indian village house. By 1989, Baker had designed nearly 1,200 houses. It was a clear indication

that nothing could resist Baker's ideas which had found their space-time configuration. The movement which he had started without much fanfare gained momentum steadily. Baker's humanistic vision and rigorous craftsmanship was reflected in the works of his students across the country. His quiet, unassuming message, powerful in its simple but profound altruism, influenced hundreds of activists engaged in house construction. In the post-Independence era, Baker's down-to-earth innovative approach to modern house design, his committement and sense of purpose have contributed to the reation of an architectural style in harmony with the Indian housing needs and relevant to the local culture and economic conditions.

Among private organisations and public sector corporations, the Housing and Urban Development Corporation (HUDCO) has played a pivotal role in the development of housing, and, in particular, the construction of low cost complexes. HUDCO has given eloquent expression to Baker's theories and given him many opportunities to experiment with design materials and construction processes. It is only now that Baker's far-reaching influence on Indian architecture and his house-design ideas are beginning to be understood and lauded.

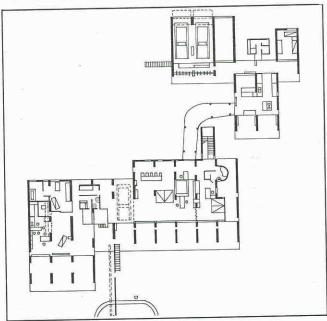
Another pioneer in the history of modern Indian architecture is the Swiss-born French architect, Le Corbusier, who has played a significant role in shaping house-design. His "modular theory" regarded man as the measure of all things in architecture. Accordingly, all internal dimensions in the buildings he designed were determined by the dimensions of the human body.

While working on the Chandigarh Project, he was invited to design the Sarabhai House, the Shodan House and two other important projects at Ahmedabad. It afforded him an opportunity to extend his influence on contemporary house-design in India. The Sarabhai House, set in luxurious vegetation, was built from 1954 to 1956, Le Corbusier used brick and exposed concrete for this residence. The extraordinary open form of the structure, and the efficiently designed doors and louvers, a result of his research in housing needs in the Indian climate, permit the free circulation of air and ensure sufficient natural light. The terrace garden extending over a sizeable area underlines the harmony between the built-up form and nature.

The Shodan House built in the mid-fifties illustrates the extensive use of exposed reinforced concrete. A ramp provides vertical circulation in this double-storeyed structure. The flat roof lightly placed on RCC piers ensures adequate ventilation. The servants' quarters are at a discreet distance from the main house. The interiors of both dwellings reflect their owners' distinct personalities. However, they share a penchant for brightly-coloured panels and fabrics.

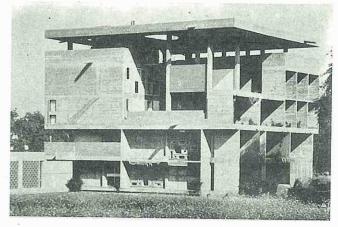
The third architect who radically changed the colour and tone of twentieth century architecture is Louis

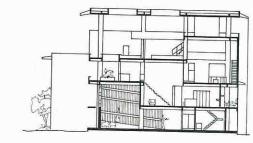


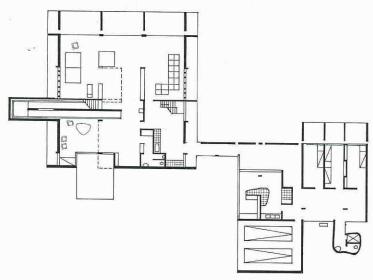


Sarabhai House, Ahmedabad Architect: Le Corbusier (1954)

Kahn, the American architect who was asked to design the campus of the Indian Institute of Management in 1962. The two-part master plan of the Institute includes the institutional complex and the housing sector. The latter is approached by a separate entry and set apart from the former by a lake. It has several laudable features to its credit. The layout of the houses includes large inner courts which give a feeling of peace and serenity, an essential quality for a comfortable living. The formal plan of the housing sector conveys an atmosphere of informality when experienced through its shaded trees and vegetation-adorned courts. In spite of the distinct groupings of different residential areas, the overall impression is one of organic unity. The staggered, low-height houses have simple plans. As Kahn stated, "Houses should be dumb looking so that families have their own say."12 The structures have blank walls on one side and openings on the other. The faculty houses have a diagonal orientation to profit from the wind direction. Striking design elements include deep-recessed windows and segmental, flat arches







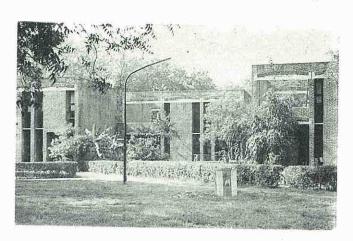
Shodan House, Ahmedabad Architect: Le Corbusier (1952-56)

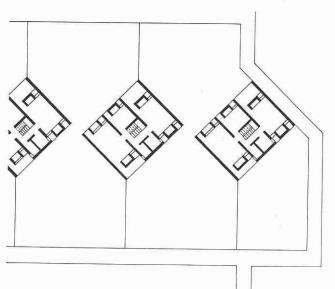
which accentuate and define these simple architectural forms. The terraces of houses in Ahmedabad are traditionally used for sleeping outdoors. The segmental arches at the roof level serve as ventilation apertures. Kahn, like Le Corbusier, favoured a combination of brick-work and exposed concrete for his houses. According to him, "somebody might use iron railings but I did not want any other material except brick, I wanted to extend the order of brick and not have many materials entered the scene ..."

Joseph Allen Stein has a unique approach to house design. He feels that the most far-reaching and exhilarating task of our time is not the conquest of space, but the development of environmental and social relation-

ships that will encourage the best potential in man. For him the principal architectural task is not the creation of innovative or striking forms, but to accommodate more people on the earth without spoiling the surroundings and indeed seeking to enhance the environment. He says, "I don't think a person can develop very fully, cut off from nature, from the mystery of the heavens at night, the wonder of the growth of a tree, the budding of a leaf ... ." So he favoured a house with compact interior dimension but large outdoor spaces in the form of lawns, terraces and courts so as to provide access to sun, air, light, space and surroundings of dignity and beauty.

The works of these foreign architects fired the mind and imagination of the Indian architects whose work began to be visible as an authentic expression in itself in the sixties. These architects began to examine the works of Baker, Corbusier, Kahn, Jeanneret, Drew, Fry and Stein and their relevance to indigenous requirements. This led to a search for design solutions that were more relevant to local needs and life styles.



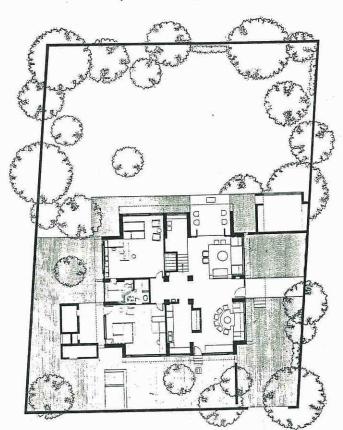


IIM Houses, Ahmedabad Architect: Louis Kahn (1965)

The Indian architect of the past enriched by experience, saw in it the infinite possibilities for coherent and creative expression. Though the first generation of Indian architects were trained and influenced by the western architects, yet they succeeded subsequently in evolving their own approach to the house-design in the socio-cultural context and weather conditions in India. This response to housing needs of the subcontinent gave birth to an indigenous architecture which was widely accepted and lauded by the Indian society. Influenced by their success and advice to "search for roots", the second and third generations of architects too worked in this direction and collectively raised the house-design to its present status. To highlight the contribution of numerous individual architects in the metamorphosis of the contemporary Indian house is a colossal task, but it may be rewarding to take a brief look at the works of those few who have experimented boldly and created a new syntax and semantics of architecture.

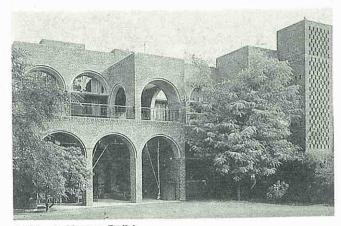
Charles Correa, an internationally acclaimed Indian architect, lays emphasis on the concept of "form follows climate". His intelligent response to the climate factor determines the form and function of all his housing and other projects, often demonstrates a subtle and sophisticated understanding of climatic problems. His award-winning Tube housing project constructed by the Gujarat Housing Board in the early sixties truly exemplifies his design concept. He evolved a cross-section of a house with sloping roof which facilitates hot air to rise naturally and escape from a vent at the top thus automatically drawing in fresh air to replace it. This creates a flow of air which can be controlled by the adjustable louvers in the windows.

Balkrishna V. Doshi, another remarkable architect who was influenced by Le Corbusier early in his career, has promised himself never to imitate his master's climate-control devices like brise-soleil or sun-breakers directly. His own house which, of course, is a manifestation of his understanding of modern Indian family's needs, is "a tentative regionalist hypothesis for the hot climate of northern India. It is like a miniature laboratory in which the architect tried out various ideas and devices that might be used in low to medium cost housing. The shading panels on this house are really abstractions of Gujarati jharokhas-balconies fitted out with ledges, screens and alcoves that project from the facades of wooden houses. The plan is reminiscent of a symmetrical shrine and seems to answer a question: Why do we need buildings? Do they not have to provide something more than just shelter? ... A house cannot be just a barrack without a soul ... In a house there is a man's family as there is God in the temple ...."15 Doshi's sensitivity to human needs was acknowledged when his Aranya Community Housing at Indore, a self-help housing scheme, won him the much acclaimed Agha Khan Award for Architecture in November 1995. Aranya is an integrated human



Architect B.V. Doshi's House, Ahmedabad

habitat, compatible with the life-style and cultural background of its residents. In this design, the architect not only considered the economic aspect, marketability and spatial parameters, but also community living. Provisions for incremental expansion of living space as and when required, stimulate the self-help principle within the community.



A Private House, Delhi Architect: Ram Sharma (1967)

Eminent architect A.P. Kanvinde whose body of work mainly includes large scale educational, cultural and industrial complexes, has, however, added a new dimension to the Indian house-design in the innovatively articulate plan of his own house in New Delhi. His pleasing blend of form and function hints at new frontiers of aesthetics to be explored. The younger generation of architects took as a challenge and collectively succeeded in creating works which were an eloquent expression of a philosophy of life and aesthetic vision oriented towards practical housing needs.



Architect A.P. Kanvinde's own House, Delhi

Inspired by the works and contribution of their doyens, young architects gave a new direction to the development of contemporary house design. Like their predecessors, they too evolved design solutions suited to the Indian climate, way of life, and technological advancements. The present level of house design is thus a result of collective efforts of numerous architects working in all parts of the country.

#### CREATIVITY GETS RECOGNITION

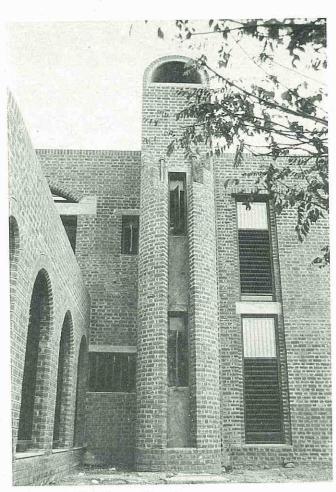
In the late eighties, the Indian Institute of Architects instituted the JIIA Awards which are given annually to the best architectural projects in various categories. The objective of these awards is "to encourage, acknowledge, appeciate and honour through the professional body and its journal, the significant contribution of member professionals in the field of architecture."16 For instance, in the shelter category the Institute has given awards to architects like B.S. Bhooshan for the design of his own house at Mysore, A.M. Shirgaonkar for a farm house in Maharashtra, and P.V.K. Rameshwar for the Singhi residence at Jaipur. In 1990, the J.K. Cement Works instituted the "Architect of the Year Awards" to promote pursuit of excellence in the field of architecture in India, and to give due recognition and encouragement to architects and professionals. Some of the award-winning houses are presented here.



Award Winning House, Baroda Architects: Shirgaonkar Associates

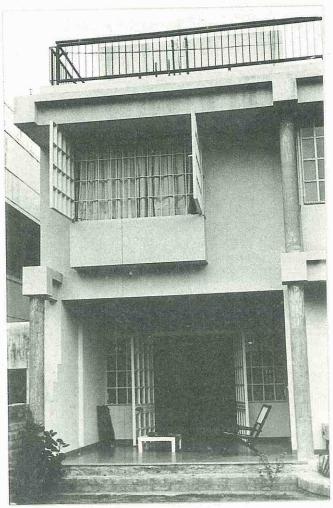


Architect B.S. Bhooshan's own "award winning" House, Mysore



Award Winning House, Baroda Architects: Shirgaonkar Associates

In the category of private houses, Kulbhushan Jain and Minakshi Jain were honoured with a commendation award in 1991. In spite of the limited size of the plot, their house is structured to provide all the comforts of a luxurious villa. The criteria that governed the design include the visual expanse of the limited space and the maximum transparency to connect indoor spaces with outdoor areas. Inside the house, various spaces are not rigidly compartmentalised but are so articulated as to flow into one another. The concept of easy linking of spaces evolved out of a very small family's needs to feel the reassurring presence of its members, no matter where they are in the house. Openings have been kept large to ensure visual communication between the inside and the outside. Conditioned by climatic needs, the design provides various measures which control temperature and create an ambience of a comfortable home. For instance, the double-height portion near the staircase creates a cross-tunnel effect, thus ensuring effective ventilation. Well-protected glazed surfaces take into account the direction of the sun during both summer and winter to prevent an uncomfortable warming-up of the house. To achieve functional clarity the work area has been kept in the basement,

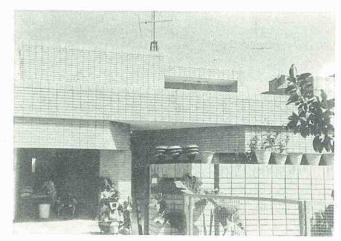


Architects's own Award Winning House, Ahmedabad Architects: Kulbhushan and Minakshi Jain

interaction areas at the ground level and private areas on the first floor.

In 1992, architect Nikhil Arni's award-winning farm house was conceived as a weekend retreat location for United Racing and Blood Stock Breeder on a 450acre stud farm at Kurigal, outside Bangalore. In order to minimise building impact on the site and also to have access to the magnificient views, the wooden house building was raised by four metres. Bangalore's architect K.J. Jaisim, the other joint winner, designed Simha House in the same city as an architectural fantasy, since the owner is a theatre celebrity. The entire structure is remarkable for its capacity to provide changing ambience. Using clay in different forms, the house is dominated by the juxtaposition of geometric forms and textures which provide a fascinating interplay of light and shade. Its terraced gardens complement the architectural fantasy.

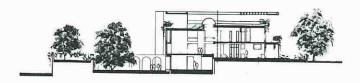
In 1992, Architect Dalbir Singh's house for Jasminder Kaur in Amritsar was adjudged to be worthy of special mention for its meticulous attention to each and every detail both inside and outside the house. Its organisation of space is aesthetically

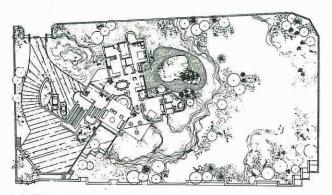


Award Winning House, Amritsar Architect: Dalbir Singh

functional and ensures efficient ventilation. In its own modest way the design of this house was considered as a trend-setter.

Baroda-based architect A.M. Shirgaonkar received the 1993 award for a politician's house. Designing it was a difficult and complex task because both the personal needs as well as the public life style of the

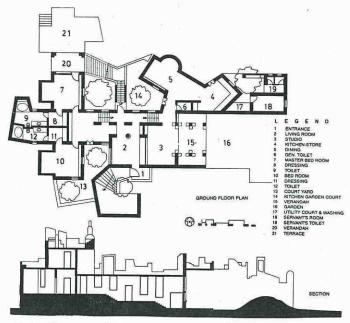




A Politician's House, Baroda Architect: A.M. Shirgaonkar (J.K. Cement Publication)

owner had to be given due consideration. This was reflected in the attempt to separate the private spaces and the public areas of the structure without showing obvious demarcation. The architect took full advantage of the steeply-sloping ground and created a semi-basement structure with split-level. The first floor with large rolling grounds and a landscaped garden for holding functions has adequate protection from heat and harsh light. The whole exercise

represents an architecturally and aesthetically satisfying solution to fulfil personal and public requirements under one roof. Also in Gujarat, Ahmedabad's Radhika and Rajeev Kathpalia received a merit certificate for Villa Mansaram at Mount Abu in Rajasthan.

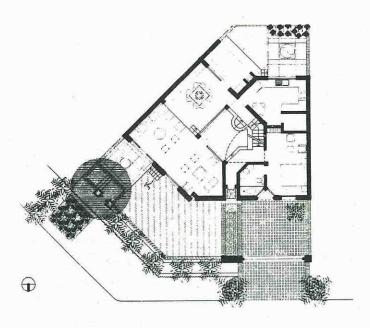


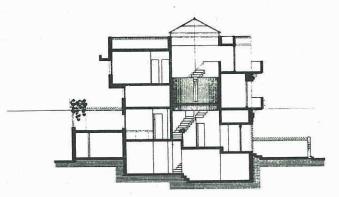
Artist Mansaram's House, Mount Abu (JIIA Award, 1995) Architects: Radhika and Rajeev Kathpalia

In 1994, architects Ashok Dhawan, Girish Doshi and K.V. Sanil Kumar were jointly awarded in the same category. Dhawan's own house faces the magnificent tomb of Hamayun in Delhi. The entry to this house is through a filigree gate and a patterned brick footpath. The rooms get vignette views of the monument. Contemporary in concept and conveniences, the house achieves a quiet harmony by echoing the past yet maintaining its own architectural identity.

The Pune-based Girish Doshi's residence is a perfect illustration of creating "humane space" with a plan endowed with a compact volumetric resolution. This prize-winning house shows a remarkable concern for light and ventilation expressed through large punctures and hung sections of prism glass. The simple geometric composition counterbalances poetically metropolitan rhythm with transcendent privacy and solitude. In spite of being severely constricted by urban residential surroundings, the structure channelises good natural light.

Engineer-turned-architect K.V. Sanil Kumar's award-winning Kala Chandra Farm House nestles in a 20-acre farmland. A meandering sheltered walkway links a sequence of rooms. This takes the form of roofed domains spilling into one another creating courtyards and gesturing to the open surroundings. The house is a playful mass of sloped roofs resting on shifting facades responding to characteristics of the

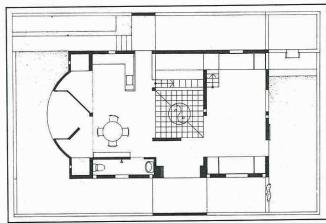




Ashok Dhawan's House, Delhi (J.K. Cement Publication)

site. The materials used are regional and familiar to local craftsmen besides being durable with minimum maintenance. As the inside flows into the external space, the house emerges as a backdrop for the lush beauty of the landscape.

At the awards presentation ceremony, the then Prime Minister of India, P.V. Narasimha Rao, wrote the following message: "I am happy to learn that the Architect of the Year Awards instituted by the J.K. Cement Works have taken the shape of a movement. I congratulate the winners of the award and hope that they use their considerable skills to come up with innovative designs to build functional and affordable houses for the common man."17 Y.P. Singhania, Director of the J.K. Cement Works, who is the moving force behind the creation of this award, remarked that "What was started as a modest gesture, a humble contribution towards giving an impetus to efforts to achieve excellence in architecture, has generated considerable interest among the public and the fraternity of architects all over India. This is evidence from the growing number of architects participating in the contest every year, and as I observed last year,



Girish Doshi's House, Pune (J.K. Cement Publication)

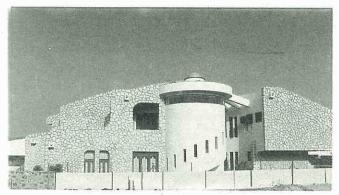
it is assuming the proportions of a movement." <sup>18</sup> The publicity given by the media to the JIIA Awards and the J.K. Cement Works Awards has helped in creating public awareness not only about architects and their works but also encouraged house owners to experiment with and implement innovative ideas. These awards have started a broad-based movement in the real sense in domestic and public architecture.



"Poetry of A Home", Hemant Mody House, Ahmedabad Architect: Hiren Gandhi

#### CONCLUDING THOUGHTS

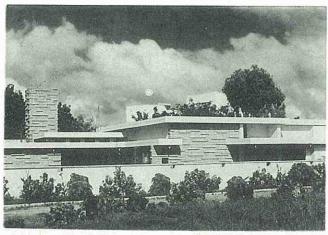
A house is no longer just a house, it has become a status symbol. Individualism, consumerism and small nuclear families are some of the factors which have contributed to the radical transformation in house-design. The metamorphosis has touched every aspect of architecture from the blueprint to building materials and finishes. The most striking feature is the cosmopolitisation of house-design which does not neglect indigenous features, characteristic of local or regional variations. An Indian architectural journal concluded in 1962 that "an American brought up in completely different conditions does not find it difficult



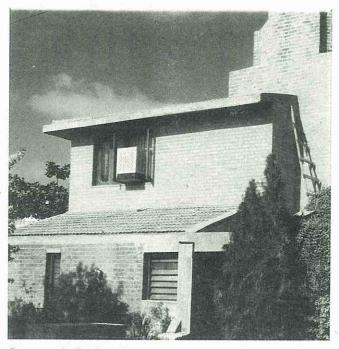
A Modern House, Pune Architect: Shirish Beri

to live in an Indian house because a uniform pattern of living is unconsciously forging itself out the world over." Buildings are a representative document of an era, of a period, of a socio-economic phase, and are politically and culturally coloured. Architecture acquires and gives meaning in a context related as it is to the pragmatic issues of daily life, of climatic considerations, and finally, to the needs, the aspirations and visions of tomorrow.

Creative architecture does not grow in a vacuum but is born out of a continuous process of interaction of the present with the past and the future. It keeps the past in some corner of the mind, articulates the existential needs of the present in such a way as to facilitate and inspire architectural exploration by future Columbuses. Such an architecture is not only a statement of the future of the past but also a comment on the past of the future.



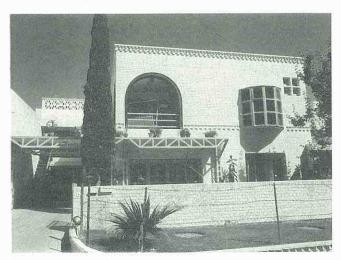
Architect P.M. Thacker's own House, Bangalore



Contours in Brick Architect: A.J. Talati



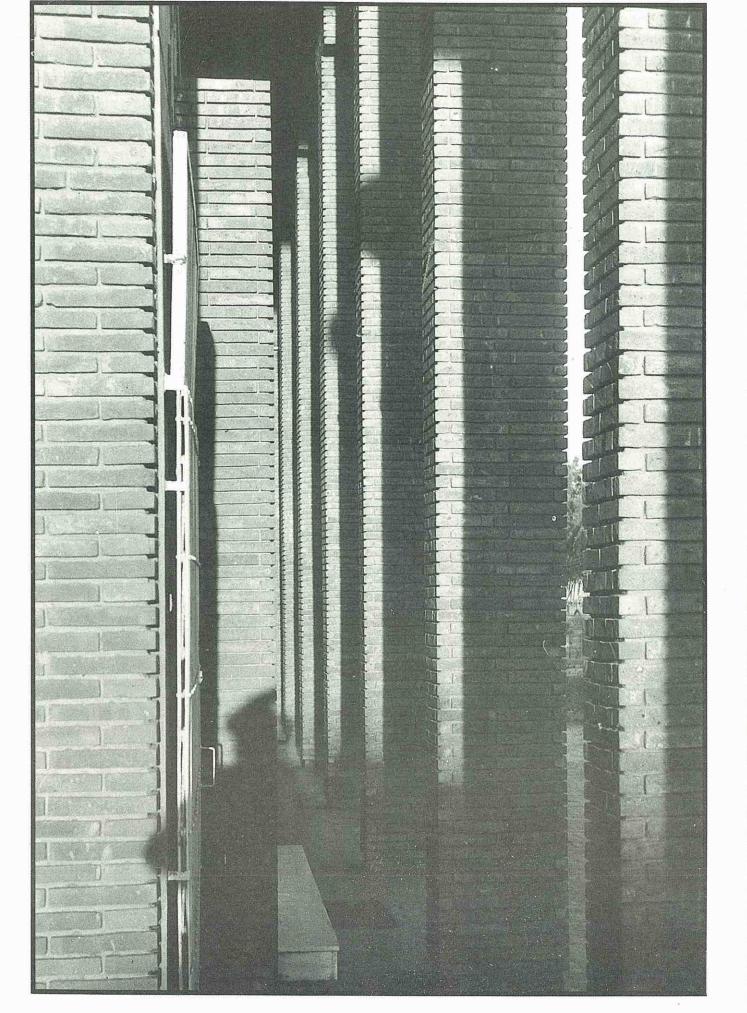
Musings in Brick Architect: Dalbir Singh



Simplicity in Modernity Architect: Satnam Namita Associates



Poetry of Stone Architect: Dalbir Singh



# Musings in Brick

Brick is perhaps the oldest man-made building material on the earth. The evidence of its use in buildings can be traced back in the ancient Indus Valley cities of Harappa and Mohenjodaro. The substantial exploitation of brick in these cities bears testimony to the fact that it is being used in this subcontinent for the past more than four thousand years. Credit for its endurance goes to the positive qualities it enshrines. These include: convenience in manufacturing, easy availability and handling, low cost, soothing colour and texture besides its adaptability to the changing trends in architecture. Since its evolution, the brick has undergone many changes in its size and shape to suit the architectural styles of the time. Though the use of brick for load-bearing walls remained unchanged throughout its history, yet its exploitation as natural surface finish reemerged in India in the early 20th century. However, the exposed brick-faced surfaces got due recognition only when the Independent India opted for a complete modern architecture. Chandigarh took the lead in promoting brick as surface treatment. Architects Pierre Jeanneret, Maxwell Fry and Jane B. Drew were the pioneers in establishing credibility of brick. Their endeavour was further substantiated by the architect Louis Kahn who explored the full potential of brick in the famous IIM Campus at Ahmedabad. Following the footsteps of their foreign masters, many of the modern architects earnestly promoted this finish. As a result of this, owners of numerous houses accepted brick as surface finish.

During the last one-and-a-half decades, however, we have witnessed a marginal decline in the popularity of brick primarily due to the visible aging effects on the surfaces. But fortunately, the technological advancements have given birth to a variety of machine-made clay tiles for cladding purposes. These tiles are more immune to the effects of weather and hence can be relied upon to maintain the original grandeur of brick for long.

# 1

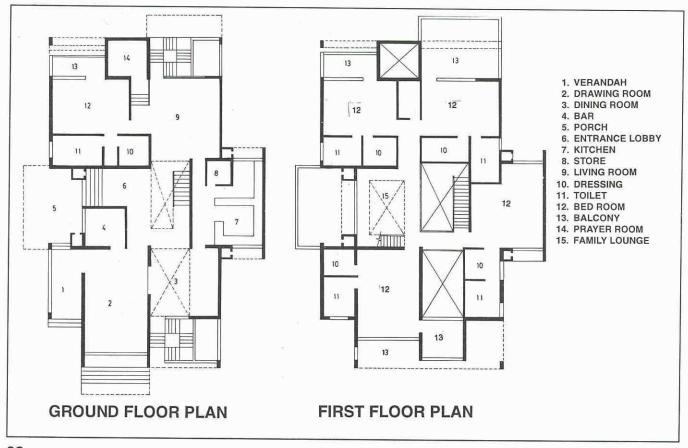
## Cartesian Craftsmanship

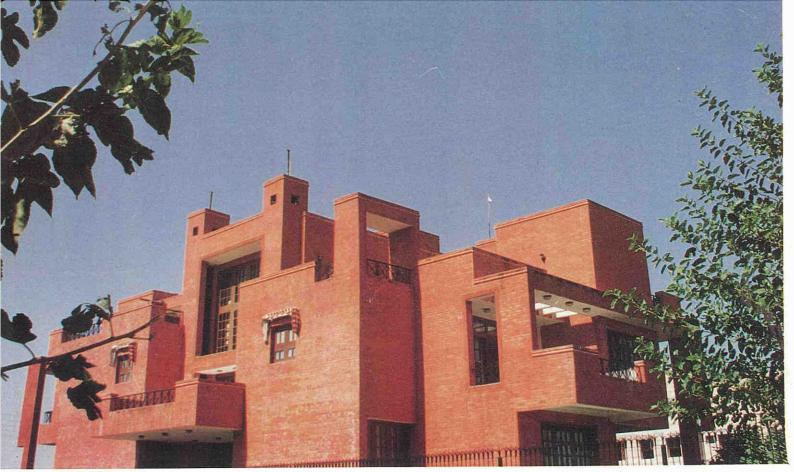
The Khannas' House, Gurgaon, Haryana *Architects:* Naveen Vij and Manmohan Sharma, New Delhi

Out of the need for novelty and a deep desire for exclusive expression, there emerges a new fashion every now and then and residential architecture is no exception to this rule. Looking at the wide spectrum of mushrooming residential buildings in urban areas. one notices that almost everywhere a complete visual anarchy exists. Most of the houses are fragments of incongruous elements which contribute little to the functional adequacy or the visual character of the structures. Multicornered rooms with chamferred surfaces and angular configurations may appear to be a pleasant departure from the so-called conventional designs, but have little endurance of their own. On the other hand, plans with well-established Cartesian patterns are more viable and contain a great deal of potential for innovation. This is what the young architects Naveen Vij and Manmohan Sharma have proved with their design for the Khannas' house in DLF Enclave, Gurgaon.

The built-form of the house is a striking composition of straight lines, interlocking masses, solids and voids with monochromatic treatment on the exterior. Four shafts with vents at the top create an interesting silhouette and give the structure a strongly defined visual character. The brick-tile-clad surfaces together with complementary elements help in maintaining visual uniformity. The overall impact of the form has been further heightened by the minute detailing of the cornices, architraves and mouldings. Deeply-recessed fenestration not only protects the interiors from inclement weather but also adds an air of tropical expression to the building.

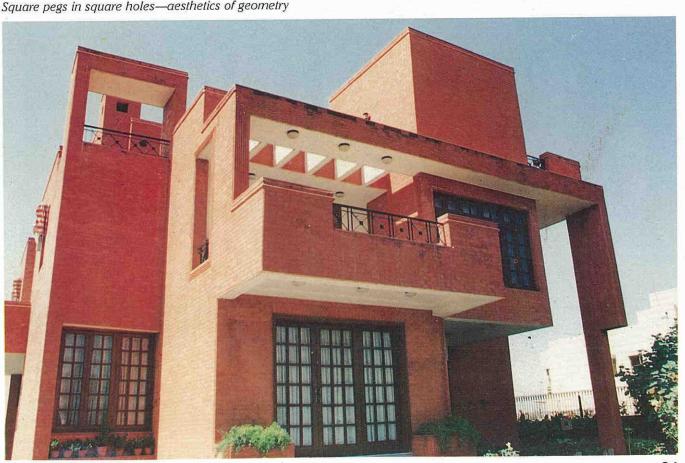
The house is designed on two levels. Except for the bedroom of the owners' parents, the entire ground floor accommodates common areas like the entrance lobby, the drawing-room, the dining-room and the living-room. On the first floor, there are four bedrooms with attached dressing-rooms, bathrooms and independent balconies. The core of the house has been designed imaginatively with double-heights, stairs and overbridges. Apart from their functional character, these elements give a feeling of uncluttered space and an aesthetic atmosphere.



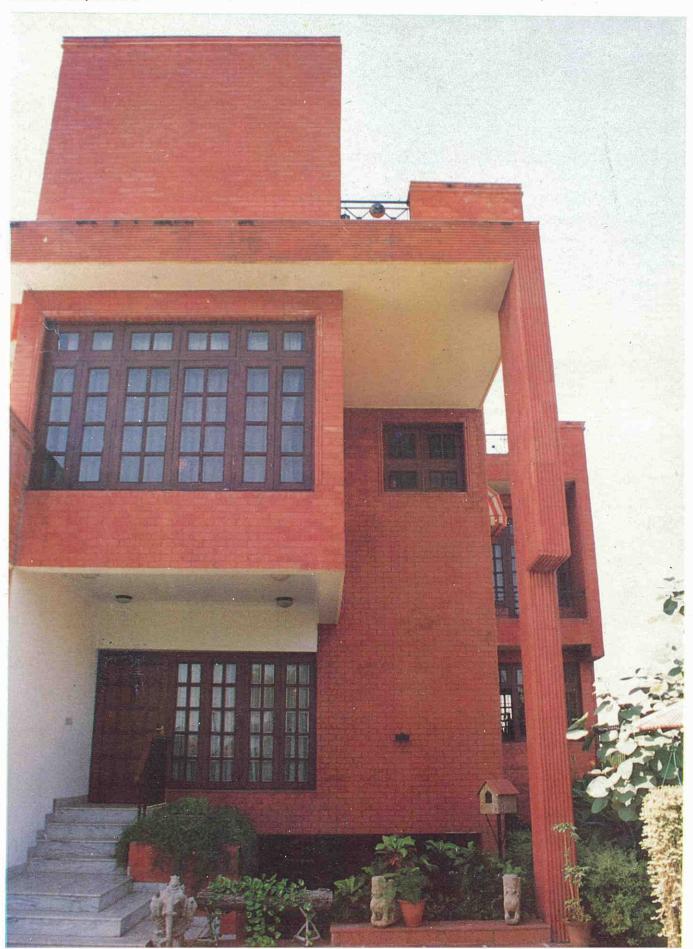


Fortress feel-brave new world of architect

Square pegs in square holes—aesthetics of geometry

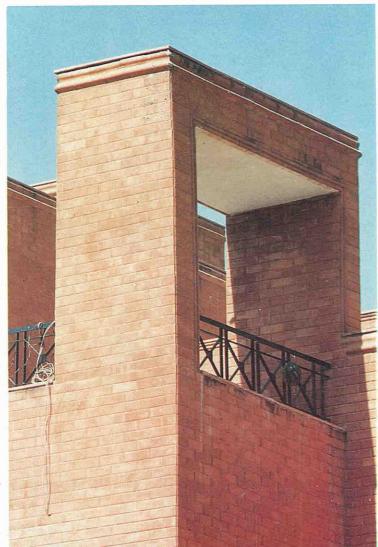


Graces of entry and exit



Framing the viewer for celebrating unframed nature







Imagination becomes a magnet

#### Geometry in Brick

Architect's own House, Panchkula, Haryana

Architect: Harish Saini, Designers Consortium Pvt Ltd, Chandigarh

Harish Saini, a Chandigarh-based architect, defines his concept of house design in the following terms: "Apart from being responsive to the modern needs, climate, and local materials, a house should evoke curosity and a positive response in terms of its architectural outlook". <sup>20</sup> His own house is a well-designed illustration of his philosophy.

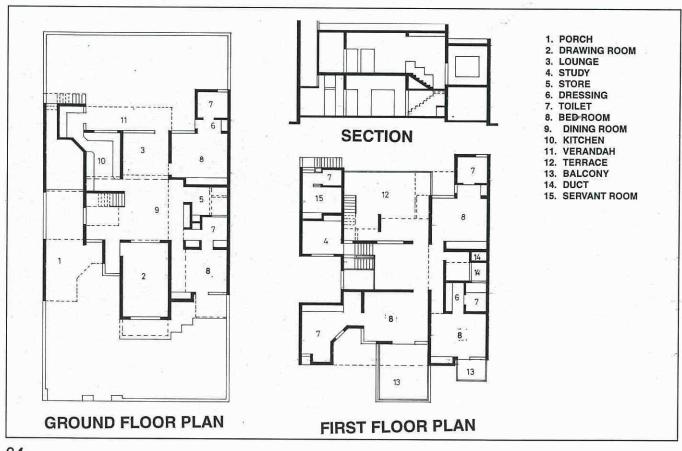
The  $15~\text{m} \times 30~\text{m}$  plot necessitated a straight-lined, regular-shaped, double-storey structure. The house has been conceptualised in a manner which exemplifies the pure geometerical relationship between the building and the site. The play of light and shade, the rhythm of solids and voids, the contrast of terracotta brick tiles and Jaisalmer stone have been utilised to create an ambience of aesthetic blends.

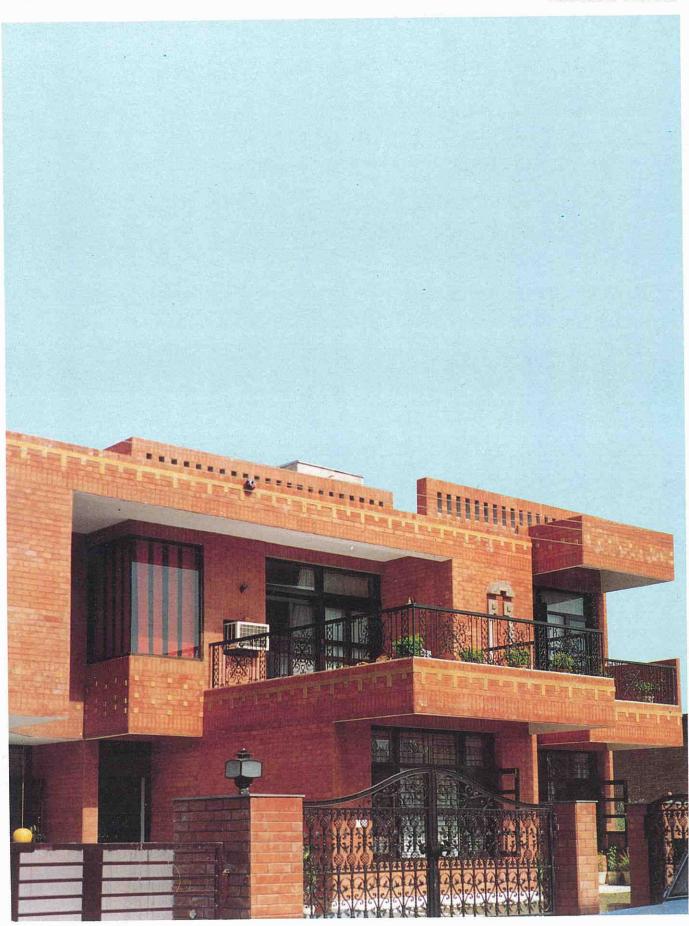
The architectural configuration of the house is determined by the large car parking area, and a floating block over the porch is one of the resultant forms. It not only extends the available functional area on the first floor but also affords a flexible space for parking.

Inside the house, all the common areas are designed to express a sense of spaciousness, visual con-

tinuity and flexibility. Partly covered terraces at the front and at the back of the house assist in this feeling of extensive space. At the end of the entrance passage the visitor has an independent access to the drawing-room and a small double-height lobby which offers informal sitting space. Of the two bedrooms provided on the ground floor, the one at the front is ideal as guest bedroom. A passage next to the garage provides separate access to the kitchen, the rear court, and the servant quarters. The first floor has three bedrooms with attached toilets. It also provides a small pantry. The prayer-room over the garage is accessible from the mid-way landing.

The house is centrally air-cooled with an evaporative type cooling unit on the terrace. The air-cooling duct runs through a ventilation shaft next to the toilets on the two floors. Orientation-wise the house affords maximum solar penetration during winter. Earthern bowls have been used as insulating material on the roof. During summer the white-washed terrace reflects the rays of the sun and reduces the heat intake.





### **Expressive Signature**

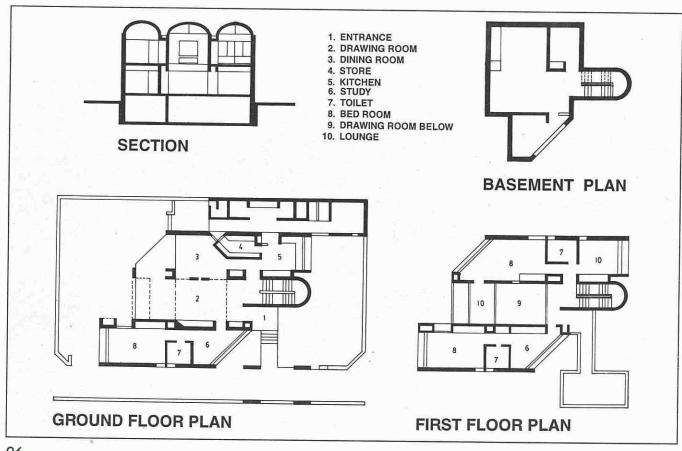
House for Hasenibhai Barodawala, Baroda, Gujarat *Architect:* Hasmukh C. Patel, Ahmedabad

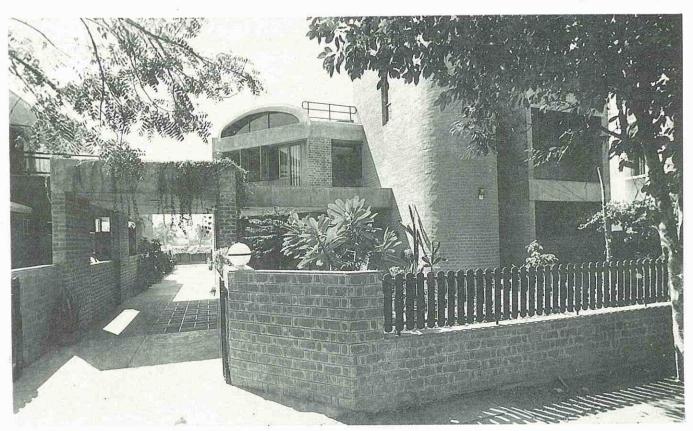
The philosophy of "directness of expression" governs architect Hasmukh Patel's designs. These have clarity of function and are simple in the use of materials. His buildings which are clear, cubist compositions, are not dressed up and, in their nakedness, emphasise workmanship, structural proportions and meticulous detailing. Patel, though essentially modern, does also respond sensitively to Indian tradition and the spirit of its cultural heritage. This is evident from the house he has built for Hasenibhai Barodawala at Baroda.

Built on a plot measuring approximately 510 square metres, the house is now being used as a guest house for the executives of a national company. An imaginatively conceived and diligently worked out built-form incorporates four parallel load-bearing masonry walls with reinforced-concrete vaulted roofs. To lend it a truthful expression, all brick surfaces and reinforced-concrete components have been left untreated on the external surfaces. All the bays are arranged in a staggered formation to create large open spaces in each

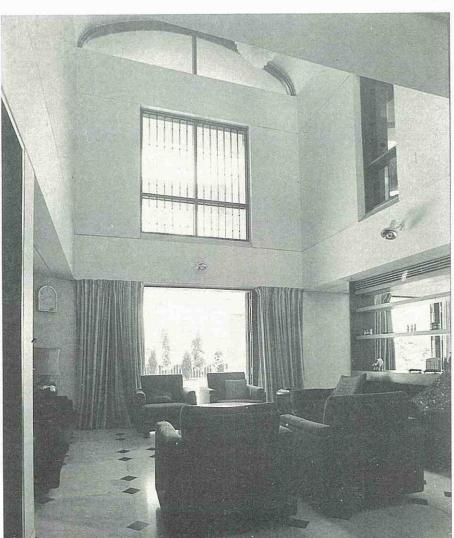
corner of the plot for outdoor activities. The recesses thus obtained not only subdue the overpowering effect of the built-form viewed from the street but also provide a pleasant foreground to the building.

The house is entered through a low-height, detached porch, from where a covered path leads to the main entrance. From here one steps directly into the living area which is innovatively designed to cater to all the general household activities. Its double-height volume and wide fenestration make it look bigger than it actually is. This space, in conjunction with a deep, south-facing verandah and back garden, can be used for large gettogethers. A dog-legged staircase with a rounded landing provides access to the upper floor which accommodates two bedrooms with attached toilets, a study-room and family sitting areas. Decisive placement of wardrobes, study shelves and niches along the linear walls helps in making full use of the circulation areas within the bedrooms.





Living in time and space, with light and shade



Double-height does not mean living in an ivory tower

#### Designer Dreams

Architect's own House, Panchkula, Harvana Architect: S.D. Sharma, Chandigarh

The house is built over a piece of land which does not enjoy a particularly favourable orientation, as an eastwest low sun penetrates deep into the rooms. Existing vegetation and neighbouring houses partially resolve the problem of too much sun. The rest of the problem has been overcome through passive solar exploitation and ingenious planning.

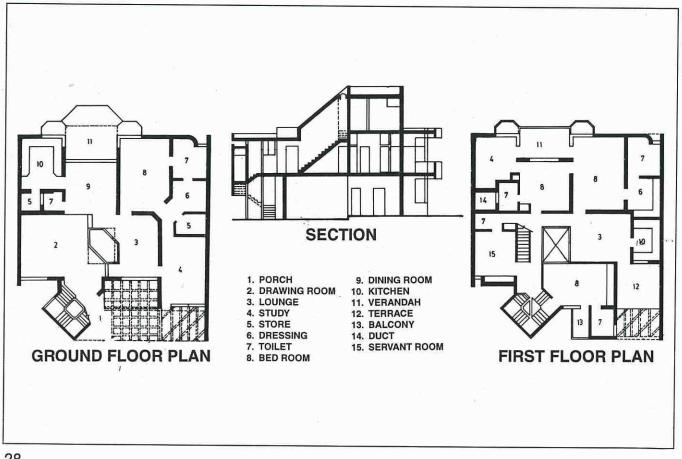
Knowledgeable simplicity of the plan, the quality of space and measured light are the key aspects on which the design of the house is based. The use of geometrical rhythms has helped in achieving arithmetical proportions and scale. The blueprint is accomplished through the dynamics of arranging domestic activities in personal need-based sequences. There is no formal fover or entrance hall. A visitor is introduced to the house directly when he steps into the living-room which is a centre for collective activity where the formal and informal areas are marked off by indoor plants. Light pours dramatically into this area from different sources

including a skylight during different hours of the day and changing seasons. The master bedroom unit with an attached toilet and a study is located on the ground floor. It is so arranged as to make it an independent unit with its own boundaries of privacy.

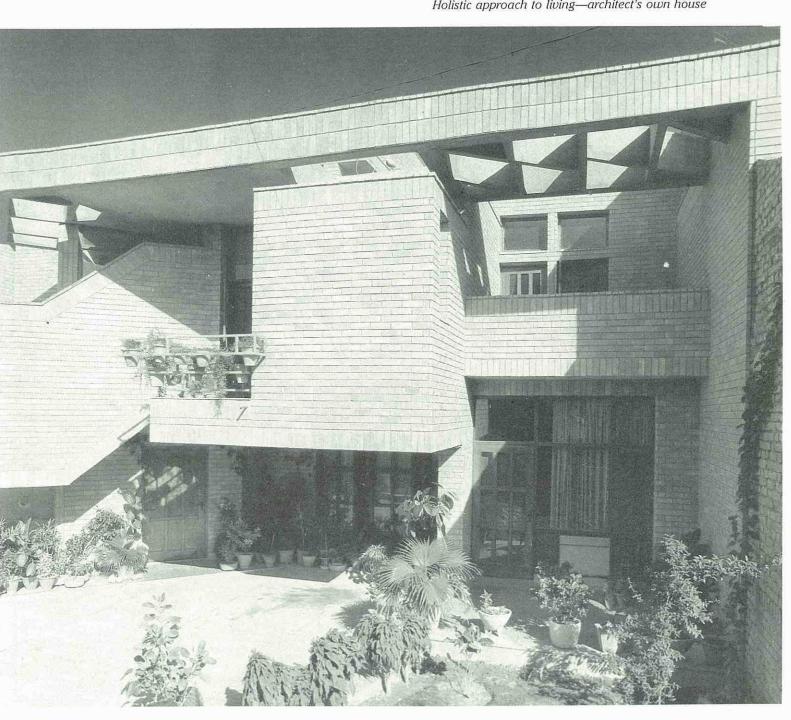
The tones of underlying dialectal relationship are expressed between inner and outer spaces. The rear garden is approachable from the dining space through sliding doors. For larger gatherings, the entire space, that is, indoor as well as outdoor, becomes one.

The staircase block connects all the levels and is yet independent. The landing half-way up the stairs leads to the guest-room. From this room one can visually communicate with the rest of the house through a wide glazing. The first floor has three bedrooms. The servant's room is housed on the top level.

Restrained and austere, the house is, nonetheless, striking as also a little unusual in its bold and eloquent contours.



Holistic approach to living—architect's own house



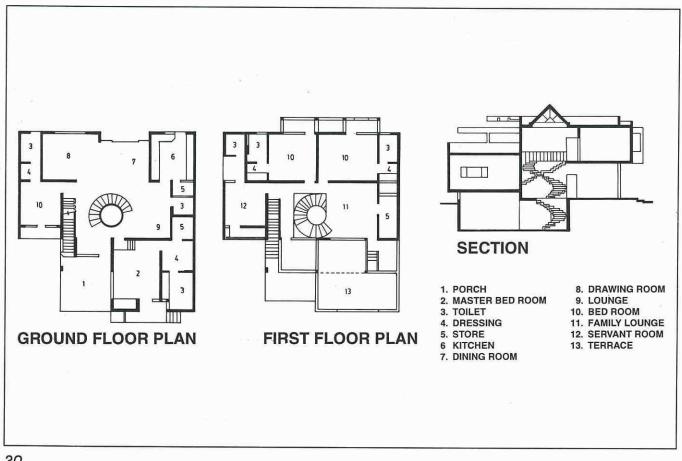
#### Patterned Perspectives

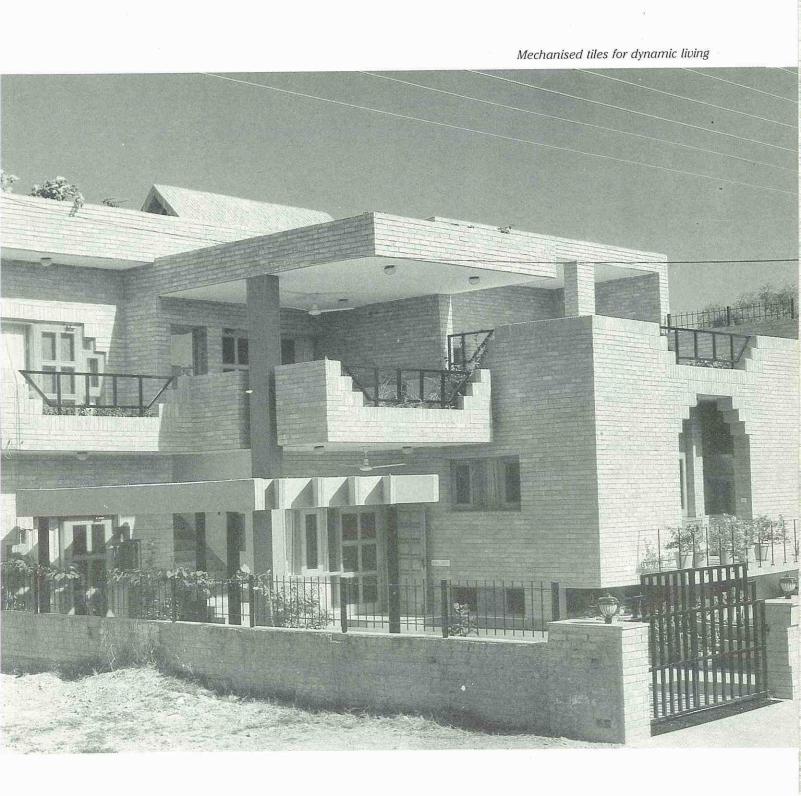
House for Gurkirpal Singh, SAS Nagar, Punjab Architect: S.D. Sharma, Chandigarh

This house for an art-loving family is a culmination of many dreams, manifested by creative imagination and expression. The architect's synthesis is faithful to the client's brief. The owner, an engineer turned industrialist, needs to entertain guests and requires elegantly designed space. The spatial arrangement of different areas is a pleasant departure from the usual practice of placing the formal spaces in the front portion of the house and the informal spaces at the back. The major chunk of the core area is designed to accommodate a drawing-room, a dining-room and a lounge, besides a spiral staircase. Starting from the entrance portico, this space flows right up to the back wall of the house where it communicates with the landscaped courtyard through wide fenestration.

The ground floor also accommodates a master bedroom and a guest bedroom with attached dressing rooms and toilets. The central staircase spirals down to provide access to a very functional basement which is used as a lounge-cum-multipurpose hall. On the first floor there are two bedrooms, a family lounge, balconies and a terrace, besides a servant's room which has an independent access. A large cut-out in the family lounge helps in maintaining a visual link with the livingroom below and lets natural light pour down into it. All the bedrooms are perfectly oriented to receive the sun and the breeze. Openings in the rooms provide a lovely view of the greenery outside.

The external finish on the walls is brick tile which blends well with the green landscaped ambience. The railings and the front verandah have been highlighted by corbellings in brick. These corbellings provide the effect of a haveli with a heightened expression at the entrance of the house. Inside, the lobby and the spiral staircase with the living and dining areas around provide comfortable and functional space.





#### Traditional Ambience

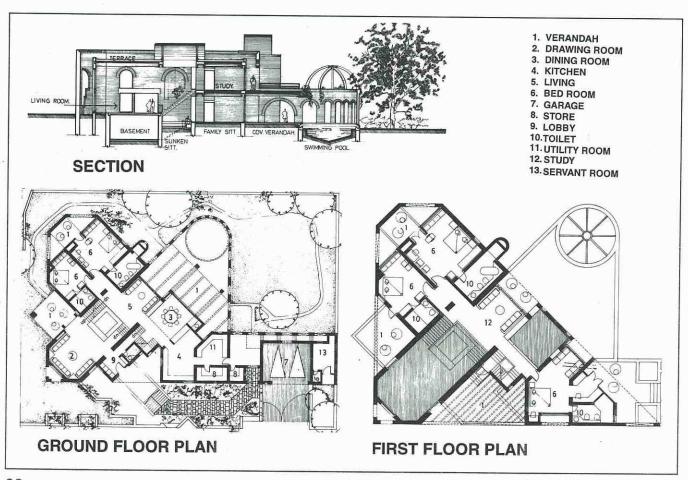
House for Mridulaben Patel, Baroda, Gujarat Architects: Shirgaonkar and Associates, Baroda

The owners of this house are lovers of nature and appreciate natural materials and traditional building elements. During their long stay abroad, they had a disciplined, clean and dust-free environment as well as modern amenities and facilities. They wished to include these elements in their house in India too.

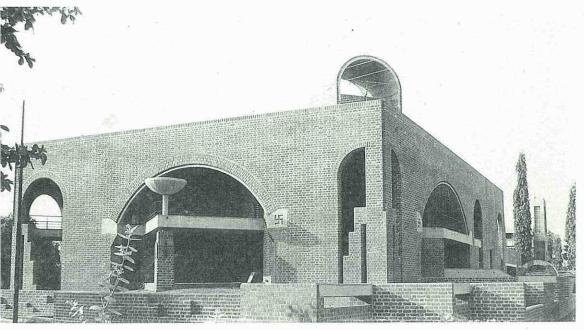
The design of this house respects the highly individualistic life-style of the owners. A monolithic brick mass has been carved-in at several places to provide the right contexts for the entrance door, the porch, seating spaces and windows which are concealed behind the arcade and arches. The larger-than-life elements on the exteriors provide a contrast to those inside which are more sympathetic to human habitation and interaction. Corbellings, chamfers, alcoves and niches cast shadows in the harsh sunlight softening the heaviness of the brick walls and add a vibrant quality to it. Moveable teak wood louvres in front of the windows which use very little glass reduce external glare and heat.

The distinguishing feature of the house is a sequence of split-level living spaces with ceilings of varying heights, and a spacious hall which can be seen from the upper-level living spaces and galleries. Natural light streams through centrally located barrel-vaulted skylight opening and provides effective ventilation in the summer months. A deep-seated, semi-covered sit-out at the back of the house looks out on a swimming pool which has a round ribbed cut-out. The pool together with a waterfall cascading from the first floor creates a cooling and soothing effect in the interior. Well thought-out circulation patterns ensure optimum use of space.

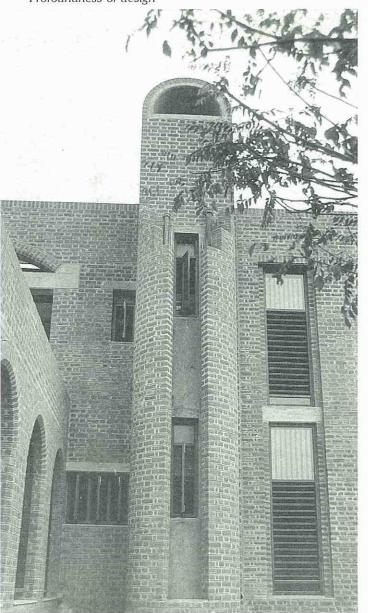
Natural brick and concrete finishes are not only used on the exterior but are also sufficiently exploited to create interesting interiors. Certain exposed ceilings are painted to reduce the harsh angles of concrete and to create a meaningful contrast to the other polished surfaces. Terraces are insulated and the white china mosaic floor finish reflects the heat of the sun.



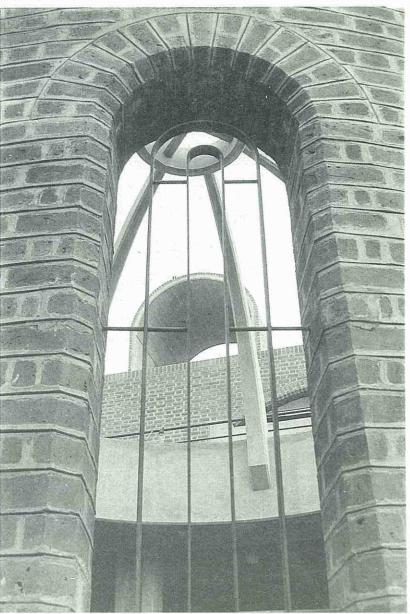
A facade detail



Profoundness of design



Brick by brick



#### **Elegant Discretion**

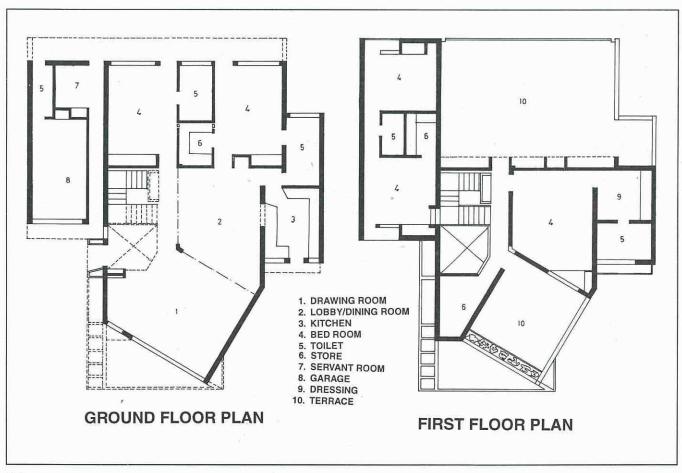
House for Surjit Kaur Takhar, Chandigarh Architect: S.S. Bhatti, Chandigarh

Chandigarh is known as a city of monotonous structures. This monotony has developed because of stringent building bye-laws, uniformity in shape and size of plots and similarity of life-styles and economic class of the inhabitants. All these have contributed to the present visual scenario of the city. Nevertheless, there are some instances of creative architecture which is essentially a by-product of productive client-architect interaction and the free rein given to the designer. The house for the Takhar family in Chandigarh reflects this harmony and freedom.

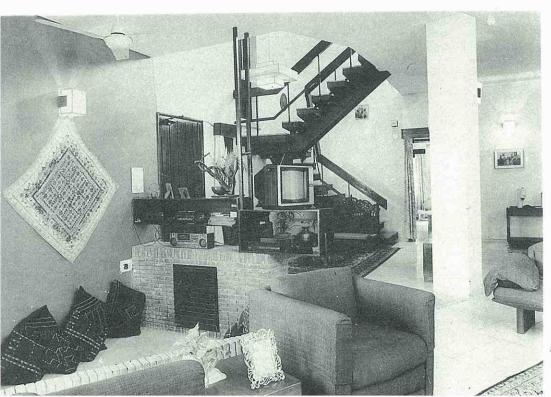
Built on a plot of 433 square metres, the house has been designed as a duplex unit and the two levels are connected by a three-flight staircase. This triple-height space is punctuated with a fibre-glass-dome skylight. The social zone comprising a drawing-room, a sunken

conversation pit, a dining-room and an entrance lobby, is well-defined space because of the staircase hall skylight. The fact that there is no floor-to-ceiling partition magnifies this feeling of spaciousness. The drawing-room has been provided with sliding-and-folding glass doors which can be slid back to accommodate large groups of people for family functions.

The architect's imaginative design structure gives the house a strong individual expression and also conforms to the strict building regulations. The all important first-floor terrace has a sense of intimacy and privacy which is created by placing it at a sharp angle to the street. The spaciousness of the terrace is enhanced by a public open space which it faces. The front and the back gardens have been carefully designed to add to the highly personalised visual expression of the house.







Stairs reflecting ambition

#### **Balanced Beauty**

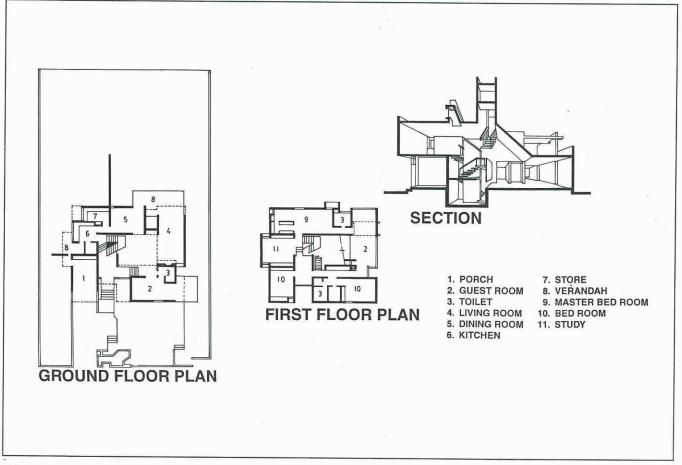
Architect's own House, New Delhi Architect: Achyut Kanvinde, New Delhi

Architect Achyut Kanvinde, a figurehead of contemporary architecture in India, is known for his sense of proportion, aesthetic vision and creative play of spaces, solids and voids. His own house in Maharani Bagh, a posh locality in New Delhi, is one of the best examples of his ingenuity and design philosophy. The creative input in the design of this house can be gauged from the fact that in spite of changing trends in architecture, the house still retains its original grandeur.

The plan-form of the house is based on *swastika*—the ancient symbol of good fortune. The core of the house is an atrium in the form of a covered court surrounded by living areas. The movement patterns within the house, both horizontal and vertical, have been planned as points of departure from this atrium. This allows the inhabitants to be constantly in contact with the atrium while moving from one area to another.

To reduce unnecessary movement of the lady of the house between the master bedroom on the first floor and the entrance area on the ground floor, the floor of the entrance lobby has been raised. As a result, the vertical distance between the two levels has been reduced by half. The atrium and the surrounding activity areas, which include the living-room, the dining-room, the guest-room and the study on the upper level, are all linked together expressing the concept of fluid interior space. Likewise, the indoor spaces on the ground floor and outdoor space in the form of a back garden interact with each other through wide openings. The atrium also receives natural light from morning to evening.

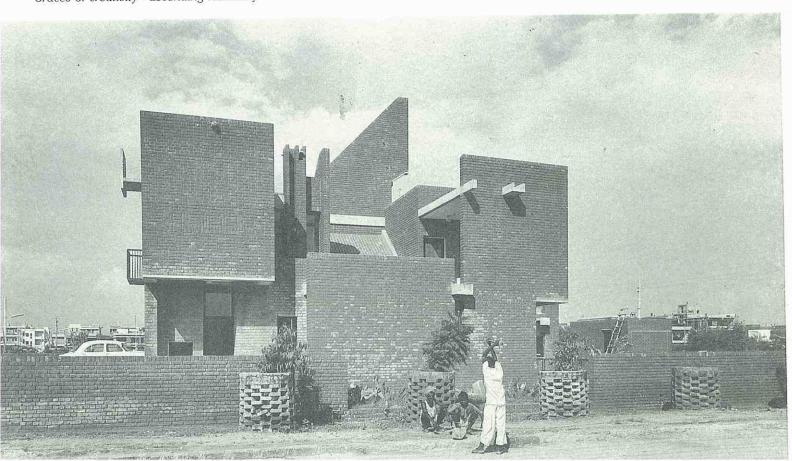
Instead of the usual safety grills which are heavy on the eye, a wooden sliding-folding device has been introduced. This also ensures sufficient shade in summer.



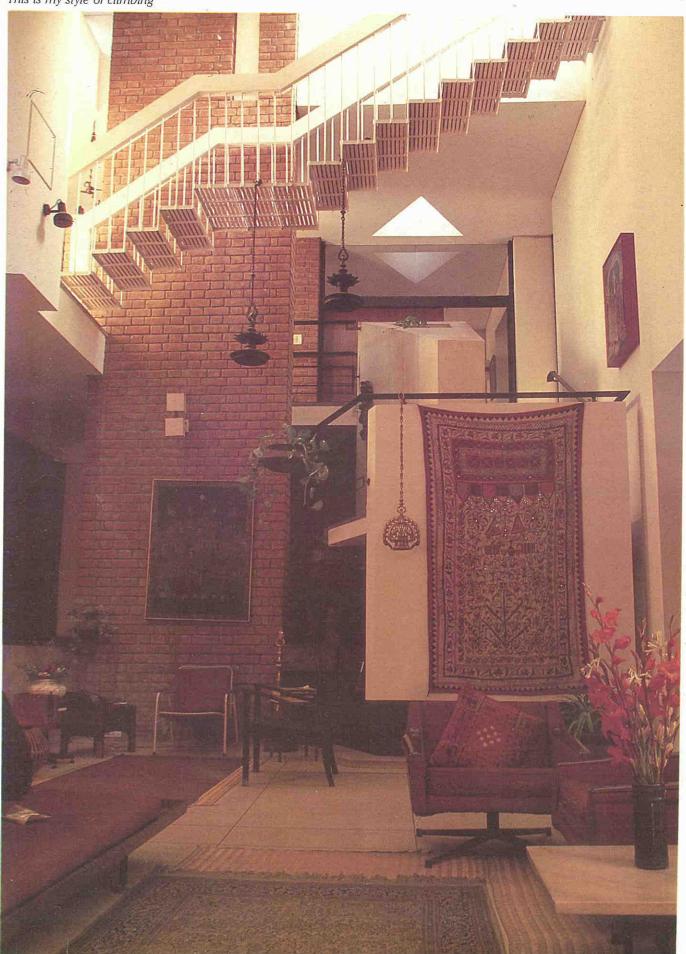


All's right and in place, God's in heaven and hey nonny nonny

Graces of creativity—ascending harmony



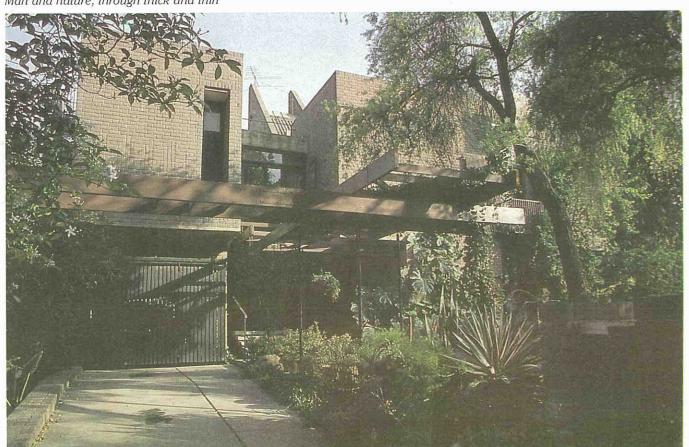
This is my style of climbing





More living, less of a room

Man and nature; through thick and thin



#### **Bold Splendour**

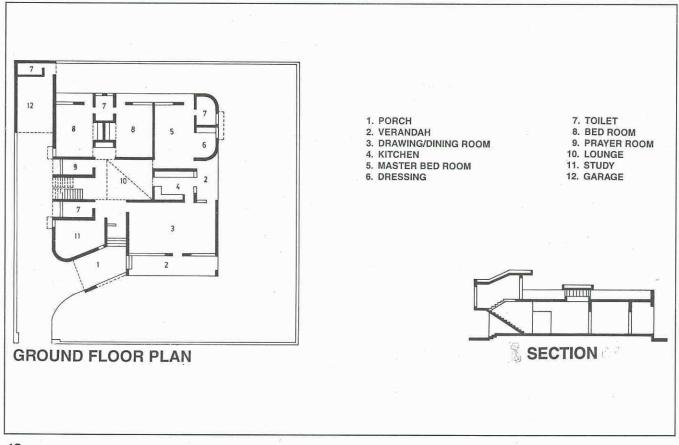
House for A.S. Chauhan, Paonta Sahib, Himachal Pradesh Architects: Saakaar Foundation, Chandigarh

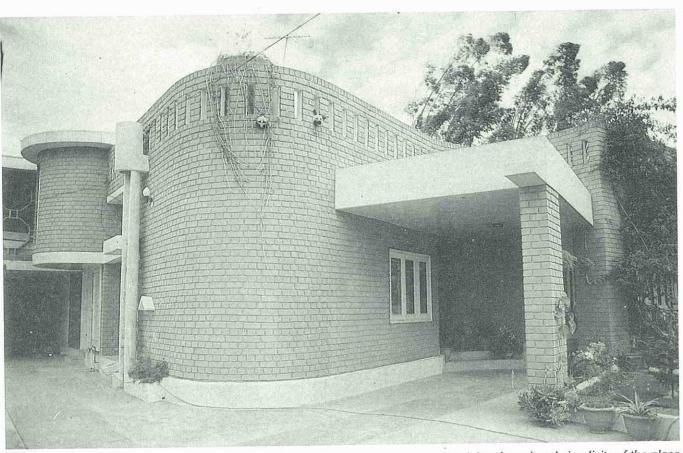
Paonta Sahib, a famous Sikh pilgrimage centre in the Sirmour District of Himachal Pradesh, is predominantly semiurban. About fifteen years ago, when A.S. Chauhan's house was constructed, development pressure on real estate in the town was much less as compared to other places. With his foresight, Chauhan bought this plot measuring approximately 625 square metres. On this unusually square-shaped site, he wanted a horizontally extending structure—simple, bold and elegant in its appeal.

In consonance with the owner's wish, the architects designed a sprawling single-storeyed villa with a planform which echoes the shape of the plot, leaving adequate open space all around. On the northern side, this space serves as a driveway while on the remaining three sides it is artistically landscaped with a lush green lawn adorned with colourful flowers. Besides offering a pleasant view, the lawn is ideal for large social gettogethers in the evenings.

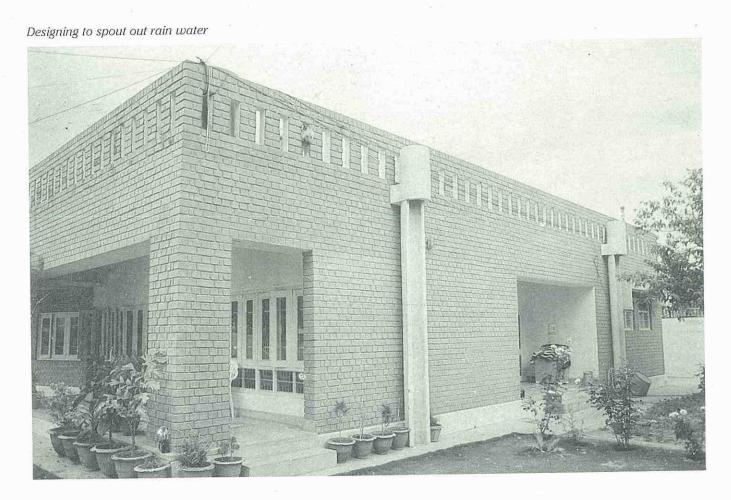
An obliquely placed porch defines the entrance to the house from where one can have direct access to the central lounge or to the drawing-room. All the sedentary areas are marked out around the lounge which has a high ceiling with clerestory windows. These provide sufficient cross-ventilation and natural light in the centre of the house. The staircase, which is a part of the lounge, acts as a channel for vertical circulation. Space in the lounge provides a play area for children and informal seating. The staircase block at the terrace level, together with stepped clerestories, balances the horizontal lines of the built-form.

Keeping in view climatic factors, all the external doors and windows are well protected by deep verandahs, roof overhangs or projections. The innovatively designed rain-water spouts and reinforced-concrete projections are plastered and painted off-white to avoid the monotony of large brick surfaces. Simplicity of form and elegance of detail contribute to the enduring freshness of its aesthetic appeal.





Retaining the cultural simplicity of the place



### Regal Elegance

The Joshis' House, Ahmedabad, Gujarat Architect: Anant Raje, Ahmedabad

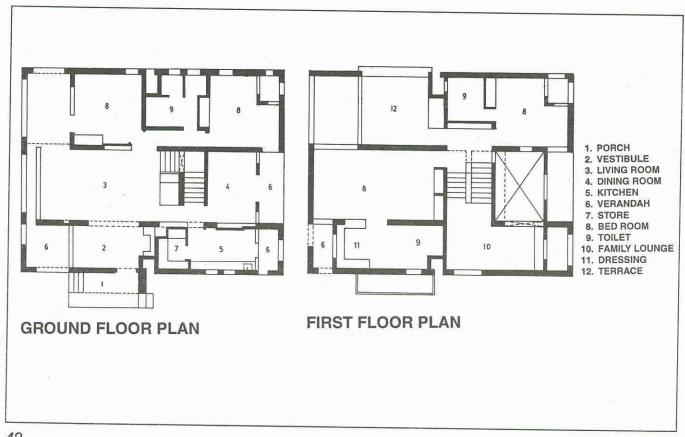
In designing private houses, it is well known that ultimately it is the will of the owner and not that of the architect which prevails. This is evident from the general trend in residential architecture today which reveals that most architects usually avoid imposing their pre-conceived ideas while designing a house and instead mould them in accordance with their client's wishes. If an architect possesses a strong design philosophy and firm conviction, he can persuade his client to appreciate and accept his ideas, as architect Anant Raje does. His ideas pertaining to climate control and use of materials in their true essence have matured over the last 20 years. Also enriched by having worked in close collaboration with the legendary architect Louis Kahn-a poet of light, Raje has had the opportunity to develop and crystallise his design style. He thus leaves his stamp on all his projects, as is evident from the design of the Joshis' house.

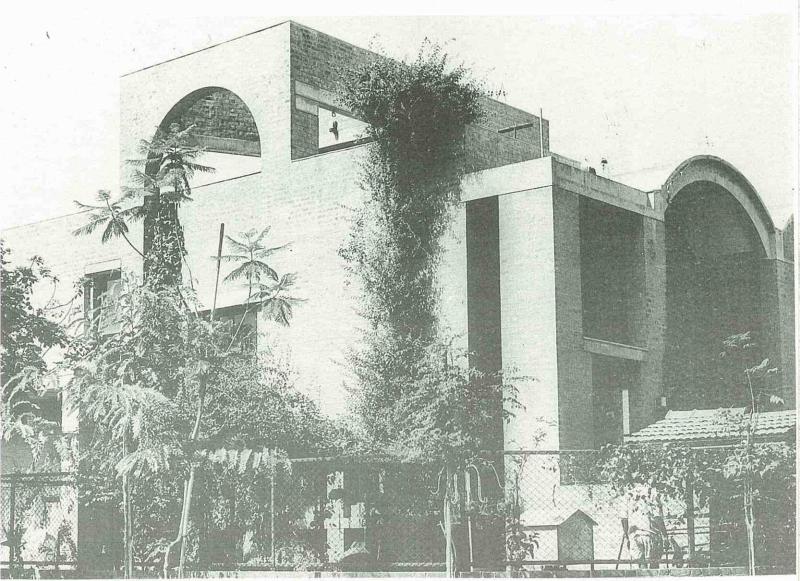
The house portrays an interesting range of the architect's design vocabulary which includes re-

cessed fenestration, light-wells and double-layered external walls—the inner wall for placing windows and the outer for protection from the sun.

The double-storeyed house is designed within a clearly defined rectangular formation with well-conceived solids and voids. In all, there are four bedrooms, a living-room, a dining-room, a kitchen and a family-room.

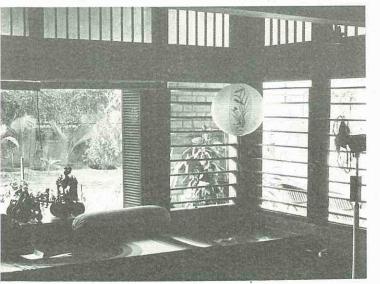
The structure comprises thick masonry walls which have been left unplastered to show the courses and bonding of bricks. All heights and details are based on a scale of brick course followed from the top of the house to the bottom. The concrete used in the building is also left unplastered displaying the form pattern. The floors are finished in polished stone. The vaulted roofs are provided with hollow terracotta tiles which ensure thermal insulation. These vaults are covered with white China mosaic to reflect the heat, thus, cooling the house in summer.



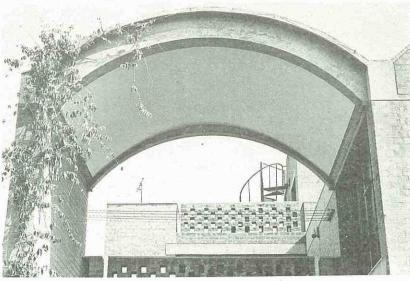


Bold visuals through nature

Detailing functional living



Living room befitting a Wordsworth



#### Tones in Brick

House for Kamal Mohan Singh, Chandigarh Architects: Designers Consortium Pvt Ltd, Chandigarh

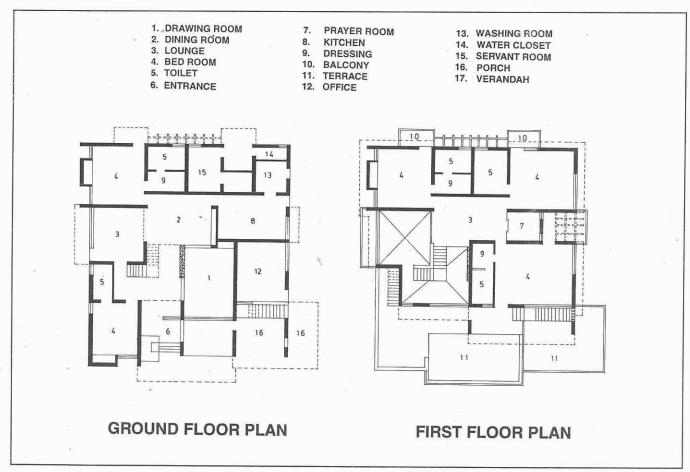
This structure is an interesting illustration of the effective use of machine-made brick as a structural component. Another striking feature is the play of vertical and horizontal planes as an element to demarcate the various levels.

The owner of this house, proprietor of a brick kiln, wanted to have a house which would reflect his personality subtly and graciously. The plan of this double-storeyed house consists of six bedrooms besides common areas which include a drawing-room, a TV lobby and a kitchen. There is a built-in provision of central aircooling of the common areas where window air-conditioners cannot be installed. The servant areas have been carefully segregated from the main house and have an independent access to the kitchen.

The design ideology of this house is based on an exclusive use of 'brick' as a module of construction. The outline of the building has been accentuated with the help of concrete bands. These create an interesting design and serve as an encircling parapet. In addition, these concrete bands not only provide a visual relief to the clean brick structure but also delineate the straight lines of the building truthfully.

The interiors are untouched by superfluous embellishments. A wall in natural stone masonry along the staircase provides a backdrop for artificially lit fibreglass-water sculpture. The landscaping all around this brick building is a statement in elegant simplicity.

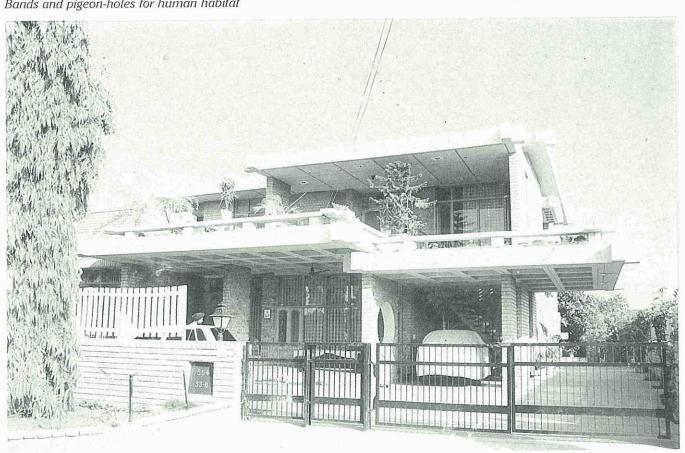
The owner's love for nature resulted in a landscaped terrace on the first floor. This south-east oriented terrace provides an alluring setting for alfresco meals.





Bricks not for sale, for own house

Bands and pigeon-holes for human habitat



### Octagonal Majesty

House for Jugal Arora, Amritsar, Punjab Architect: Dalbir Singh, Amritsar

This sculptured house octagonal in form with built-in planters and an earthy finish of machine-made brick-tiles is sited on a corner plot in the posh colony—Green Avenue—in Amritsar. Its bold massing and homogenous external finishing make it prominent amid its heterogenous surroundings. When completed in 1984, the house claimed to have created a new genre of expression in the city's residential architecture.

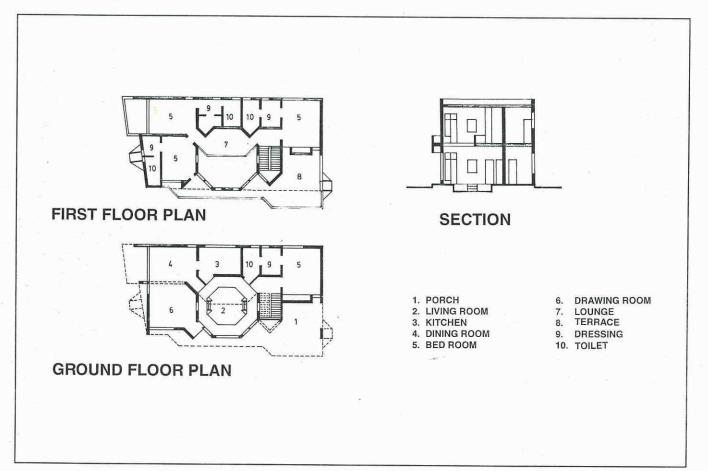
The ground floor has most of the functional units—an informal and formal family-sitting area, a dining-room, a kitchen and a master bedroom. This room overlooks the main gate. The dining-room opens into a comfortable sit-out facing the east where the family can have tea or breakfast in winter. The upper floor consists of a small lounge attached to three bedrooms for the children and guests, each with an independent dressing-room, a bathroom and a covered balcony. The family lounge, the heart of the house, is the focal point of

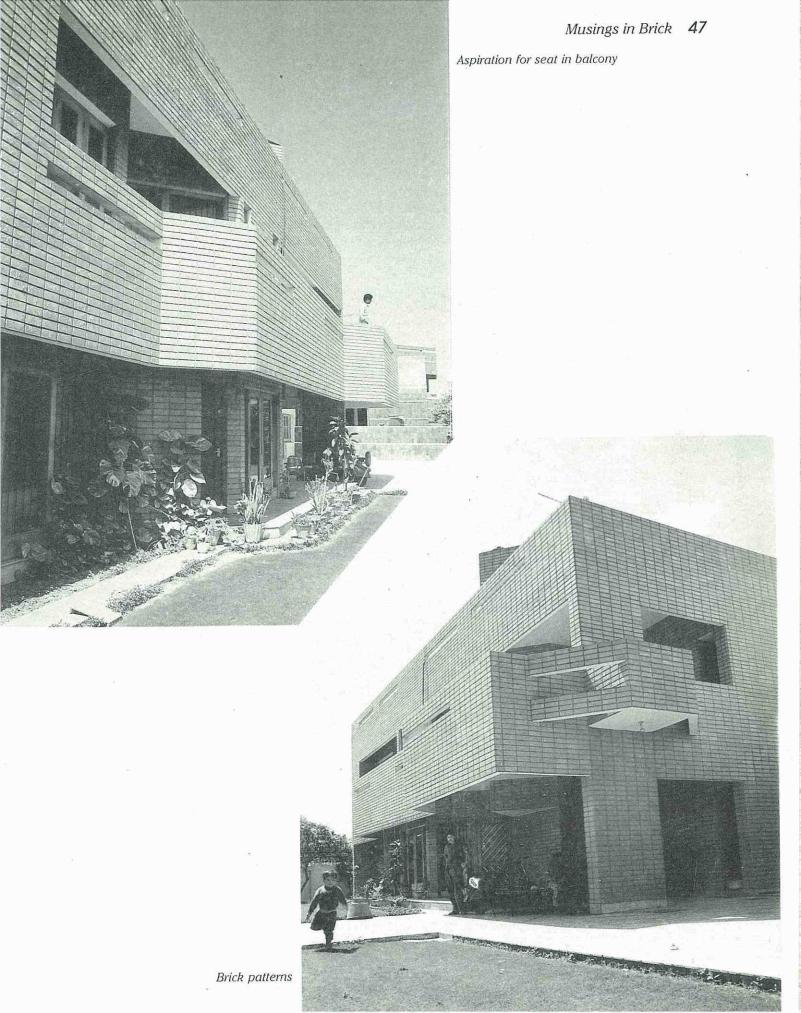
attraction with its double-height octagonal void space and a sunken sitting-room furnished with elegant marble side-tables.

On looking up one sees the hanging upper floor lobby, which facilitates communication between the two floors. Circular openings on two sides of the lounge create a see-through effect. While sitting in the drawing-room one can catch a glimpse of the family lounge and further down, of the staircase block.

Similarly, while going up or down the staircase, one can have a perspective of the lounge and the drawing-room. In fact no area in the house is isolated from the other areas of the house. This makes the house appear bigger and the inner space more fluid.

The off-white interior, the white marble flooring and the polished woodwork in a natural teak shade make an interesting blend of elegance and sophistication.





#### Brick by Brick

House for S.R. Das, Panchkula, Haryana *Architects:* Satnam Namita and Associates, Chandigarh

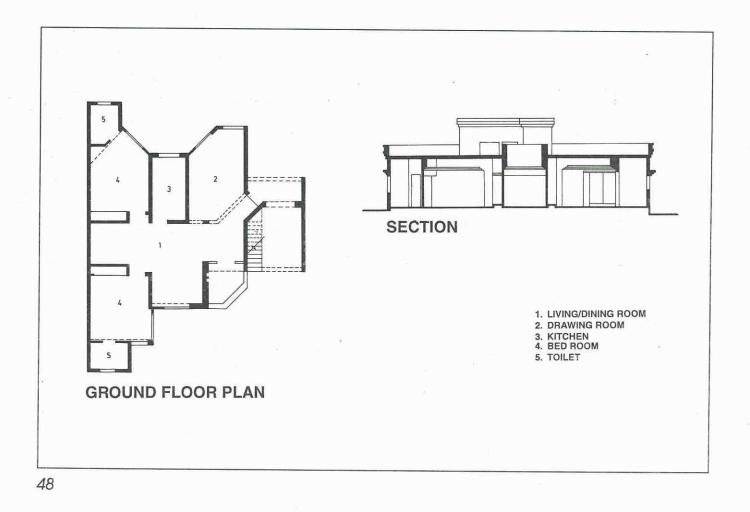
This low-height, sprawling house in Panchkula—a satellite town of Chandigarh—is representative of the architects' understanding of and response to contemporary urban living style in north India. The building expresses eloquently their concept that "a house should be designed for living in and not for looking at. A frilly structure and grand scale should not dominate the design of the house".<sup>21</sup>

Functional convenience and comfort have been the guiding principles in designing this house. Easy-to-live-with finishes have been used for the interiors and the exteriors instead of finishing them with expensive materials and ornamentation which bear no relation to the rooms within. The external aspect is the outcome of the architects' endeavour to work out elaborately the geometry of planes and bold masses; and to integrate organically the building material and the operative stages of construction with artistic expression. The

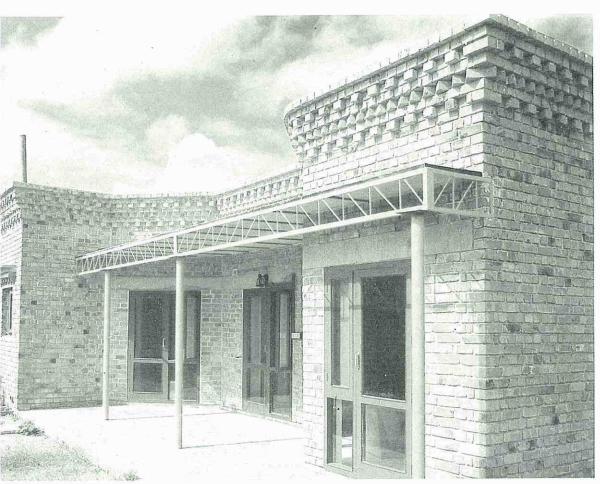
structural qualities of brick and the perspective they give to the walls, the parapet and different key elements like window projections, with slabs resting on them have been exploited to create an elegantly simple exterior. This treatment tones down the vigour of sharp edges and planes.

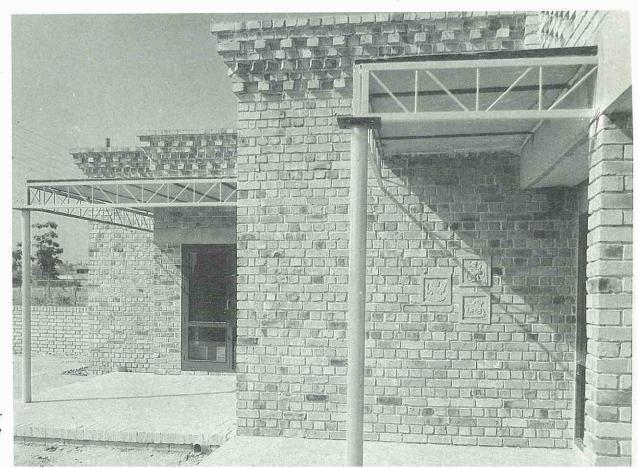
The interiors too are a study in textured tones of brick which blend the elements of construction and decoration.

The core of this two-bedroom house is a family lounge-cum-dining room which with its judicious and imaginative use of space accommodates many informal activities of the family. The architects felt that an isolated dining-room is a luxury because it would remain unused most of the time. To cater to the needs of day-to-day living, every inch of available space has been cleverly utilised by providing suitable cabinets and shelves for different purposes.



Coeducation of the old and the new





Burning bricks for innovative texture

#### A Simple Poem

House for S.S. Sahota, Chandigarh *Architects:* Saakaar Foundation, Chandigarh

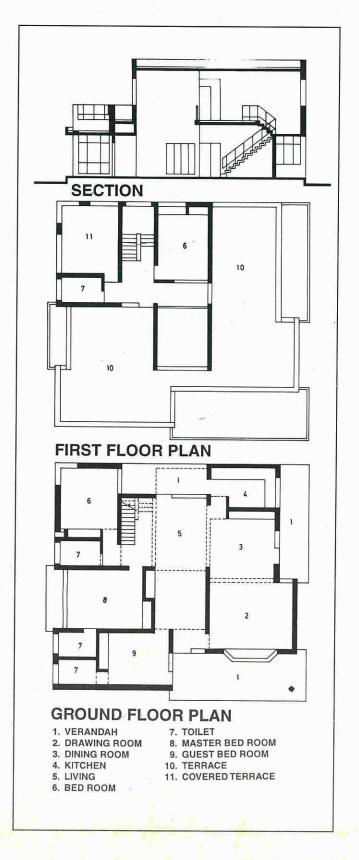
The owner of this house is a retired army officer with a rural background. He wanted his house to be spacious and functionally adequate inside, and unadorned with sparse lines on the outside. In compliance with his wishes, the architects designed this double-storeyed house without any superfluous architectural features on the external facades. In contrast to the stark external hues, the internal ambience reflects comfort and elegance of living.

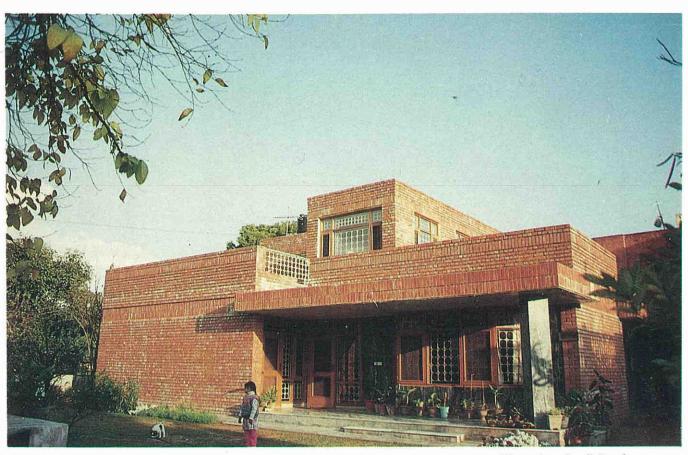
This 836-square-metre corner plot enjoys a vast open space in the form of a community park on its left against the backdrop of the Shivalik Hills. The basic design carves out three distinct, well-articulated activity zones—formal, informal and private. The informal family area is flanked by a formal drawing-cum-dining space on the right and personal living space on the left.

An internal staircase from the living area leads one to the upper level which comprises a study, a toilet and a covered deck from where one has a spectacular view of the Shivalik Hills. A sense of spacious unity is obtained by allowing space to flow freely both horizontally and vertically. The living area links the two levels through a double-height space which offers a view of the main entrance.

Deep verandahs with low roof protect fenestration from hostile weather and create a variety of spaces while serving as connectors between indoor and outdoor areas. Solid surfaces, thick masonry walls, minimum openings ensuring natural light and crossventilation, are the necessary elements which create a comfortable indoor environment and conserve energy.

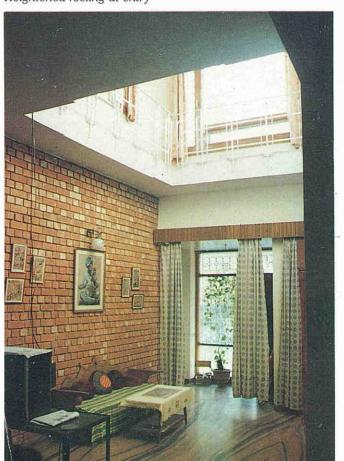
A contextual relationship with French architect Pierre Jeanneret's work which is in the vicinity is established by using machine-cut exposed brick faces. Reinforced-concrete components on the external facades clad with recessed brick tiles unite the entire brick-faced exterior. Keeping the bricks untouched resulted in saving in the initial cost of plastering and finishing and the recurring cost of external maintenance. Plastered, white-washed interiors enhance illumination and complement the marble flooring.





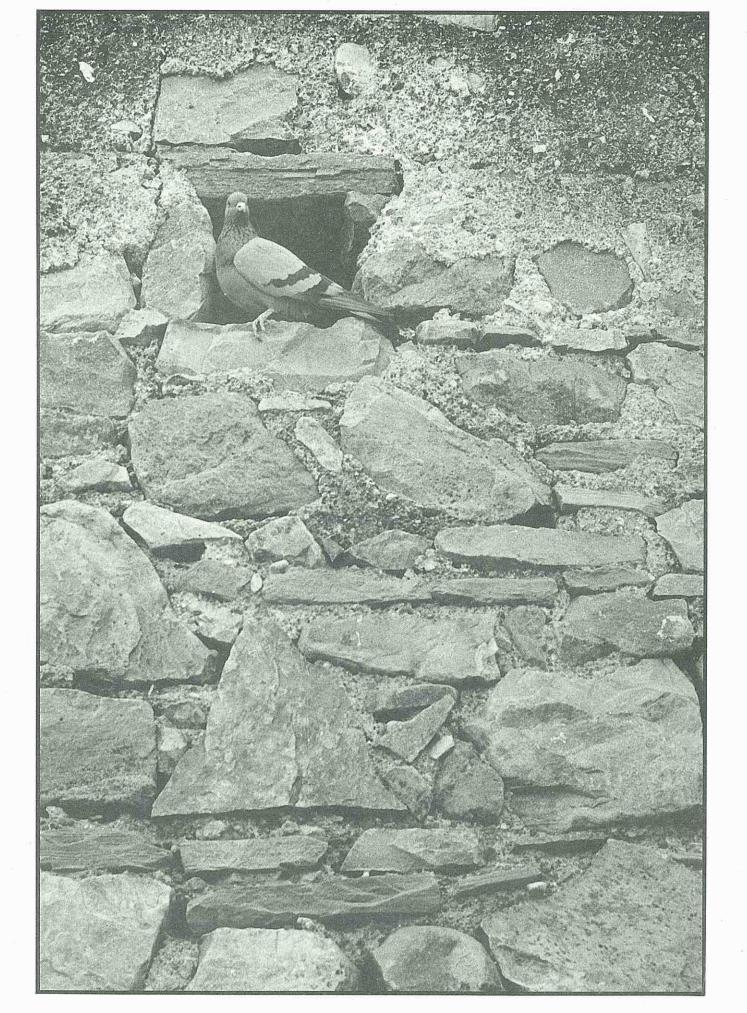
Disarming simplicity of armyman

Heightened feeling at entry



When man peeps out, nature peeps in





# Poetry of Stone

Ever since man has wanted for an enduring shelter, he has used stone as a building material. From the days of cave shelters to the present-day posh bungalows, stone has always been used in one way or another. However, its mode of application has changed in different eras and different regions depending upon its availability and craftsmanship. The use of stone in loadbearing walls predominated its other applications as in lintels, beams and slabs, to name a few of them. In the earlier versions of load-bearing stone was generally used in random rubble courses. The heavy thickness of such walls and shrinking space for housing lots reduced the popularity of random rubble masonry. This gave way to the dressed-stone masonry walls. These walls have an edge over the random rubble masonry ones because of their reduced thickness, uniformity and use of less cement mortar. The diminishing resources of good quality stone, the tremendous labour required for dressing it and the slow construction process, however, were some of the factors which marginalised the use of dressedstone masonry. In spite of this, stone has remained an all-time favourite of architects and builders because of its positive qualities like, durability, protection against inclement weather, minimum maintenance, natural and soothing colours and textures. Nowadays, due to mechanisation and use of rapid and efficient transportation systems, the use of stone has become universally popular and resulted in development of new techniques of dressing as well as application. The last decade has witnessed a growing trend in the use of stone as a surface veneer both on the exterior as well as in the interior. The availability of numerous varieties of factory-cut stone tiles has increased its demand. These tiles are easy to handle because they are small and less thick besides possessing the same characteristics as natural stone. If used with ingenuity, keeping in mind its advantages and limitations, such finishes are capable of re-establishing the ancient glories of Indian architecture.

#### A Turreted Dream in Stone

House for Savita and Satish Gopi, Pune, Maharashtra *Architect:* Shirish Beri, Kolhapur

At first glance the plan-form of this house seems to be unusual, but on a closer look it reveals itself to be a befitting synthesis of the specific requirements of its owners. The Gopis longed for a spacious house with a feeling of openness and space around it. The limited size of the plot (18 m  $\times$  30 m) and a long list of requirements like four large bedrooms, a study, a family-room, verandahs, a garage and a servant's room made the architect's task a challenging one.

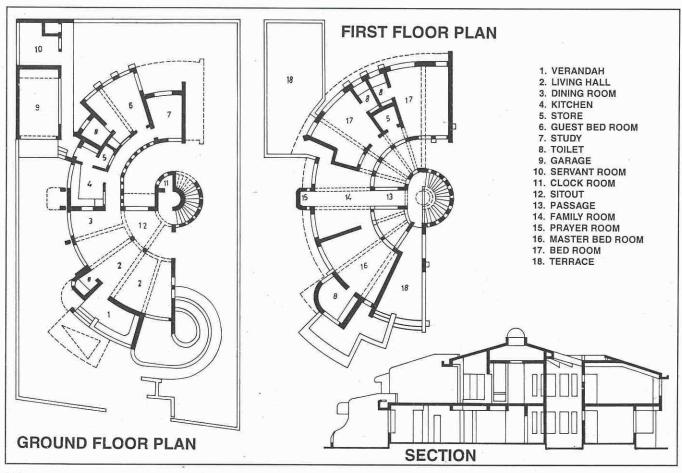
To arrive at an optimal solution, the architect changed the shape of the house to create larger non-monotonous residual set-back spaces and allowed these open spaces to penetrate further into the house structure. As a result, larger and more meaningful spaces both inside and outside the house are obtained instead of long, narrow, open spaces on all sides.

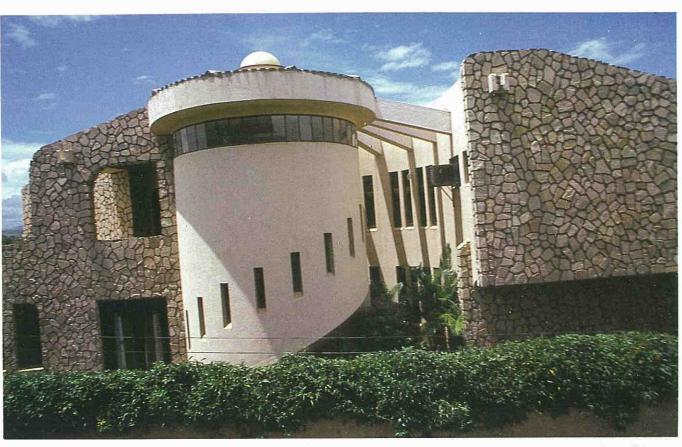
The space within the house is extendable, thus creating a more spacious feeling. For instance, both

the living and dining-rooms stretch into the vestibule which further extends into the garden on two sides. The main lines of the house revolve around an independent staircase tower which also contains a water tank and skylight on the top. The in-between open-to-sky portion ensures effective cross-ventilation.

The overall building form in elevation respects the plan-form. The external finishes of the walls have a certain formal clarity, for example, the external radial walls have stone cladding whereas the circumferential surfaces have plaster and paint. The stone cladding makes for easy maintenance and also highlights the spiral form of the staircase.

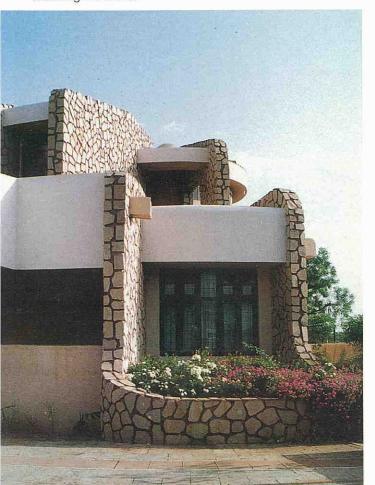
In the whole house there is a feeling of interrelatedness and communicability because of the interplay and interflow of spaces. This also helps in creating warm and creative family bonds.



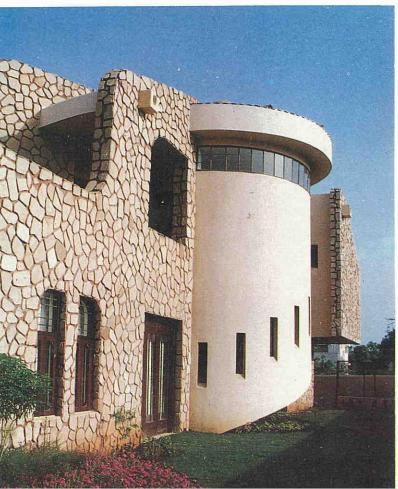


Rounding off beauty

Stunning the stones



Spout for pipe, smooth for hype



#### Sprawling Grandeur

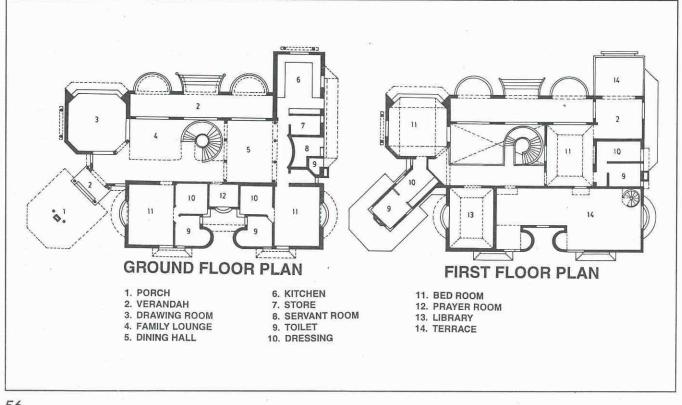
House for Kaushal and Yamuna Dutt Aggarwal, Ahmedabad, Gujarat Architects: Kulbhushan Jain and Minakshi Jain, Ahmedabad

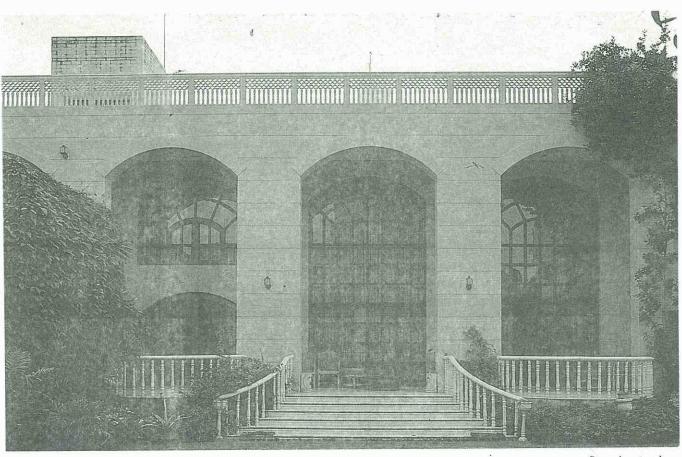
The urban elite in general want their houses to reflect not only their social status but also be visually expressive symbols of their personalities and life-styles. This factor is responsible for bringing in elements of individuality and variety in the house designs. The basic requirements, however, remain almost the same.

The Aggarwals are an affluent family of Ahmedabad. They wanted their house to have an imposing presence, though this was not going to meet any tangible needs. In the absence of financial constraints, the architects had more freedom to express their creativity. They tried out eclectic compositions with interesting resultant effects.

The approach was determined by the concept of a central family area from where each and every space in the house would be visible. This double-height space provides visual access to the first floor. A spiral staircase separates the family area from that of the diningroom. The main entrance to the house has been made strikingly inviting by providing a spacious porch opening into a vestibule. From this entrance, one steps directly into the heart of the house. All the other areas of the house, including the formal drawing-room, are accessible from this central area.

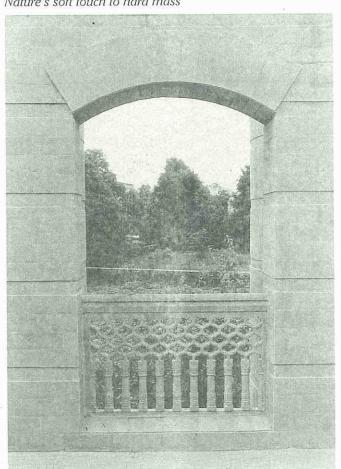
The house is so designed and sited as to leave sufficient land on the east for a garden. The wellmanicured lawn and carefully selected, imaginatively placed plants provide a sylvan setting for the built-form. Visual communication between the garden and the common indoor areas has been magnified by providing wide double-height openings in the eastern facade. A large verandah on this side not only acts as a transitional space between indoor and outdoor areas, but also protects the fenestration from the vagaries of weather. An enclosed terrace on the first floor is used for outdoor family activities at this level.



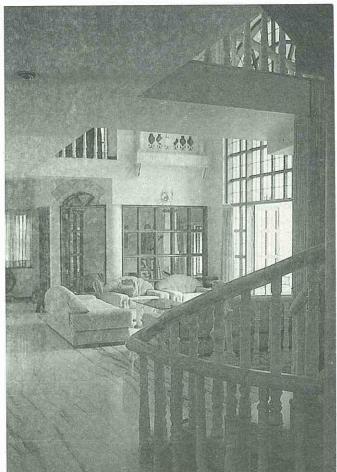


Stepping to glory

Nature's soft touch to hard mass



Lounge befitting a Lady of Shallot for full view



#### Cloistered Quiet

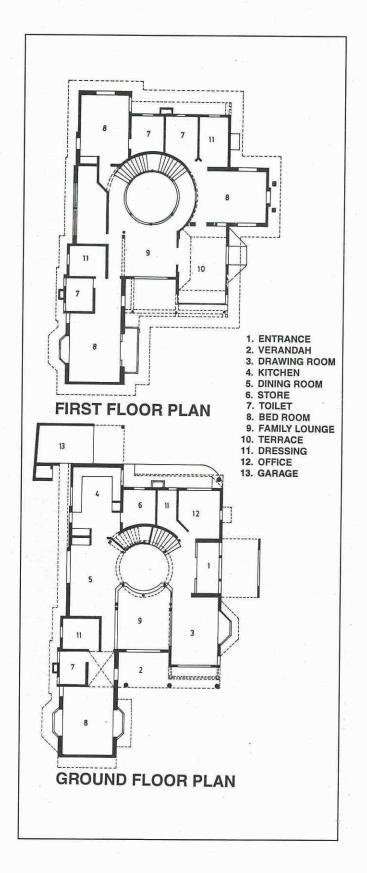
House for Hira Chand Jain, Ahmedabad, Gujarat *Architects:* Kulbhushan Jain and Minakshi Jain, Ahmedabad

The husband-wife architect team of Kulbhushan Jain and Minakshi Jain designed this house for a small family, formerly from Jodhpur and now settled in Ahmedabad. Because of his background and association with Rajasthan in general and the city of Jodhpur in particular, Hira Chand Jain wanted his house to be a modern version of a typical Rajasthani *haveli* in Jodhpur stone. Taking the owner's requirements into consideration, the architects incorporated a slanting *chhajja* which runs all around the building at roof level in addition to meticulously detailed bay windows.

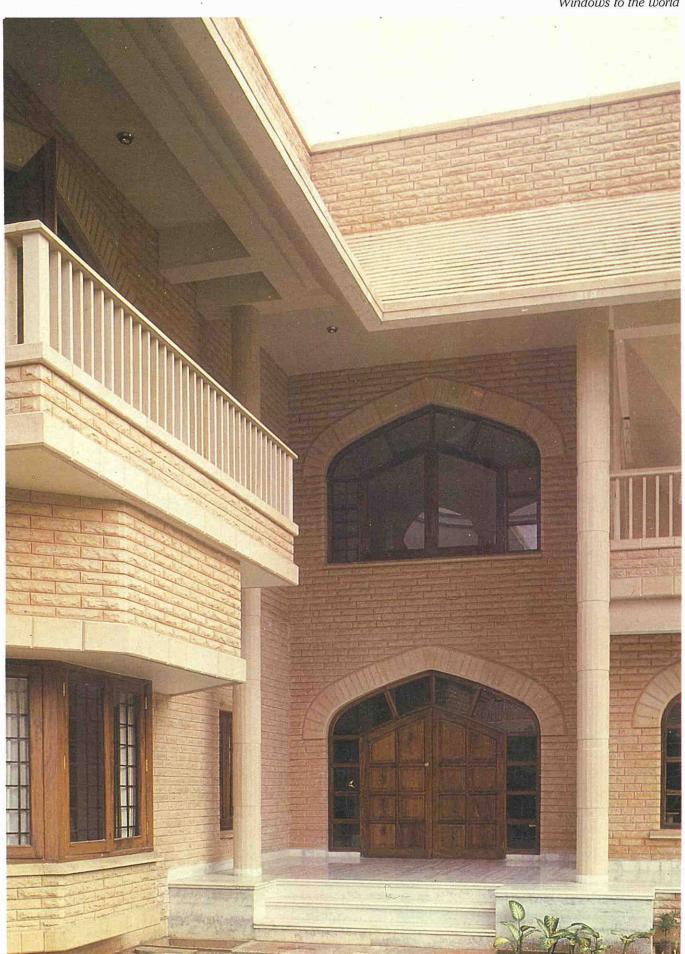
The unusual siting of the plot with the longer side abutting on the approach road offered ample opportunity for the architects to express the range of their creativity. The simplicity and the clarity of structure has resulted in a pleasant retreat from the complexities of conventional urban forms. The visual impact of the stone set in luxuriant greenery speaks volumes for the imaginative handling of texture, colour, materials and space by the architects.

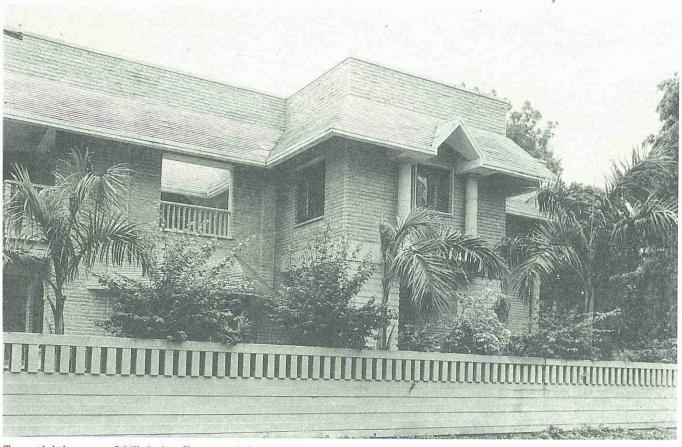
The two-level structure accommodates a porchcum-entrance, a vestibule, a drawing-room, a diningroom, a kitchen, a bedroom, a family-room, an office and a garage on the ground floor, while the first floor houses three more bedrooms and a lounge. This lounge opens onto a semi-covered terrace from where one can enjoy the perspective of the landscaped courtyard. To ensure privacy, the side facing the road is partially enclosed.

The core of the house is conceived as the focal point. An extra dimension has been added to this central space by shaping it round. It links all spaces of the house horizontally as well as vertically. The staircase is also woven into this area and forms an important element of the house. Tudor arches, an aesthetic option, have been used to span the openings as well as to define the central space. The crystallisation of the blueprint in the natural spontaneity of stone is the result of an extraordinary client-architect relationship based on coordination, understanding and shared vision.

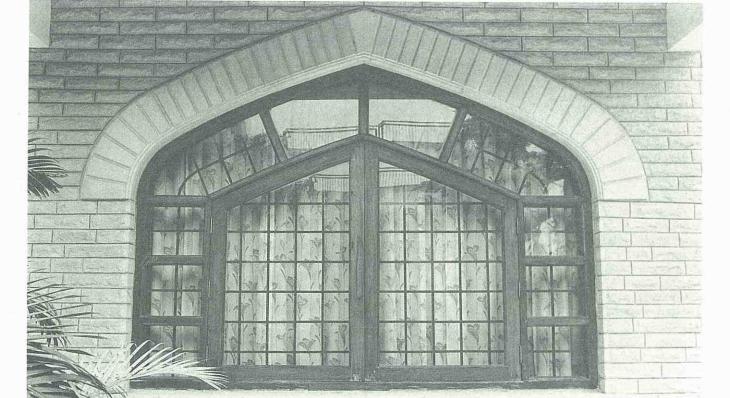


Windows to the world





Torrential downpour? It'll drain off cats and dogs quietly

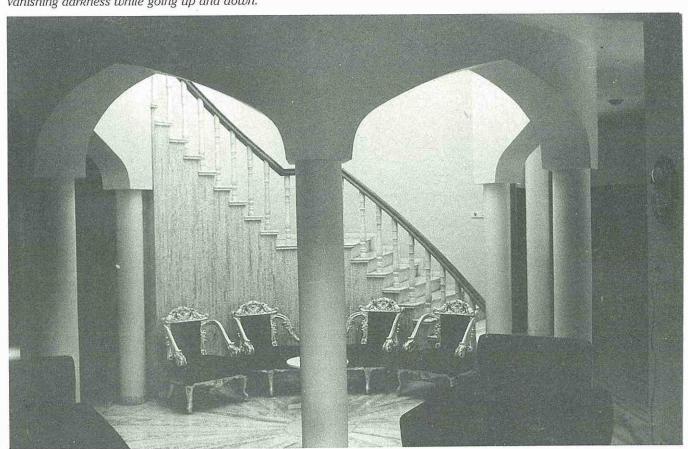


Dressing the windows with imagination



Arches reminding of Mughal-e-Azam

Vanishing darkness while going up and down.



# Stone Symphony

House for R.P. Pathak, Panchkula, Haryana *Architects:* Gurdev Group of Architects, Chandigarh

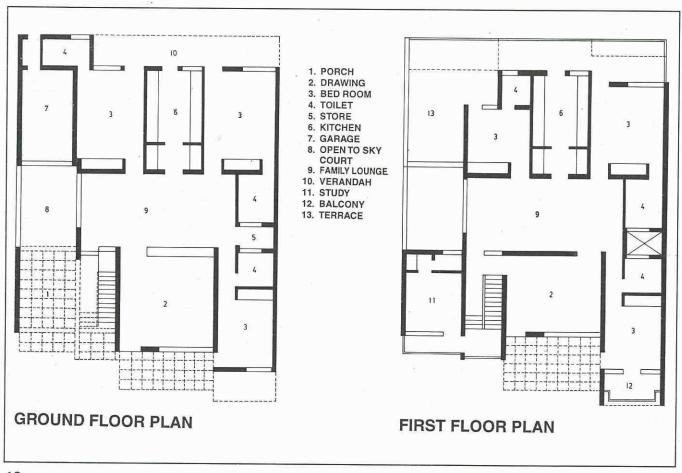
With rapid westernisation of the Indian society, house designs too have witnessed a remarkable change in recent times. The introverted personality of old Indian homes has more or less vanished from the urban scene. The majority of present-day houses are extrovert in nature and have imposing exteriors with lavish and, of course, more enduring finishes. Stone cladding in various forms has become the fashion rather than the symbol of affluence amongst the upper strata of society. R.P. Pathak's house in Sector-12, Panchkula, represents a growing number of such houses. The dominating facade with wide openings and massive surfaces finished in butch-work of Dholpur stone expresses characteristically the changing face of society.

The conglomeration of well-conceived protrusions and recessions in the elevation gives the illusion of a wide frontage. The overall external expression is a pleasant blend of horizontal as well as vertical massing. Wide circular openings in the vertical staircase block attract attention which together with other ele-

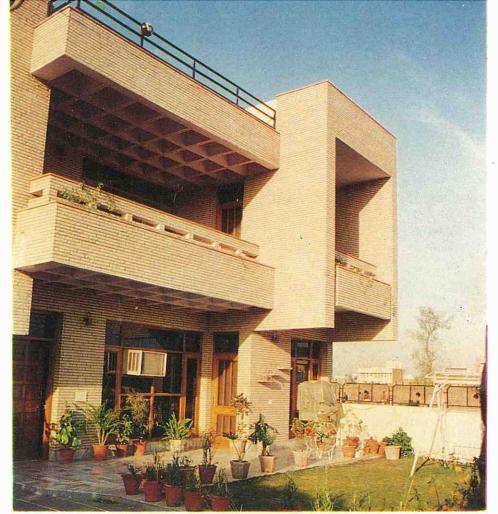
ments of the facade give the house a striking and imposing appearance whereby making it a focus of appreciative comment in the locality.

The two-storey house has been designed primarily to accommodate and serve two families — the owner on the ground floor and a tenant on the upper floor. If need be, the upper floor can be connected to the lower floor by means of a strategically situated staircase.

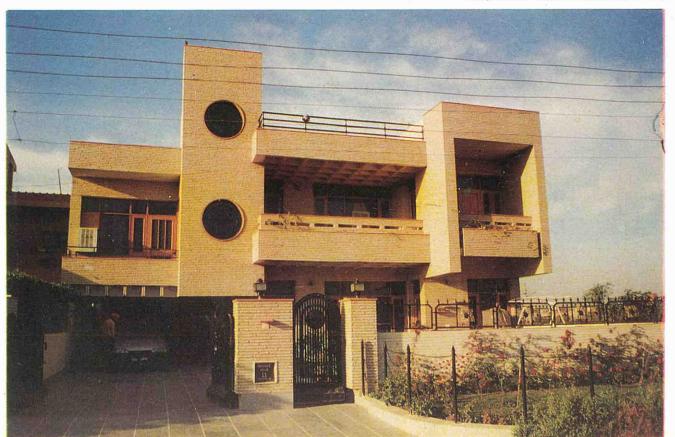
The ground floor accommodates three bedrooms, a drawing-room, a family lounge, a kitchen, and a car porch. On the first floor there are three additional bedrooms, a study, another drawing-room and also a lounge. All the rooms have been provided with either a covered balcony or terrace which functions as an outdoor sit-out. To ensure wider windows in the rooms, toilets are set back from the external walls and are ventilated through a duct. The structure system employed is the conventional type with load-bearing brick-masonry walls and reinforced-concrete slabs.



Like blocking the actors



Respect for line, mass, coffers and all



### **Exquisite Restoration**

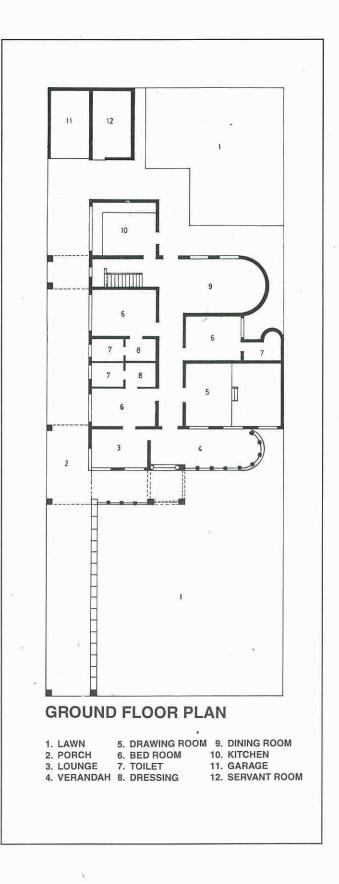
House for Badri Nath, Amritsar, Punjab *Architect:* Dalbir Singh, Amritsar

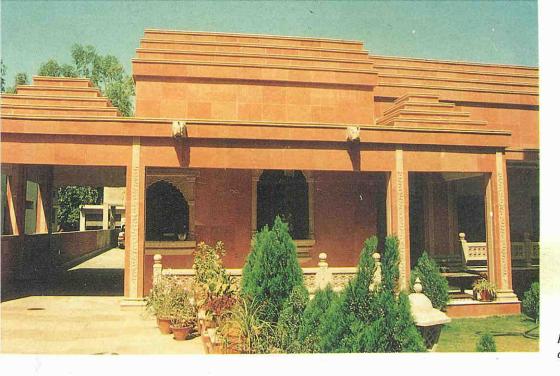
Walking along the famous Circular Road one suddenly comes across a majestic steel gate flanked by two pillars with lanterns in sandstone. Looking across the gate, one catches a glimpse of low house clad in plain Agra stone and carved Dholpur stone. A few years ago this was a non-descript house with a central corridor and rows of multifunctional rooms along it. The transformation of this old house reveals the creative genius of the architect and the vision of the owner.

The driveway has been worked out meticulously with flooring in red and buff colour sandstone slabs. The boundary wall on the left has a combination of Agra stone with panels of carved Dholpur stone. The right edge of the driveway has been marked with built-in planters of varying heights. The first encounter with the built-form is through an attractively designed car porch with a pyramidal roof and flower-patterned floor. A corner window with stone carving in the Jaipur style, the walkway to the entrance with a stone *jaali* on right side, the entrance canopy with four stone pillars, and a pyramidal roof-exude the captivating charm of a traditional Indian welcome. The raised front verandah reminds one of the *otla* of old Indian houses.

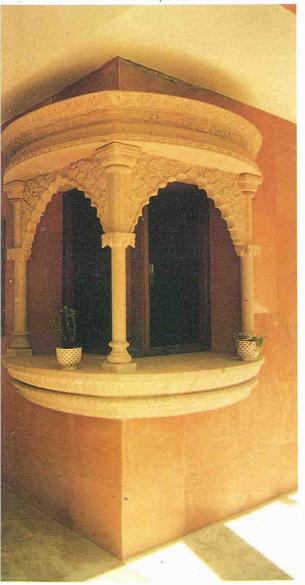
An antique wooden door leads to the central corridor which is now a distinguishing feature of the house. It has a high ceiling with stained glass windows at both ends, antique hanging lights and mirror frames. All the rooms flanking this corridor have been renovated in accordance with the needs of the family. Of these, the drawing-room has been exquisitely decorated in a combination of contemporary and period design.

The front lawn cherishes an old cypress tree to balance the built-form. Lanterns in stone illuminate the lawn at night, and act as decorative elements during the day.





Pharaohs' pyramids can also be for living





Sculpture of architecture: A jealous sentinel guarding entrance

### Textures in White

House for H.S. Ahluwalia, Chandigarh *Architects:* Designers Consortium Pvt Ltd, Chandigarh

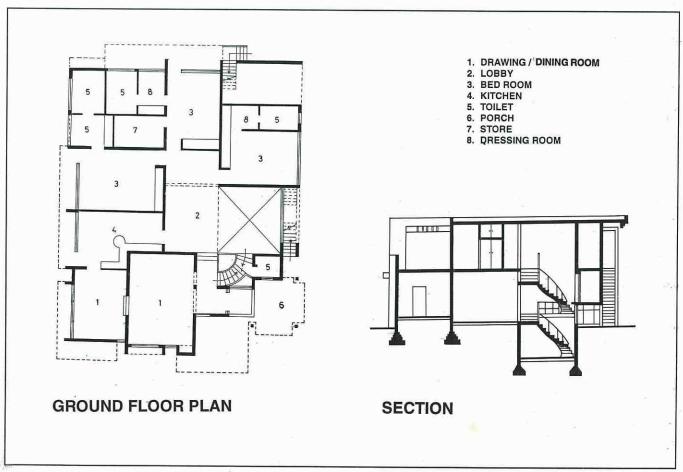
The only demand of a coal merchant owner about his dream house was that it should be stark white and distinctly individual in its external expression. Hence the architects chose marble as the most aesthetic and suitable material.

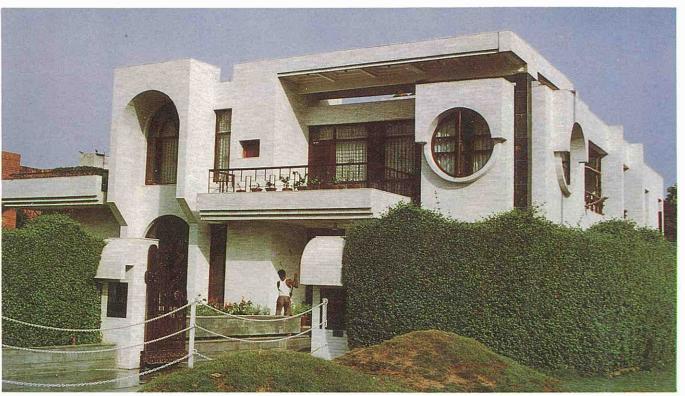
The house was designed in bold lines cleverly using architectural elements to give it a grand presence. This dream home is built on a corner plot with a south-east orientation lending a pleasant aspect to the terraces and the landscaped lawn in the front which are used frequently. The side-entry to the plot serves as a secondary entrance and is used exclusively by the first floor tenant.

A small basement, the ground floor and part of the first floor are used by the owner whereas the rest of the first floor has been constructed with the aim of renting it out. The inside of the house is luxuriously done up in marble with *shisham* wood joinery and speaks of the

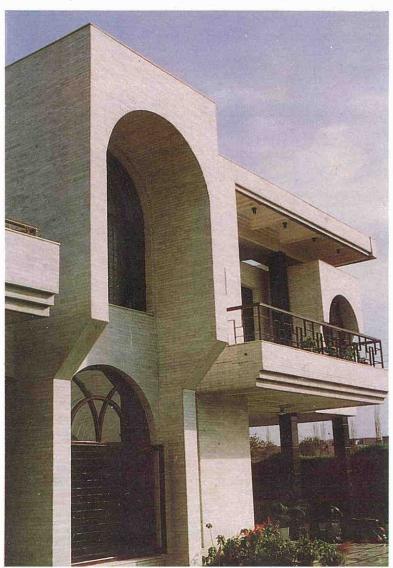
meticulous detailing of the interior spaces. The addition of textured materials on some of the walls give necessary relief. The trellis work done in the stairhall windows and wall cabinets contributes to the visual charm.

No special insulation was required to keep out the summer sun because the marble tile cladding takes care of the scorching summer heat to a large extent. The terraces have been whitewashed to increase the coefficient of reflection. A central air-cooling system helps in providing comfort without disturbing the aesthetics of the house. The solar water-heating system provides hot water to the kitchen. An electric geyser was installed for the bathrooms because in order to ensure a steady supply of hot water a very big solar water heating system is needed, the efficiency remaining limited.





Creative coexistence of arches and circles



Regal marble spelling expressive contrasts

### Space Continuum

House for Karnail Singh, SAS Nagar, Punjab *Architects:* Saakaar Foundation, Chandigarh

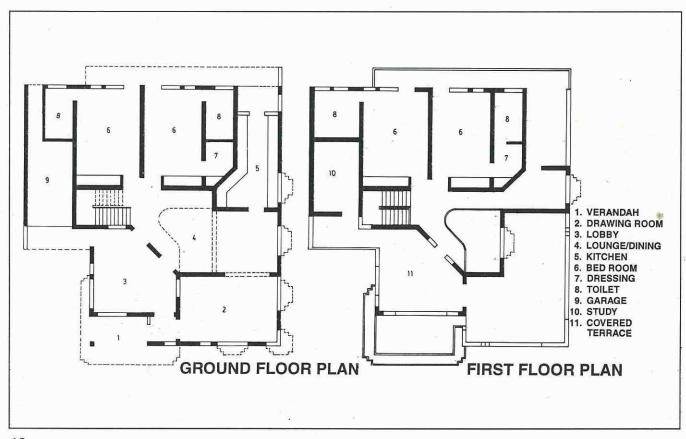
Sahibzada Ajit Singh (SAS) Nagar, an emergent electronics town of Punjab and an industrial satellite of Chandigarh, has been planned in continuum with the grid-iron pattern of the City Beautiful. To maintain visual continuity, Chandigarh's stringent building byelaws are strictly enforced. As a result, local architects feel constrained in expressing their creative genius and this in turn tempts them to violate regulations. However, Karnail Singh's house designed by Saakaar Foundation proves that creative design can express itself within the confines of the bye-laws.

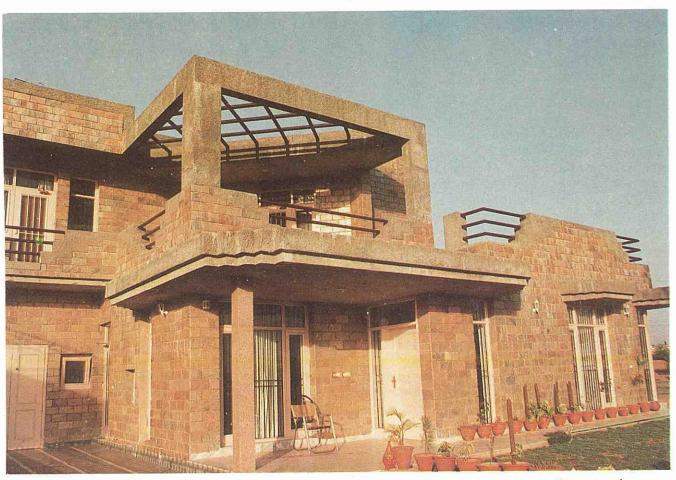
The owner, a renowned Punjabi scholar, wanted his house to be as spacious as possible keeping well within the prevalent building regulations and the constraints of a limited budget. The corner site has a vast open space in the front and on one side in the form of a community green. The duplex house has been designed to cater to household needs and functions as well as the owner's social activities. The public zone has received special attention. It is an interlocking of

sequential spaces which are arranged in a hierarchical order—formal, semiformal and informal.

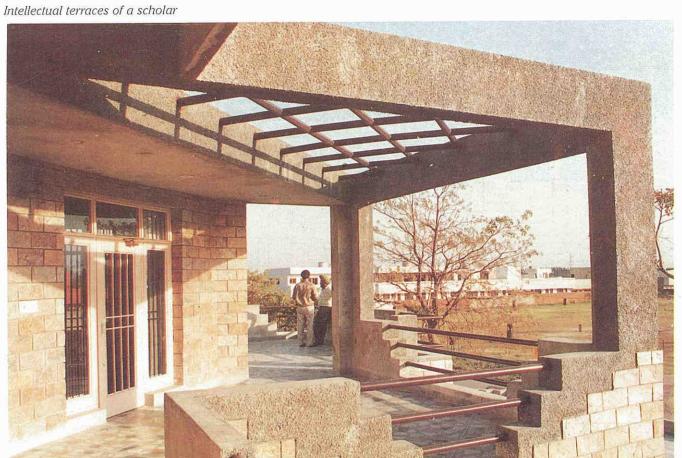
The house is entered through a deep verandah which leads to a small lobby reminiscent of the *deori* of traditional Indian homes. From this *deori*, the hosts can take their guests either to the formal drawing-room or to the semiformal lounge, thus avoiding an awkward situation of "wait for a minute, I will open the other door". Further on, the drawing-room opens into the intimate dining-room, and the semi-formal lounge changes tone as it extends through arched openings into the double-height informal family living area. Other utility areas have been vertically stacked to make optimal use of available space.

On the outside, the house is elegant in form and has a subtle geometry of structure. The tubular pergola, parapets, window projections and a golden slate and rough cast concrete finish are designed to adorn the structure and lend it an appearance of a modern villa.





Romance of economy



# Contextual Creativity

House for Ashwinbhai Doshi, Wankaner, Gujarat Architect: Kishore Trivedi, Rajkot

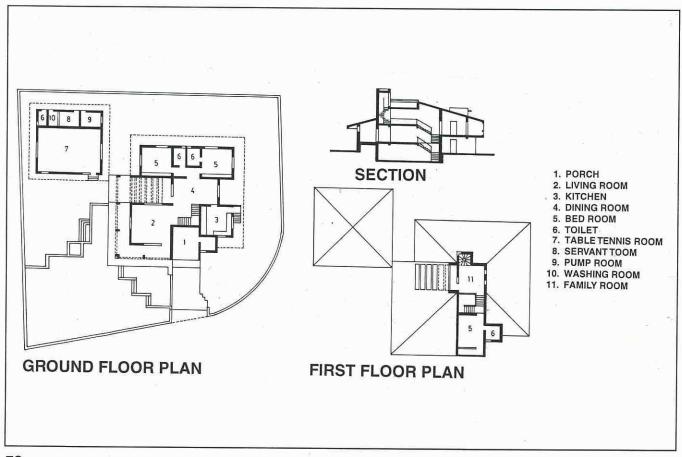
This house is situated at Wankaner, a town in the Saurashtra region of Gujarat. Designed for a Bombay-based businessman originally hailing from Wankaner, it was conceptualised as a vacation house to serve the dual purpose of a pleasing retreat and a base for philanthropic activity.

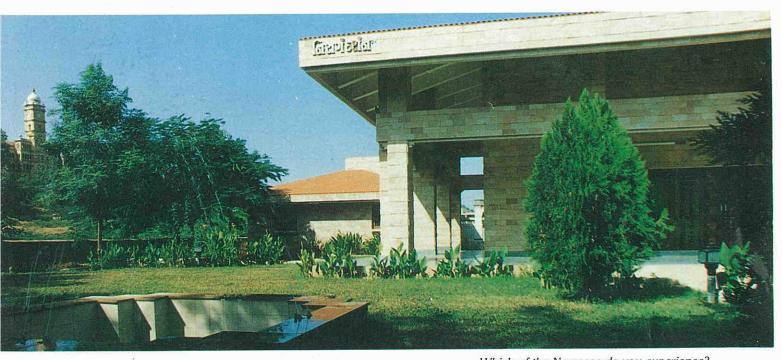
The site itself offered a host of advantages. Located in an oasis in an otherwise dry region, with the majestic Wankaner Palace adorning a hillock in the background give it an undeniable charm. The local architectural language of stone construction, sloping roofs, low profiles and a strong horizontality dominated Trivedi's vocabulary and helped evolve a pleasing functional retreat with recreational spaces, both inside and outside the house.

The semicovered spaces are more often used than the living areas inside, the latter being reserved for more private activities. The large verandah and the courtyard surrounding the living area meet the need of semi-private activities. The pergolas over the courtyard screen the house from direct sunlight, creating crisp shadows, and the wind passing through the garden is further cooled in the verandah, which in turn cools the interior of the house.

Tying up volumes on the exterior, the double-height sloping roof gives a unified character to the whole structure. The usual problem of such a roof appearing too heavy and out of proportion is avoided by breaking down the scale on the outside by a horizontal band, which also acts as a sunbreaker.

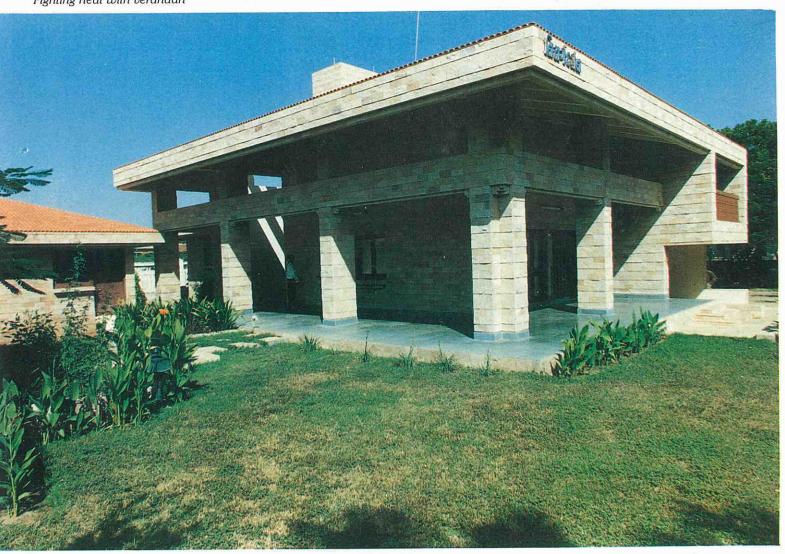
The simple form unfolds itself as one goes around the site and into the house, offering varied levels of experience. It is a form which utilises the local language, improvises upon the same and manifests it more clearly, true to its temporal and spatial context.

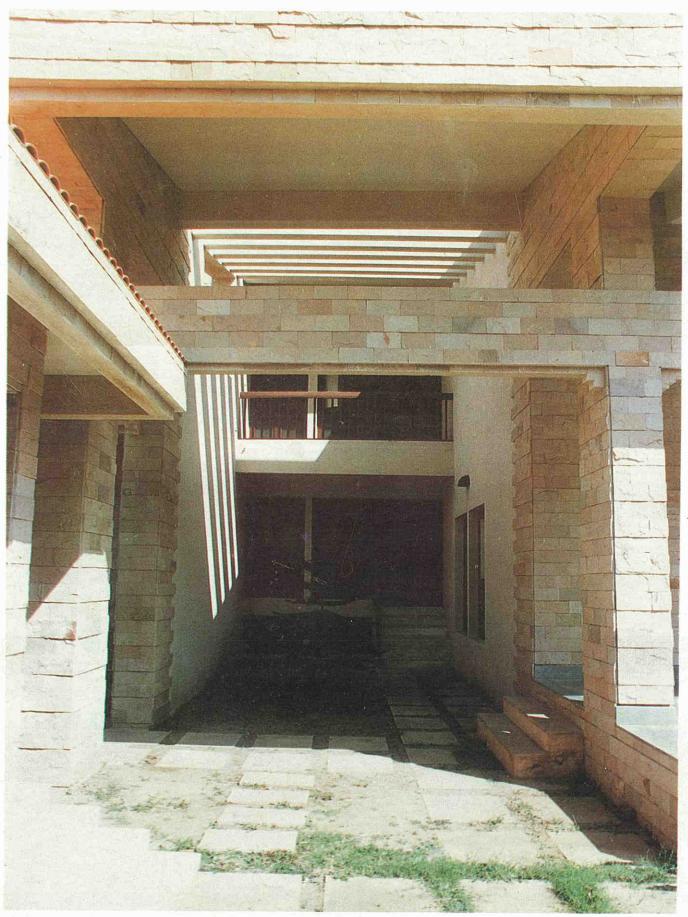




Which of the Navrasas do you experience?

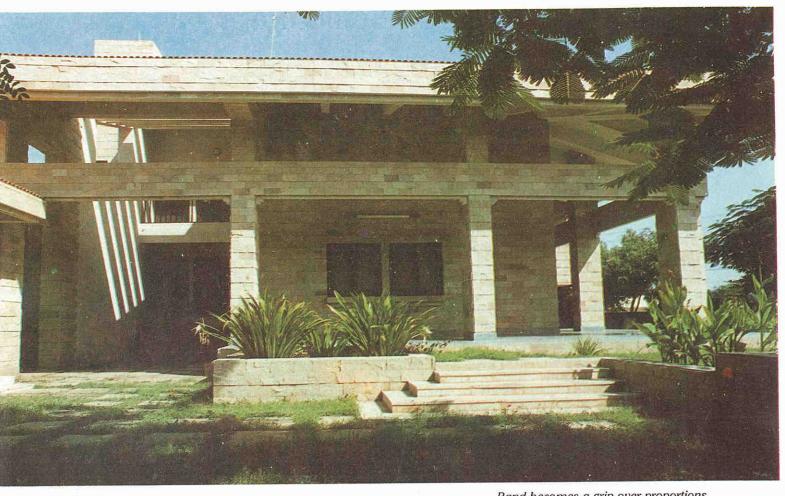
Fighting heat with verandah



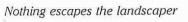


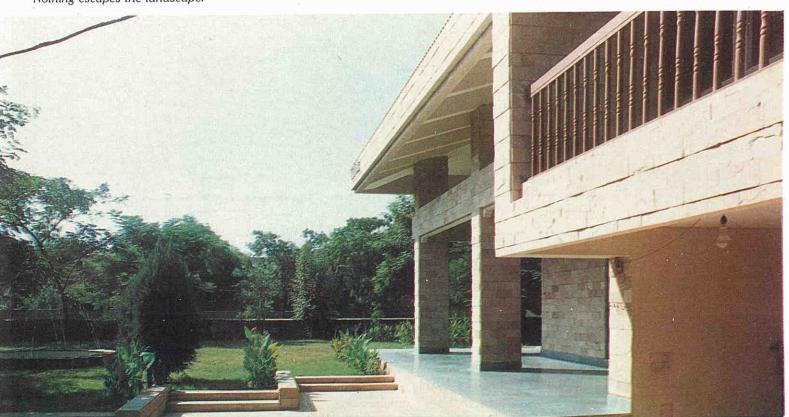
Let whiffs of fresh air enter from every direction





Band becomes a grip over proportions





# A Geometrical Sculpture

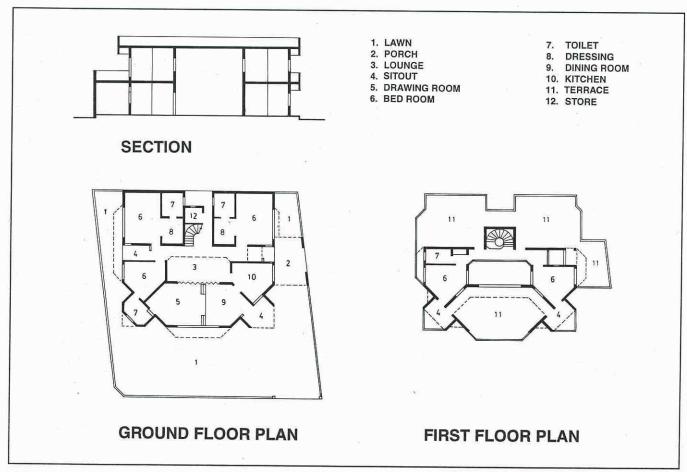
House for Paramjit Singh Anand, Amritsar, Punjab *Architect:* Dalbir Singh, Amritsar

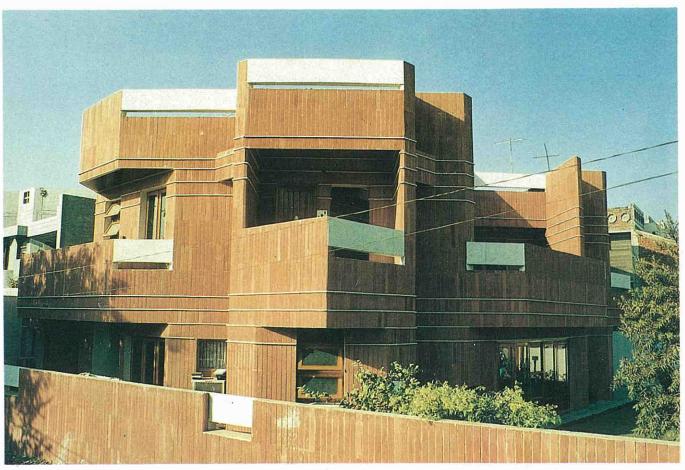
Architect Dalbir Singh, who is more like an artist than a technocrat, feels that a house is not merely a place to live in. It has to contribute aesthetically to the streetscape. The house he has designed for Paramjit Singh Anand is a physical manifestation of his design ideas.

The house is located on a corner plot with an approach road on the north and a side street on the east. The built-form with all its dynamics and geometrical compositions unfolds and presents changing perspectives as one moves around it. Clad in vertical strips of red sandstone with sleek horizontal bands of white marble, the building also keeps on changing its colour and brightness according to the direction of the sun. The raised front lawn with lush green grass complements the red mass and balances it in a subtle way. The boundary wall too becomes an integral part of the built-form and seems to become a fluid extension of the

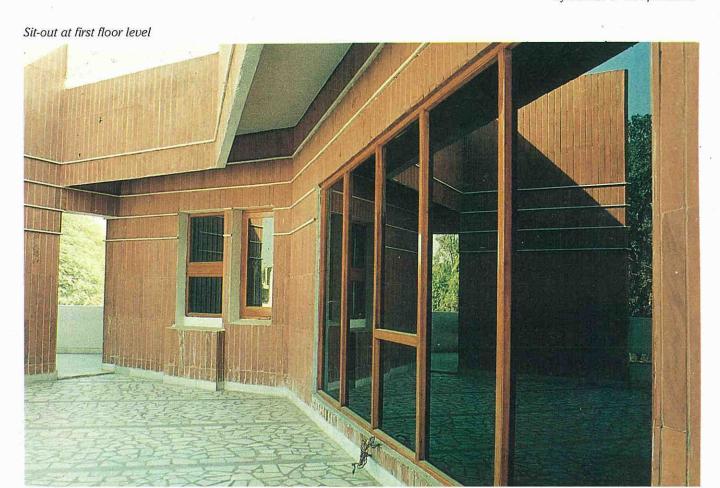
built form. Greenery peeps through the openings in the wall adding another dimension of colour.

The interior of the house with all the surfaces in offwhite tones soothes the eyes and provides a conducive ambience for comfortable living. The voids, the masses and the planes are carefully and harmoniously proportioned. The living areas are designed to look spacious by allowing the space to flow freely. The central family lounge has been visually linked with other areas on both the floors. This area receives glare-free light from the north through a panoramic window at the first floor level. Through this window, one can have a look at the sky while sitting in the centre of the house. Effective protection against harsh weather is ensured through well-placed windows. These are well protected by roof overhangs or projections. To mitigate the feeling of suffocation inside the house, unobstructed ventilation has been ensured by providing fenestration in the direction of east-west wind.





Dynamics of compositions





# Reflections in Stucco

Notwithstanding the artistic appeal of exposed brick and stone surfaces, their finishes, for some reasons, did not become popular. The reasons given are: poor quality bricks, lack of visual variety, uneven colours, visible aging effects and continual deterioration because of Indian climate, diminishing masonry skills and lengthy construction process. Also architects, who are considered catalysts of public opinion in respect of aesthetic expression of buildings, differ in their choice of surfaces and finishes. Some prefer natural brick or stone surfaces while others have a predilection for plastering over brick masonry and finishing exterior surfaces with coats of coloured paint. The arguments of those architects who favour plastering have always been accepted by their clients and, rationally, there is substance in them too. Stucco finishes not only facilitate the use of second-class bricks but also help in quick initial construction. In semi-urban and rural areas, where building activity has not reached the desired level of quality, such finishes help in camouflaging the defects caused by lack of precision in construction. Besides, the stucco finish takes care of changing trends in decoration as houses can be painted at regular intervals and look fresh and different every time.

The mushroom growth of building materials industries along with the arrival of new products which offer a wider variety and enhanced versatility have made such finishes very popular. A panoramic view of modern Indian architecture reveals that buildings with these finishes outnumber those in any other category and there seems to be no reversal in the quantitative trend. However, varieties of textures and wider range of shades need to be developed and standards of excellence to be set in terms of quality.

# Sculptured Stateliness

House for Amubhai Malvi, Rajkot, Gujarat Architect: Kishore Trivedi, Rajkot

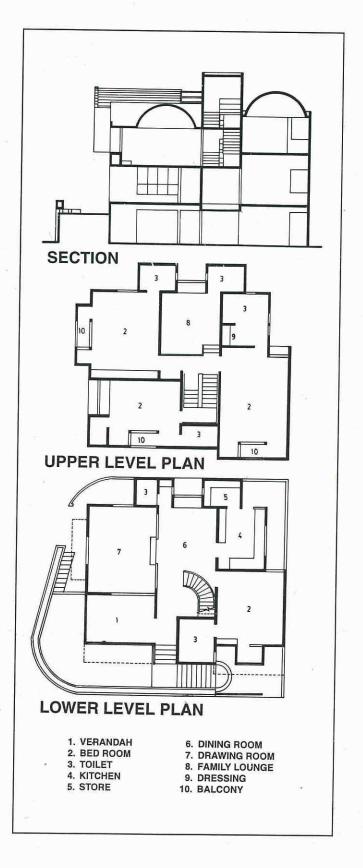
The site for this residence of a Gujarati entrepreneur based in Rajkot, is situated on important urban node, at the junction of three major traffic arteries. In the context of changing cultural and economic values and the location of the site, a bold and sculptural statement was called for. Astronomical real estate prices and tremendous urban pressure made it mandatory for the architect to optimally utilise the possibilities of the land. The island opposite with its water retreat is an oasis in an otherwise arid region and adds to the importance of the house.

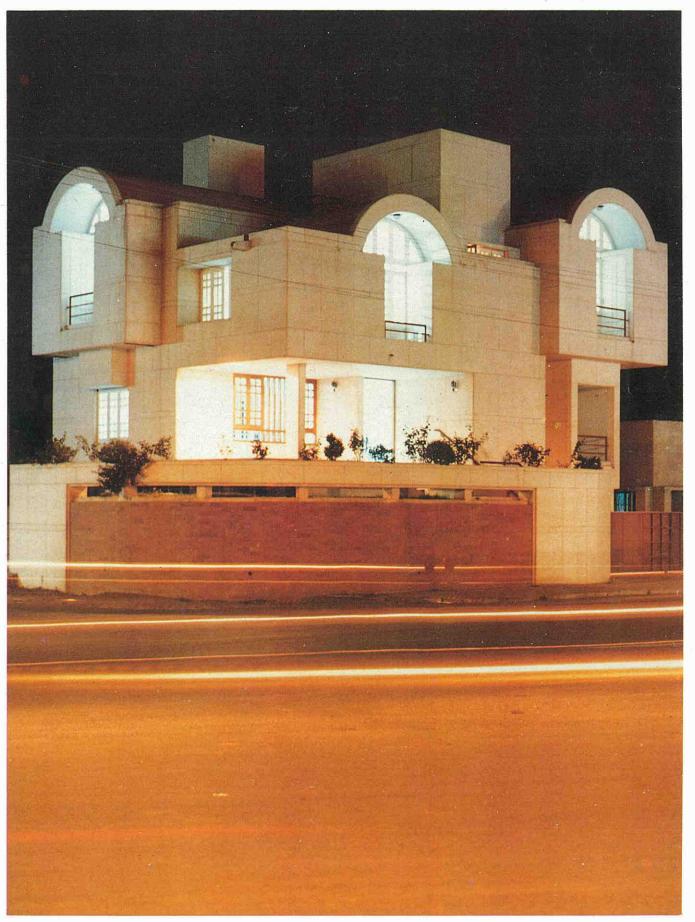
The vaulted roofs of the three bedrooms enlarge the volume inside, freeing the exterior from the usual box format. The compact balconies provide functional space, saving on usually high maintenance of unused open spaces. The high porch and the raised garden to the north-west provide group sit-out spaces usable at all hours. Their composition creates the theatrical dynamism of a stage or an arena.

Just below the living space, the entire ground area serves as a multipurpose space, well-protected and enclosed. It also serves as parking area.

The building reacts with and also orients the whole node. During the day, the structure, with the monochromatic expression in underplayed colour tones and exquisite finishes, provides a visual relief and at night its enchantingly patterned fenestration creates an unrivalled delight, complementing the recreational space opposite.

Clarity of form, consistent detailing and well-structured facades help create an aesthetic experience for all who stay in the house, visit it, or merely use it as a reference point in the matrix of their daily activities and it is in this sense that it has truly become a landmark in the city.

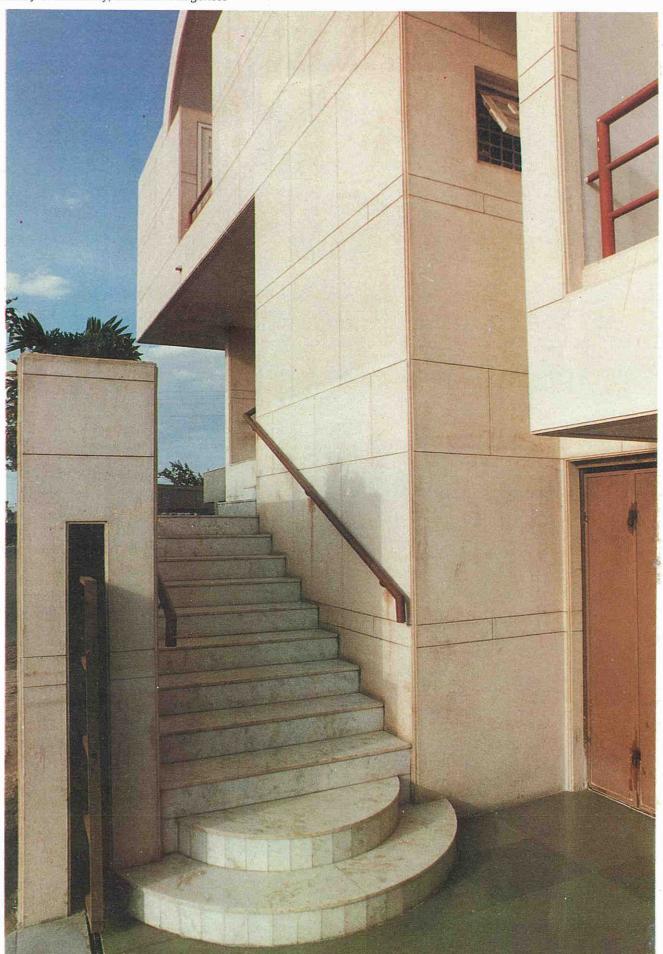


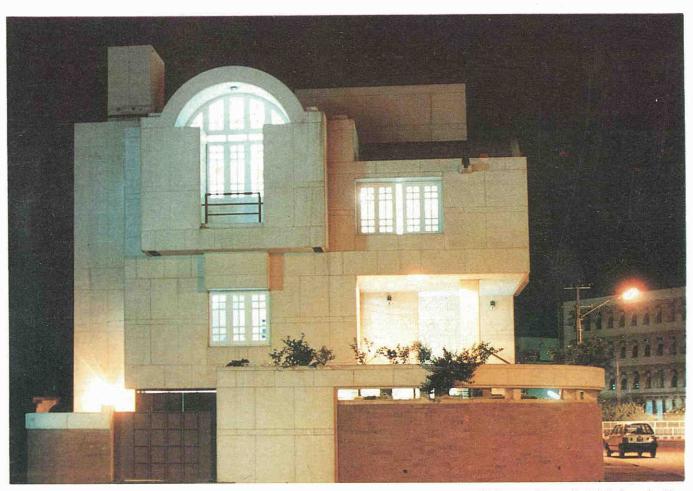


Slide the gate and usher the guests into the raised garden

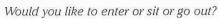
80 Sculptured Stateliness

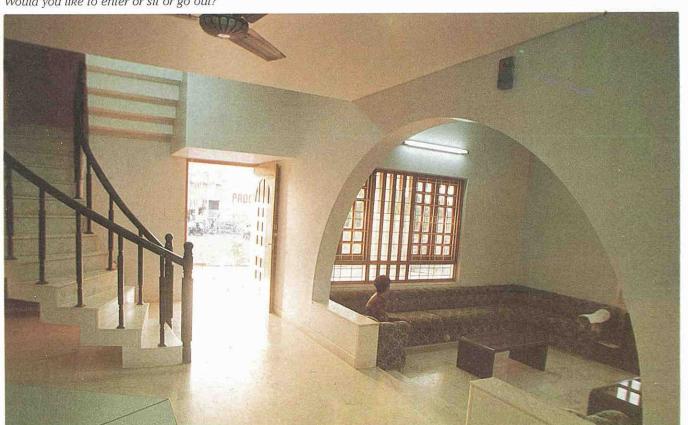
Stability in modernity, balance in hugeness





Light sparking off nightly imagination





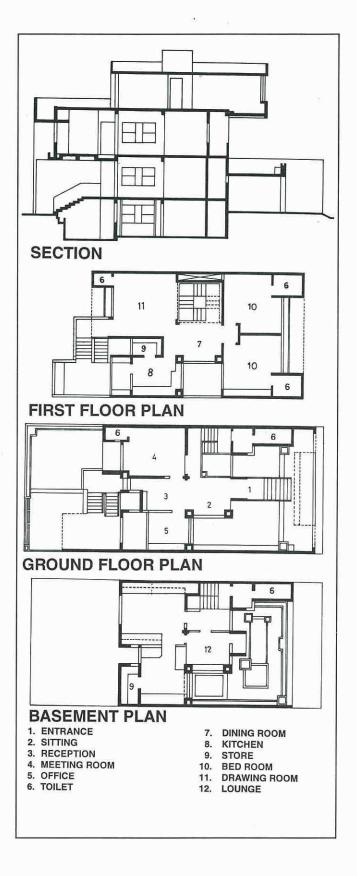
### **Square Cubes**

Architect's own House, Rajkot, Gujarat Architect: Kishore Trivedi, Rajkot

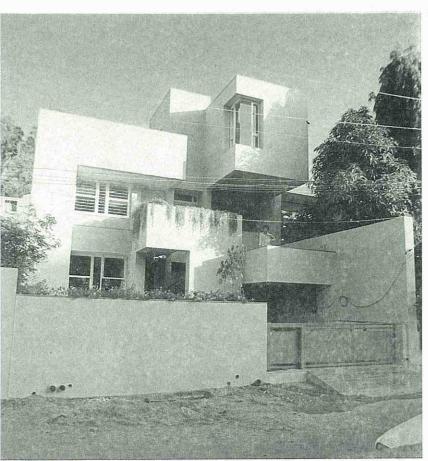
To any architect, even for one who has practised his craft for 18 years, the task of designing either his own house or office marks the epitome of his involvement and is marked by considerable apprehension. When the architect Kishore Trivedi decided to buy independent property in a highly priced area, it was evident that office and the home would have to be together. A plot was chosen abutting on two parallel streets, one commercial and the other, residential. The plot was adjacent to the beautiful and extensively landscaped complex of the Ramakrishna Ashram.

The setting of the plot urged the architect to give two different characters to the two sides while maintaining a homogeneity as well as to take advantage of the neighbouring landscape and utilise to the maximum the available space and light in the otherwise deep and narrow plot. At his creative best, Trivedi evolved an optimally functional and pleasing form having an interesting section and juxtaposition of masses.

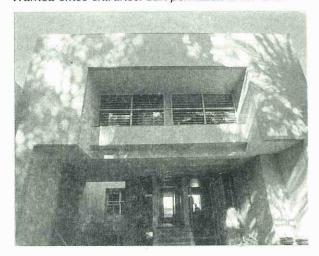
The void of the framed entrance to the office on the ground floor brings in the necessary light and air while the garden screens the studio from noise and pollution. This creates an agreeable microclimate. The living quarters on the first and second floors with their various masses thrown centrifugally direct the eye upward which comes to rest ultimately on the upper room corner window. The play of solids and voids specially enhanced by the evening sun reminds one an interesting cubist composition on a blue canvas. Inside, the sleeping areas towards the east, with their recessed windows, take advantage of the landscape across the street with the morning sun filtering through the tall trees. The central courtyard ensures cross-ventilation. The free-standing staircase in the centre links up the volumes and ventilates the adjoining areas.



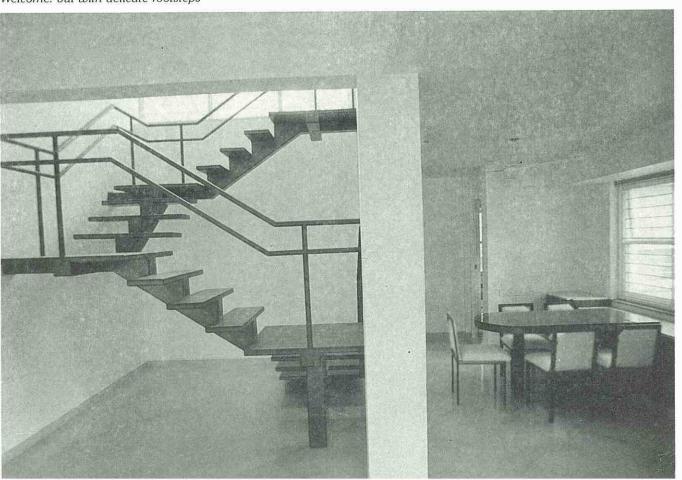
Theatre of the giants



Framed office entrance: Sun permitted to come in



Welcome! but with delicate footsteps



#### White Shadows

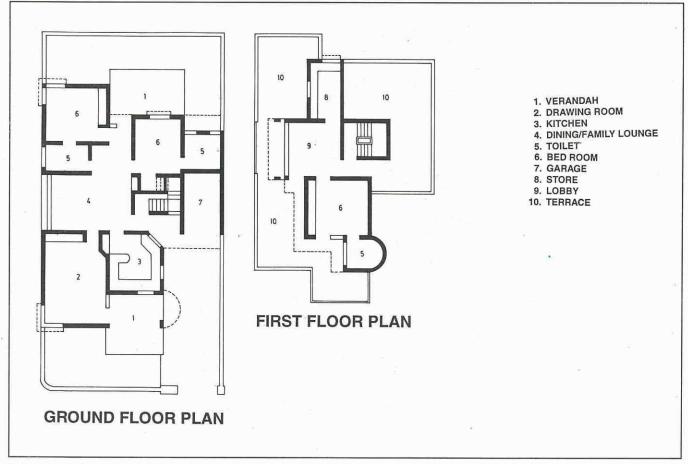
House of Ajay Sandeep, Panchkula, Haryana *Architects:* Saakaar Foundation, Chandigarh

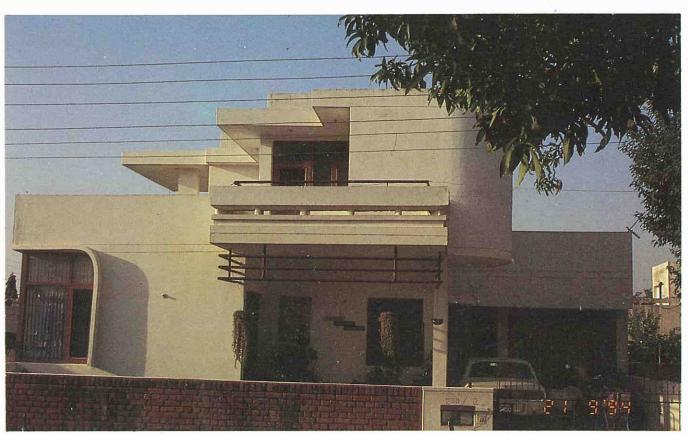
This house with a built-up area of 320 square metres is located in Sector-2, Panchkula, which is a suburban city contiguous to Chandigarh. Though sited in an urban context, it enjoys a breathtaking view of the scenic beauty of Shivalik Hills.

The owner, an army officer, had dreamed of a house which would have a distinctive appearance evoking the concept of "peace". The client's brief called for a house which would be used exclusively by him and his family. The architects have attempted to design a modern house keeping in mind the owner's taste as well as local climatic conditions. The external surfaces are finished with white cement. White was chosen because it is serene, cool and soft. It also expresses delicate luxury. The house is designed double-storeyed keeping in mind all the strict bye-laws and zoning regulations of the Haryana Urban Development Authority. The architects' main concern was to ensure a

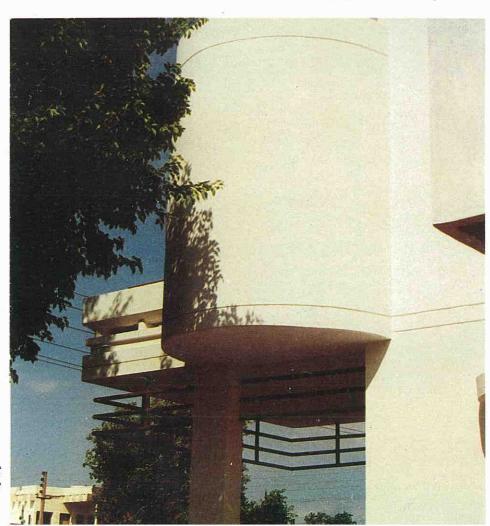
panoramic view of the hills besides accommodating the general requirements of the owner.

Besides domestic comfort, this house acts as panacea for the heart, the mind and the eye. The simplicity of form and elegant detailing give the house a fresh, timeless quality. This three-bedroom house with corner windows displays a harmonious coexistence with nature. The focus of the house is the living-room which accommodates all the social activities of the family. All the spaces are centred around this unit. A spacious drawing-room is approachable through the main entrance portico. In addition, the ground floor has two bedrooms with attached toilets. The kitchen has been deliberately placed in the front of the house so that the lady of the house can keep an eye on the main entrance gate. The first floor of the house has a lounge, a kitchen and a bedroom. A terrace open on all sides is intended for outdoor activities.





Come-hither look of entrance



Welcome with open arms but toilet behind the cylinder, please

## Kahnian Vocabulary

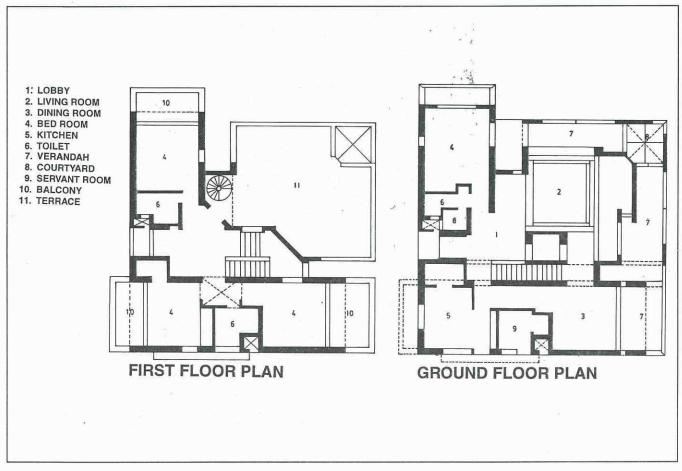
House for Kannubhai Patel, Ahmedabad, Gujarat Architect: Anant Raje, Ahmedabad

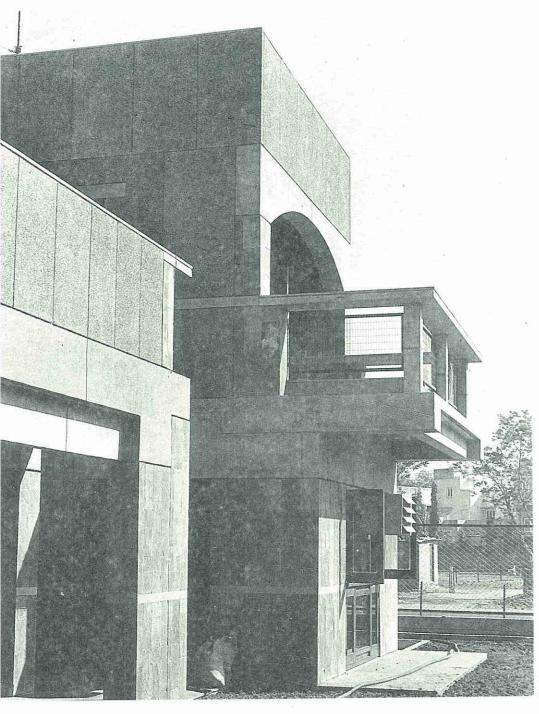
This posh villa reflects Raje's well thought-out ideas on design and structure which have crystallised after executing numerous projects. It stands on a corner plot bounded on two sides by streets. The house is designed on two levels. On the first level there are a living-room, a dining-room, kitchen, a bedroom and the servant's room. The second floor accommodates three bedrooms and a spacious terrace for outdoor gatherings and sleeping out. The access to this floor is by an internal staircase which starts from the entrance lobby. The L-shaped configuration of the built-up area encloses the terrace from two sides. This not only provides a much needed sense of privacy on the terrace but also offers a visual delight to passers-by.

Except for a bedroom and the kitchen, all the other areas on the ground floor are not severely cut off from each other. Instead, these are so laid out as to unfold

their individual space gradually as one moves from one to the other. From here one can feel and appreciate the architect's understanding of the idiom of natural light. The inner spaces of the house are protected by deep verandahs from the hot afternoon sun but open up to the cool southern and south-western evening breeze.

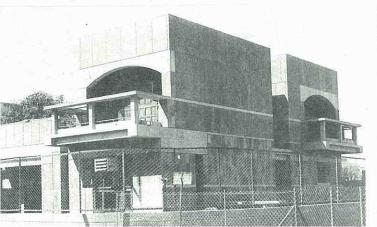
The house turns away from the noisy main street towards the gardens on the southern and western sides. The eastern facade along the busy street has been exploited minimally except for the main entrance and a balcony projection. Arched lintels over the recessed openings are the dominant architectural feature which control and direct the scale and proportions of the house. The external finishes which include grit in panel formation and concrete in natural texture complement each other and convey the impression of a unified whole.



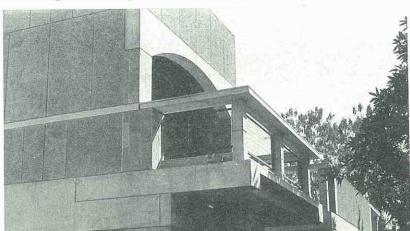


Drawing board comes alive in line, mass and band

Taming the massive giants



Fine tuning of the railing



### An Architect's Den

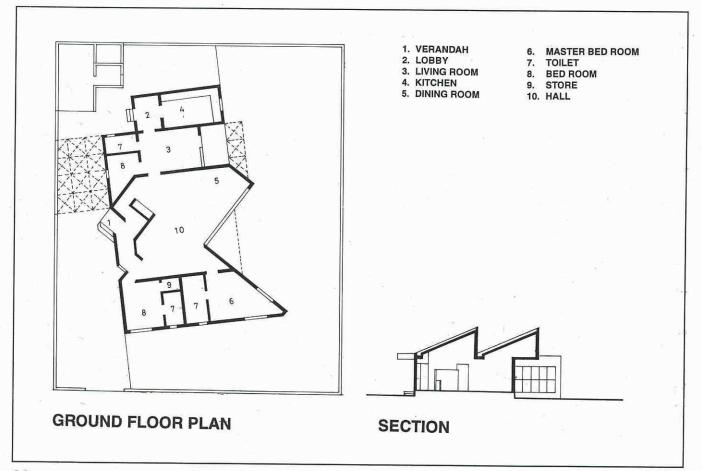
Architect's own House, Pune, Maharashtra Architect: Iqbal Chaney, Pune

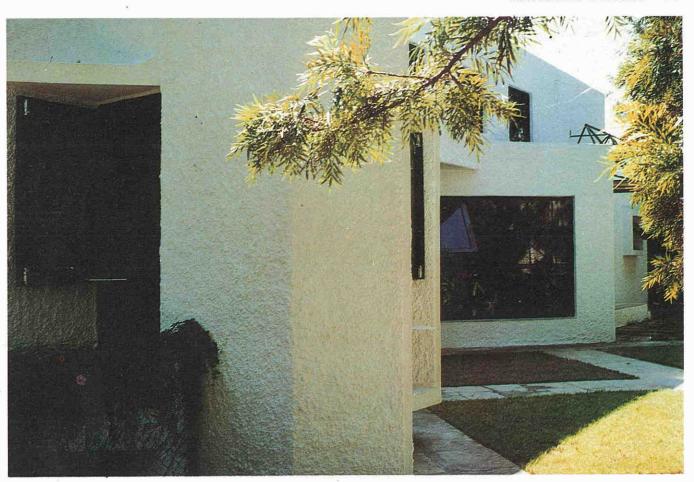
After working abroad for more than a decade, architect Iqbal Chaney and his wife Nina, a beauty therapist, decided to settle in Pune. 'Le Chene'—the house they built for themselves, reflects in subtle elegance their wide exposure, visual reinforcement and an understanding of Le Corbusier's philosophy that "architecture is a play of light and shadow and juxtaposition of masses". 22 'Le Chene' with a built-up area of 186 square metres, nestles comfortably on a plot of almost 650 square metres.

The plan of the house is conceived from 'inwards-tooutwards' and is based on squares and diagonals providing a refreshing change from predictable geometries. The unusualness of the plan lies in the juxtaposition of various activity areas. For instance, the living-area located in the centre of the house is flanked by two bedrooms at the front with functional areas including the kitchen and a lounge placed at the back. The interior of the living-room is designed to serve as a personal art gallery and displays cherished artifacts and objets d'art collected during their stay abroad. The family lounge strategically located between the formal dining-room and the kitchen is the most lived-in part of the house. The lounge and living area open out into deep verandahs which function as transition spaces leading to the luxuriant and well laid-out garden.

The easy-to-maintain landscape consists of green lawns punctuated with visually arresting paving in rhythms of squares and diagonals. Tall silver oaks border this house, adding to its mysterious allure.

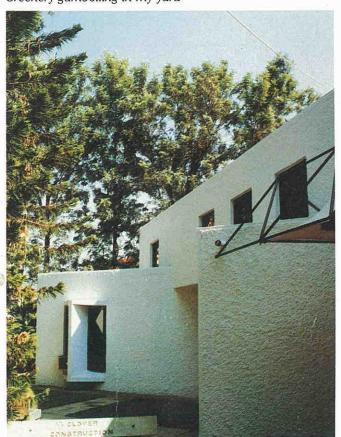
The house is oriented to take in light from the north. The windows are glazed with grey tinted glass for glare-control and carefully placed wind-catchers for ventilation. The twin-sloping planes of the roof, subtly reflect the thought given to climatic constraints of the region.



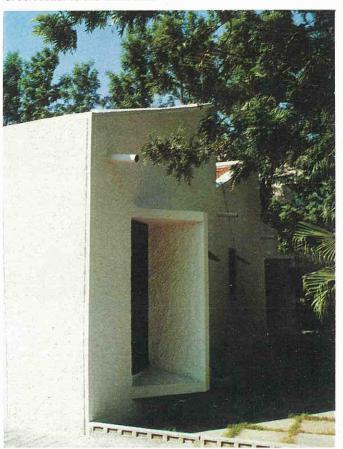


Simplicity of modernity

Greenery gambolling in my yard



Green relief to the hard stuff



### Colonial Expression

House for R.K. Bhaduri, Raipur, Madhya Pradesh *Architect:* Dulal Mukherjee, Calcutta

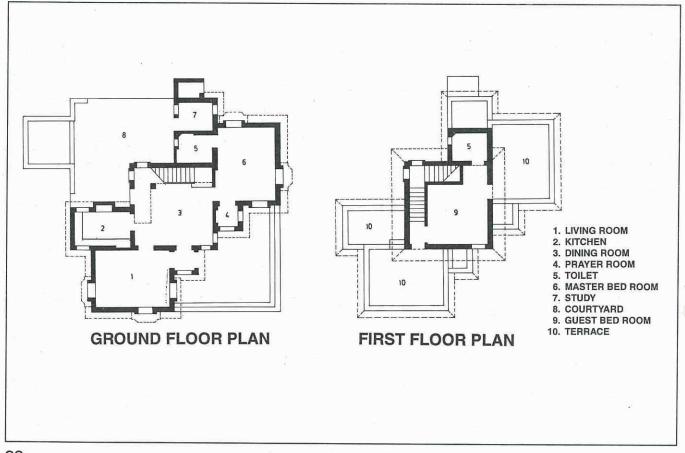
This house is located in a locality of period buildings built during the first half of the twentieth century. These picturesque structures have lime-washed buildings with flat, terracotta-tiled, slanting roofs commonly found in all the small and big towns of central and north India. The house occupies a portion of the front open space which was once a garden of Rose Villa—a sprawling, single-storeyed structure. The site and the built-environment around posed a challenge to the architect who designed this small house perfectly in harmony with its surroundings.

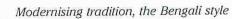
The architectural delineation is based on the existing traditional elements with little innovations in the sunshading devices over the window openings. The geometrically-articulated plan with interlocking squares accommodates a living-room, a dining-room, a kitchen, the master bedroom and a study at the ground level. The first floor houses a guest bedroom with an attached bathroom besides a number of open roof terraces for

sitting and sleeping out at night in privacy. The guest bedroom unit which marks the central square, has a slanting, tiled roof with wide overhangs. The roofscape together with perforated parapets, cornices and stucco surfaces is a creative expression echoing its surroundings.

The functional aspect of the house is highlighted by two predominant courtyards—one at the front and the other at the rear. The front courtyard which faces the old Rose Villa acts as an entrance patio and is used for outdoor sitting. The rear courtyard is designed for multipurpose, household activities.

The finishes have been kept austere because of financial constraints. Local, grey, polished, slate stone is used for internal flooring and rough slate stone for outdoor terraces. Walls, both external and internal, are lime-washed over a cement and sand plaster. Doors and windows are made of locally available hard wood.







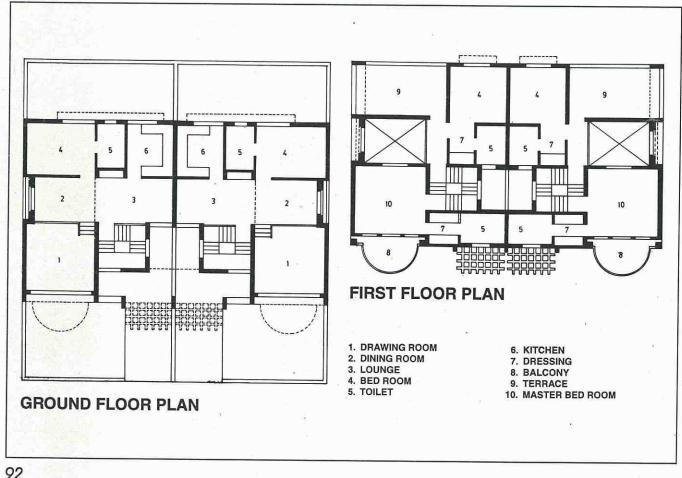
## Double Delight

Houses for C.P. Dawar and A.K. Joshi, Gurgaon, Harvana Architect: Manmohan Sharma, New Delhi

With the ever-rising prices of real estate in urban areas. the sizes of affordable plots are shrinking day by day. The narrow frontages of these plots and individualistic and idiosyncratic architectonics add to the chaotic street pictures of cramped urban settings. But with imagination, understanding and cooperation, one can create order, beauty and perfection. This has been proved by the owners of two adjacent plots and their common architect, Manmohan Sharma.

In spite of the small plot sizes of 200 square metres with frontages of 10 metres each, Dawar and Joshi's houses create an illusion of one big bungalow. Both these owners got their houses identically designed and clubbed in a fashion that one creates a mirror image of the other. The symmetry thus achieved manifests itself in the total equity and balance of the left and right. The harmony and regularity of both the structures give one a feeling of peace, stability and order.

Each house is duplex in form with a compact and well articulated plan. On entering through the main gate, one is welcomed by a decorative pergola above the portico. From here, one encounters the stairhall through which the core of the house, a linear loungecum-dining-hall is accessible. Together with a bedroom, a toilet and the kitchen at the back, this lounge has been raised by 76 cms above the portico level. The square-shaped drawing-room in the front is at a lower level. On the first floor, there are two more bedrooms with their independent dressing-rooms and toilets. Of these, the master bedroom faces the front side. It has been kept lower than the main floor. Both the floors communicate through the double-height portions of the dining-room. This portion also acts as lungs which facilitate breathing and make it a comfortable and airy house to live in.





Rhythm of loving thy neighbour



Unity in diversity; two looking like one

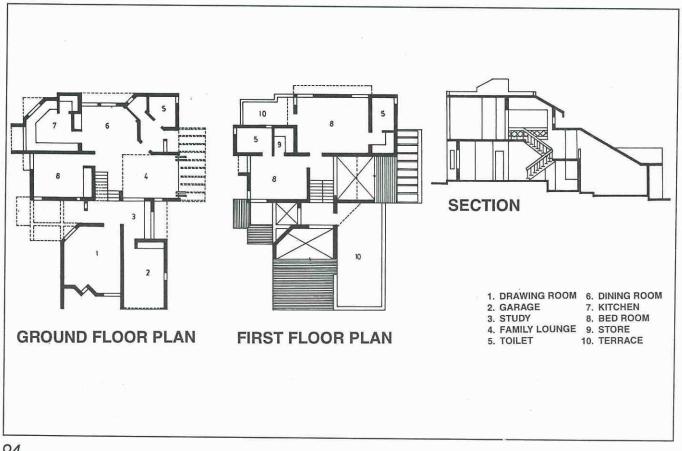
### Stepped Elegance

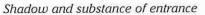
House for Jagan Nath, Mysore, Karnataka Architect: B.S. Bhooshan, Mysore

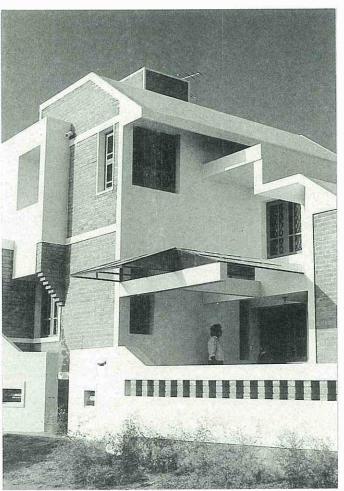
The design of this commodious villa is determined by its site and surroundings. Situated at a T-junction of two residential roads, the trapezium shape of the plot dictated the plan-form with its narrow frontage fanning out to a wider area at the back. The gentle slope towards the front unrolling to the view of the Chamundi Hills in the distance is a striking feature of the site. A large-sized community park on one side of the house seems to complement the built-form. To achieve the predetermined visual expression, the front portion comprising the living-room and the garage has been kept single-storeyed while the rear portion is designed as a double-storeyed structure. The split-level formation with the living-room at a lower level and the rest of the areas at a higher level did away with the additional heavy earth-work and cut down on enormous construction costs which such a work would have entailed. The undulation of the site is well reflected both inside and outside the house

The formal entrance to the house is at the mid-level of the structure. From the entrance itself, demarcated by a translucent glass canopy, the varying volumes are modulated to guide one to the living-room and the family-cum-dining-room. A bedroom and study, besides the kitchen and utility room, are other facilities on the ground floor. From the dining-room a flight of steps climbs over the entrance from where one has a glimpse of the living-room below. Continuing upwards, one reaches the first floor which includes two more bedrooms. The double height of the family room not only links visually both the floors but also adds to the spaciousness of the interior.

The construction is simple with load-bearing brick masonry walls and reinforced-concrete slabs. The exterior has exposed wire-cut masonry whereas the interior is plastered to give a dramatic composition of various textured volumes signifying internal functions.



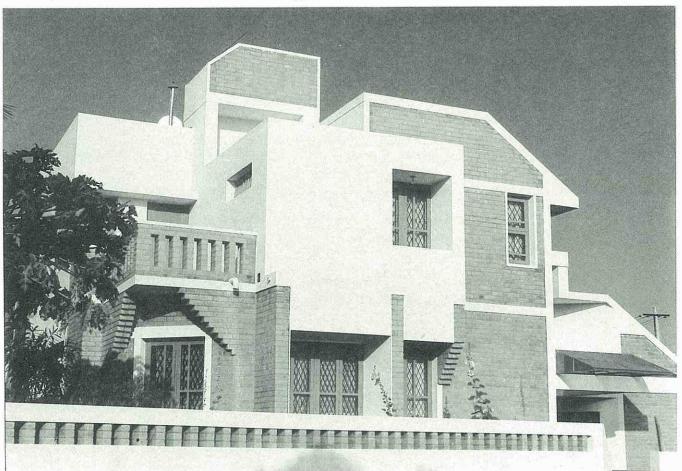


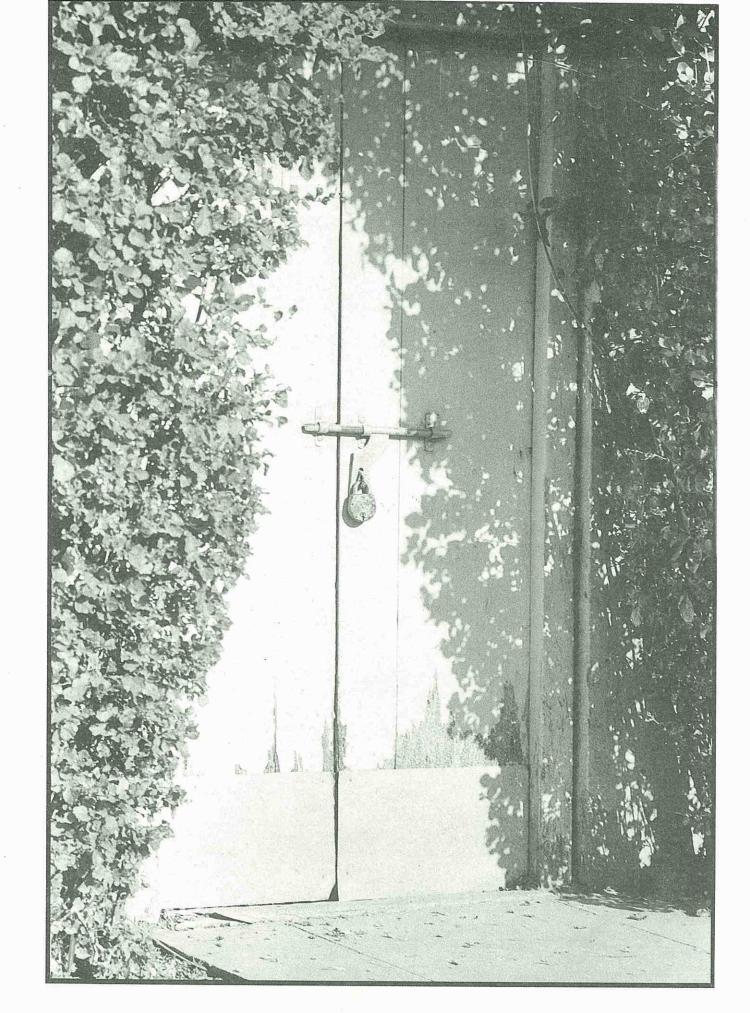


Musical bandwagon of bands



Commas, semi-colons and colons of colour: Promoting balance





# The Mystique of Nature

Man is an integral part of nature and cannot live in an isolated and alienated habitat from nature. He needs air, water and food for his survival. The wholesomeness of these essentials ensures the quality of his life and his physical and mental wellbeing. Thus man must live in close harmony with nature, in dwellings which underline the symbiotic relationship between man and nature. Unfortunately, the concentration of population in urban areas and the consequent astronomical prices of real estate have resulted in architecture which creates skyscrapers of cages piled up. In this context any reference to the man-nature relationship is meaningless. It is only the wealthy who can afford to buy large plots of land in lowdensity, exclusive localities and enjoy the refreshing beauty of nature even in metropolitan cities. Those who do not have the financial resources to buy or construct houses fit for human habitation are obliged to move out of the cities into semi-urban or rural areas. These areas being less crowded and less polluted are more suitable for living in. The last few decades have witnessed a growing awareness about and respect for nature among people. Their need to spend time away from the city has created the concept of farm houses and week-end houses. Placed in natural settings in rural or semi-urban areas, they offer an ambience of restful seclusion for the city dweller. These country houses create an environment where he can have some time for himself to replenish his depleted energy. They help improve the quality of life in a quiet celebration of man's undeniable and unbreakable bonds with nature.

## Rural Retreat

Architect's own House, Nadhavade, Maharashtra Architect: Shirish Beri, Kolhapur

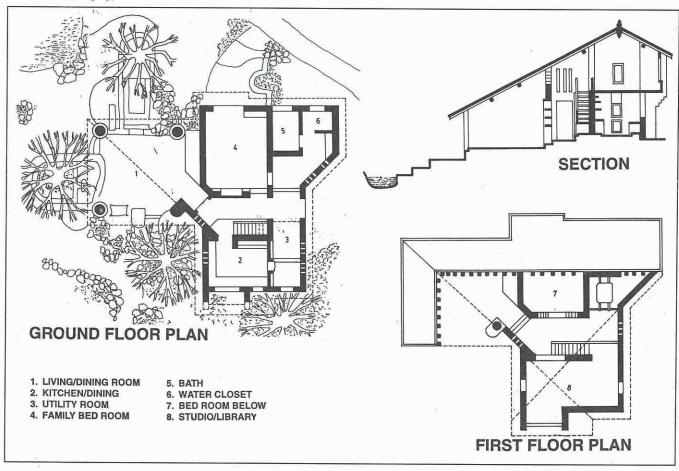
Architect Shirish Beri bought a two-hectare farm and built a small house on it. The property is by a river at Nadhavade, a hamlet, 80 kms south-west of Kolhapur in Maharashtra. The house, where the architect spends most of his leisure time, is a symbol of his love of nature, solitude, gardening, conservation, ecology and environment. Beri enjoys the best of both worlds by having a work place in town and a home in a rural setting. According to him, "the two life-styles are beautifully complementary." He adds, "after a while in the city one feels the urge to go to nature for refuelling. Staying in the company of nature is so invigorating that one is raving to start work and do something creative." 23

The house is designed around some trees and these are integrated into the built-up area. It has an organic quality with a unified interior space instead of segregated, isolated rooms. Every space has a high utilisation factor with its multiple functions. The inside and

the outside spaces flow into each other. Sometimes, the garden glides inside or the house sweeps out in low built-forms into the garden.

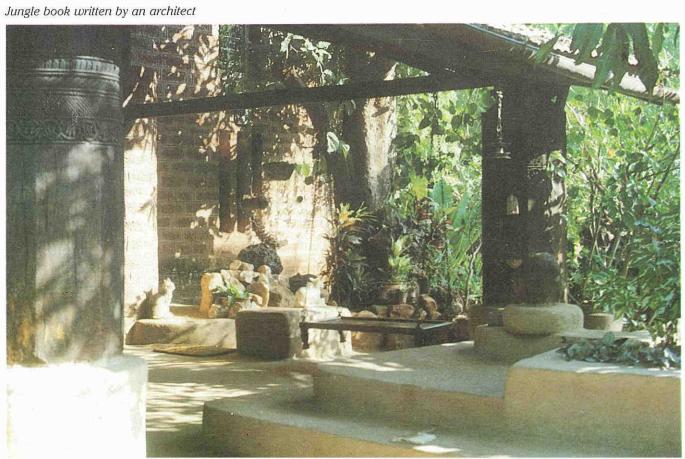
To economise on the cost, the major components of the house, for instance, walls, flat arches over windows, steps, niches and flower-beds, are all constructed in locally available laterite stone. The wood used to build the roof is also a locally available jungle variety. The beautifully carved wooden pillars of the portico were procured from the village temple when it was being renovated. The flooring on the ground floor is made up of mud and cowdung while that of the mezzanine is in timber.

The microclimate of the house has been significantly improved by ensuring sufficient cross-ventilation and providing wooden roofing topped with Mangalore tiles. A swimming pool and luxuriant vegetation too help in temperature control.





Prologue: Bathing in the pool. Epilogue: Meditating about creation and creativity



## Stillness Set in the Garden

Architect's own House, Ahmedabad, Gujarat Architect: Dhansukh Bhatt, Ahmedabad

This house designed by Dhansukh Bhatt for himself is centred around three sides of a courtyard which is considered the heart of the house with movement patterns swirling around it in well-defined traffic lanes. The drawing-room, the dining-room and the studio get a complete view of the courtyard which is conceived as the first window of the house opening to the sky, with each area of activity borrowing natural light and fresh air from this inner space.

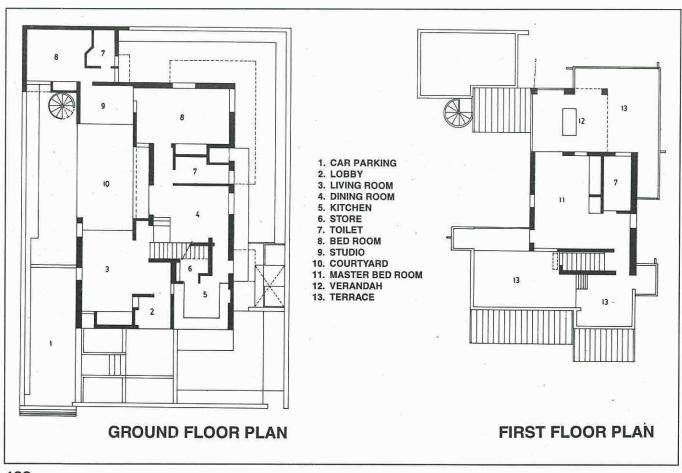
Taking into consideration the gradual slope of Shreyes Hill on which the house is built, the main entrance and the drawing-room are raised on a-metre high plinth whereas the dining-room and the other units are dropped half-a-metre below the drawing-room level. Stepping up small terraces to reach the front door gives the house a friendly look and evokes curosity about its interior. The continuous spaces within the house give it an air of spaciousness, though the actual area of construction on the ground floor is only

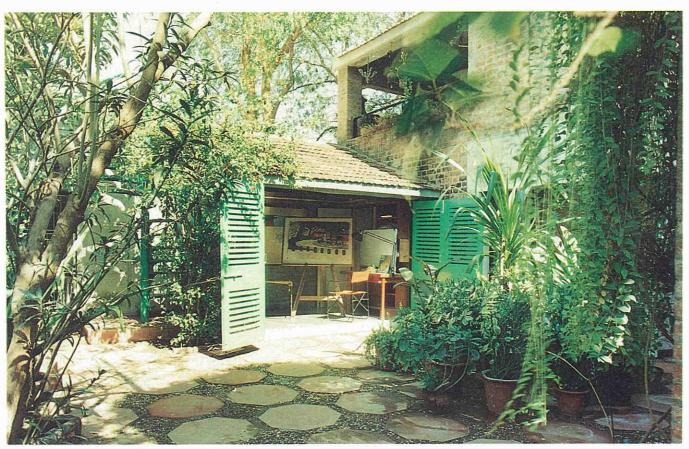
160 square metres and that of the first floor is 25 square metres.

It is a simple load-bearing structure with exposed brickwork on the exterior and plastered walls within the building. All terraces are covered and finished in white China mosaic to reduce sun-heat transfer. The sloping Mangalore-tile roof with a reinforced-concrete slab underneath helps bring down the room temperature in summer while maintaining an aesthetic profile and human scale.

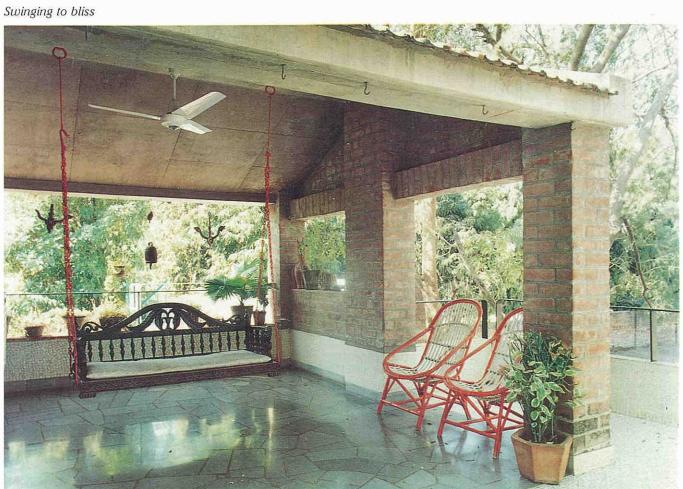
For the flooring, Kota stone has been used in irregular compositions which are nonetheless pleasing in their interesting asymmetry.

This house is ideal for the middle class who are restricted by tight budgets and demand value for money too. It is an example of how waste materials and simple inexpensive fillings can be used without compromising on the quality of life and living space.





Don't say "shop-cum-flat", the new word is "studio-cum-home"



### Woodland Retreat

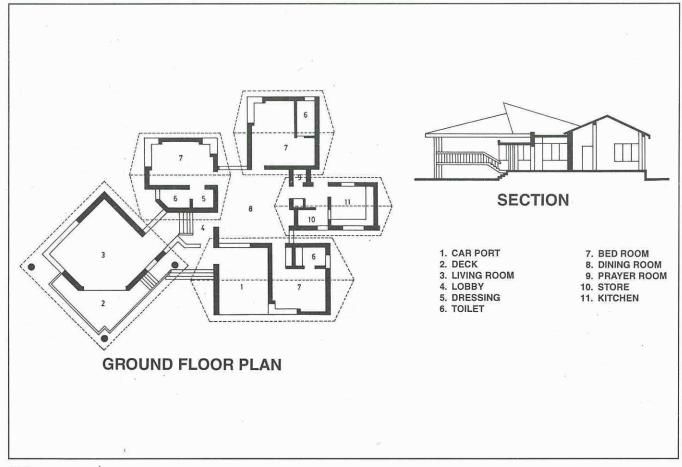
House for P.B. Vittal, Coorg, Karnataka *Architects:* Thimmaiah and Prabhakar, Bangalore

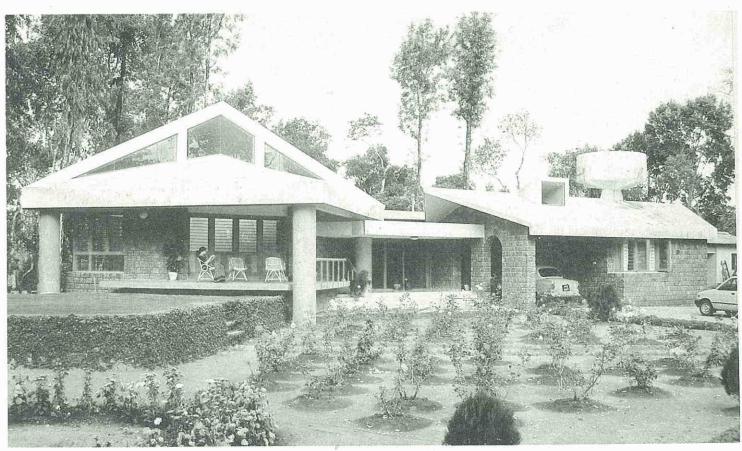
Nestling in the luxuriant foliage of the Kwality Estate in the midst of Coorg's coffee plantation area is P.B. Vittal's house. Unlike urban home design, the vast 40-hectare spread of the coffee estate tested the creative ingenuity of the architects to design a villa which would be not only functional but also in consonance with its lush, natural surroundings. The architects created a low-height, sprawling structure in perfect harmony with the lie of the land. Although the various components of the house-plan are designed to retain their individual identity, the overall impression is of compatible elements in an integrated whole. The juxtaposition of dressed stone masonry walls and an innovative roofscape in reinforced-concrete is a happy blend of tradition and modernity.

A wide flight of steps and a covered patio take you inside the house where a series of split levels lead to various rooms. The spacious interiors with large open-

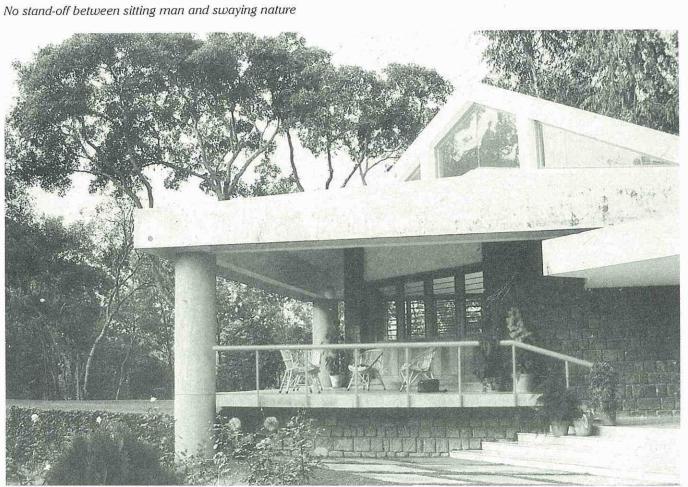
ings dissolve the inside-outside structural limits, letting the occupants enjoy the tranquil scenic beauty of the garden. The living-room has French windows opening to the elevated deck creating a spacious room and providing a view of the sprawling lawns. A large, airy dining-room with a kitchen and utility are conveniently and suitably located. The bedrooms are large with natural light streaming in through corner windows. These features minimise the wall area and contribute to the free flow of space. The changing levels, high ceilings, skylights and the magnificient portals give each area a distinct identity of its own and respect the privacy of the occupants too.

This markedly functional house displays great flexibility of form and space and highlights the creative ability to strike a harmonious balance between the built-up space and the natural landscape.





Architectural rose is a rose is a rose is a rose



### Of Vistas and Views

House for Reliance Industries Ltd, Surat, Gujarat

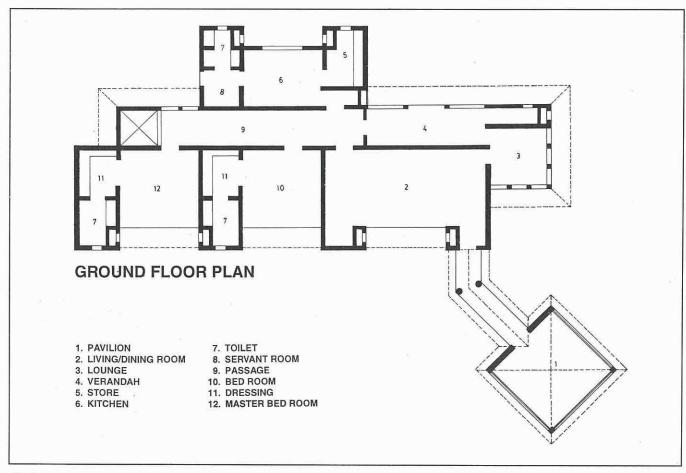
Architect: Rumy Shroff, Bombay

This single-storeyed house is intended for the use of the chairman of a leading company during his occasional visits to Surat, an industrial town of Gujarat. The site, in spite of its location in a busy area, offers a panoramic view of a nearby river. The two-bedroom house offers all the necessary residential facilities for a short stay which may require formal entertainment also. The public areas are marked off from the chairman's residential space.

The spectacular view of the river front seems to have influenced the architect to orient the family areas towards it. This resulted in a significant departure from the conventional house design. All the rooms, except the service areas, face the river and are linked by straight corridor. A detached pavilion has been provided on the riverside for informal gatherings. It is connected to the main house by a covered passage.

In addition to the fulfilment of functional and aesthetic needs, the architectural concept has been so tailored as to meet the exacting task of completing the construction within three months and on a limited budget. The structure is designed in reinforced-concrete frame, supporting a flat slab and in-fills of brick masonry. The owner wanted a sloping roof, so slanting *chhajjas* have been fashioned in teak wood and finished in Mangalore tiles. This effect has been further highlighted by providing a pyramidal roof over the pavilion. The outside walls are finished in stucco while those on the inside, in plaster of Paris. The flooring is in marble.

The surrounding landscape completely transforms the place making it hard to believe that this house is in the heart of a heavily industrialised area.





Linearity to whisper to nature



Communication is the thing

Solid sentries guarding intimate parlance



## Traditional Tones

The Shettys' House, Bangalore, Karnataka Architect: Rumy Shroff, Bombay

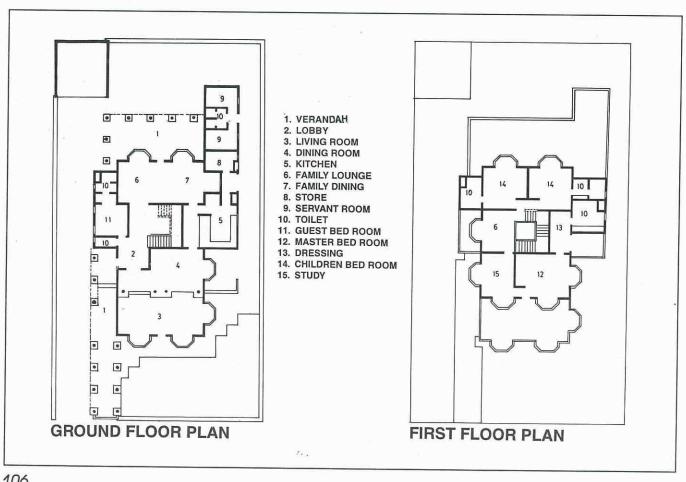
According to a widely accepted notion, architecture should be representative of the time, place and technological advancements of the period. Making architecture truthful to modern construction techniques and blending it well with old settings has always posed a great challenge to contemporary architects. Architect Rumy Shroff confronted a similar challenge while designing this luxurious villa for a wealthy Bangalore family.

The city of Bangalore has a distinctive atmosphere in its traditional architecture and Shroff thought it essential to capture that ambience. The difficulty in striking a balance between tradition and modernity was further increased by the owner's insistence on including the arch as a dominant architectural feature. The architect, on the other hand, was not inclined to use arches purely as decorative elements. Though acceptable in principle, the arch as a construction technique is irrational as compared to reinforced-concrete lintels.

To find a satisfactory solution, the architect intro-

duced an arcaded verandah abutting on the long driveway. The detachment of this arcade from the main structure clearly indicates that arches are a purely ornamental feature and not a part of the structural system employed in the construction of the main house. The other repetitive element of the house is a bay window with a slanting tiled chhajja. The introduction of this element brought in not only a flavour of traditional style, but also posed the least problem in terms of contextual structure. The design of this house reinforces the belief that certain vernacular elements can have a legitimate place in contemporary architecture without neglecting present techno-economic demands.

The plan of the house is based on a strict Cartesian pattern with spacious interiors enclosed within loadbearing masonry walls. The lintels and slabs are in reinforced concrete. All the external surfaces are finished in stucco and the flooring is in marble. A number of planters have been provided on the terraces to soften the harshness of the structure.





Style is the man, style is also the driveway



Creepers showering blessings on elegant arches

## **Sprawling Spaces**

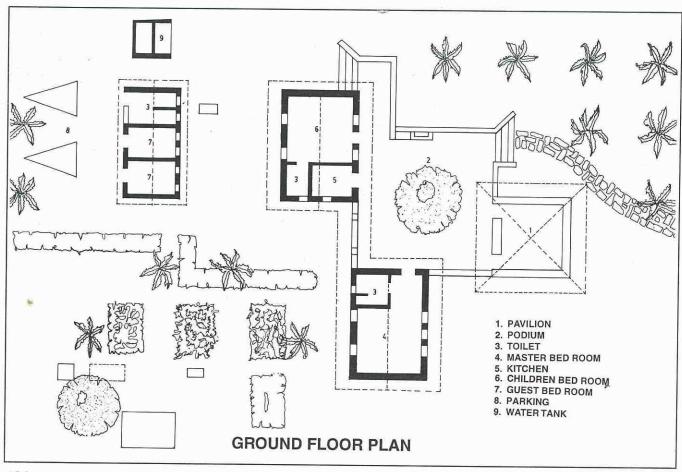
The Shroffs' House, Bombay, Maharashtra *Architect:* Rumy Shroff, Bombay

There is a common desire amongst city dwellers to spend their weekends in the countryside away from the fret and fumes of the city. This farm house fulfils the need for a sylvan getaway. The house having a built-up area of only 120 square metres, owes its charming beauty to the picturesque surroundings. The farm is heavily planted with coconut trees and local shrubs so as to merge with the natural landscape.

Since the house is intended to be used for short periods, the usual residential needs, for instance, a formal living-dining room, are not necessary. These functions are replaced by a more plastic use of space in which outdoor spaces are partially covered but not enclosed. In order to give a feeling of spaciousness the structure is conceived of as a composition of built-up as well as open-to-sky spaces. The built-up spaces are so put together as to give a feeling of enclosure stretch-

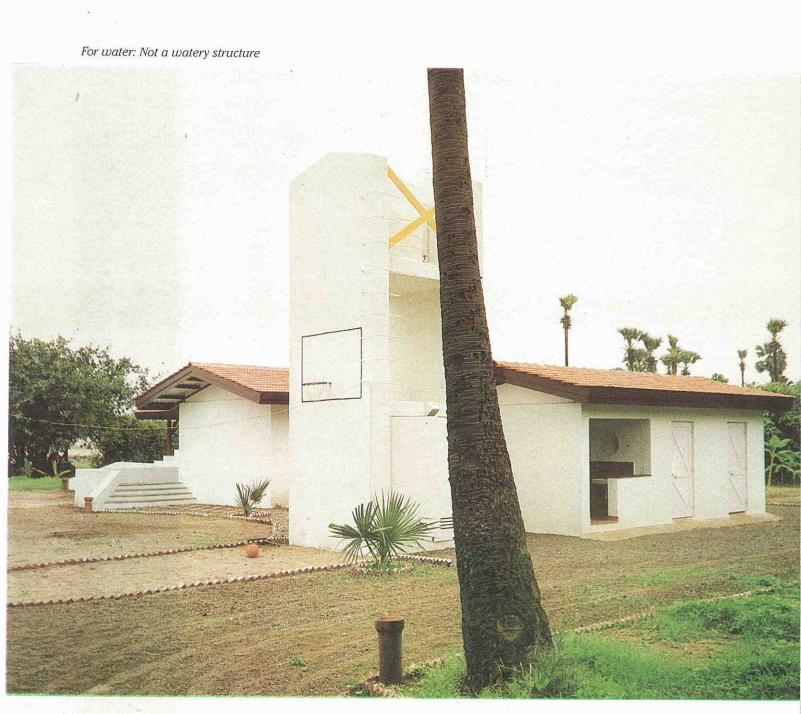
ing to the open-to-sky spaces reminiscent of the traditional courtyards. The open spaces thus formed are raised to almost plinth level of the structures, forming a kind of podium with low parapet walls which extend into the landscape and merge with it. This arrangement also makes the house appear much larger than its actual limits.

The structure is load-bearing consisting of thick brick walls, supported on random rubble masonry foundations. The walls are finished in rough-cast plaster on the outside as well as the inside. All the plastered surfaces are given a final finish in white cement paint. The roof is structured in teak wood following traditional wood construction details and is exposed on the inside. It is covered by asbestos sheets and finished in Mangalore tiles. The flooring is in mosaic of terracotta coloured marble and the windows are in teak wood.









Keeping Indianess on the top



Blessed are the humble, for they shall inherit the earth



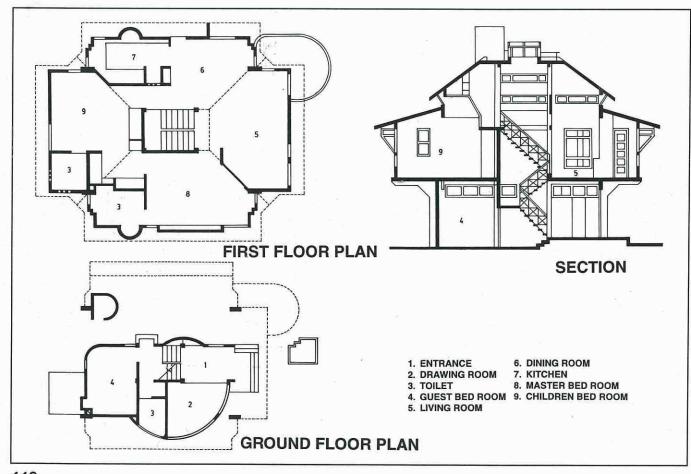
## **Compact Contours**

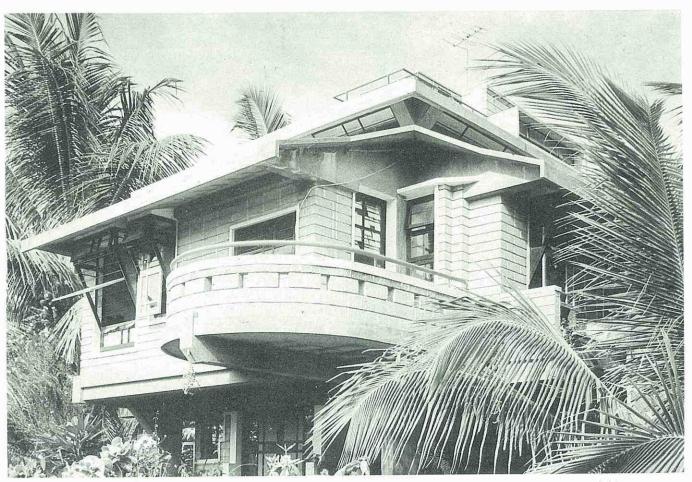
Architect's own House, Mysore, Karnataka *Architect:* B.S. Bhooshan, Mysore

This self-designed architect's house is located on a small site of  $10.75 \times 18.50$  metres to provide for the needs of a small family with two growing sons. The form is an adaptation of the local vernacular double-pitched roof with a raised central attic. The whole structure is raised on columns leaving ample space on the ground for children to play in. Within the reinforced-concrete frame work and the geometry of the roofs, the plan and the section adapt to functions stretching and flexing beyond their confines.

The ground floor includes the entrance and a guestroom, besides parking space. All other units on the first floor including two bedrooms, a living-room, a diningroom and a tiny kitchen are designed around a stairwell-lit at the top. From here a narrow flight of steps leads to the attic, housing the study, the library, a storage room and a sleeping platform. Two bedrooms are connected through a walk-in-wardrobe with sliding doors so that both rooms can be converted into continuous space. No partition walls reach the ceiling, thus allowing free circulation of air within the house.

All slabs and the roof are made of reinforced-concrete with hollow clay blocks embedded in it to reduce its weight as well as thermal radiation. The floors are of traditional clay tiles and rough stone slabs. Stabilised mud blocks made at the site itself are used for the walls, the brick is exposed on the facade and in some areas inside the house. The windows have been conceived as three-dimensional bays. The horizontally pivoted shutters have a three-position range to control air movement. Also, it is possible to look down vertically through them literally putting one's head outside the walls. The windows thus act as balconies. The staircase treads are made of wooden planks allowing light to filter through and are mounted on a handrail designed as an inclined truss.





Shape of things to come

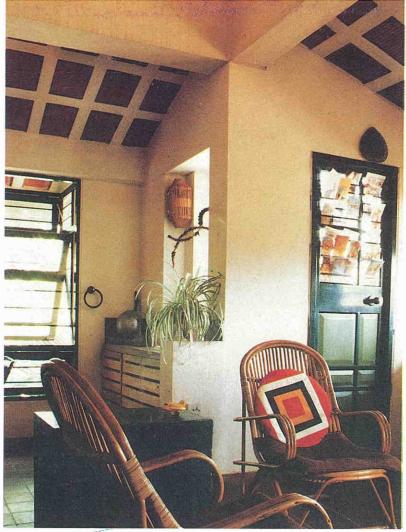
Not a night club, but a nightly home



### 114 Compact Contours

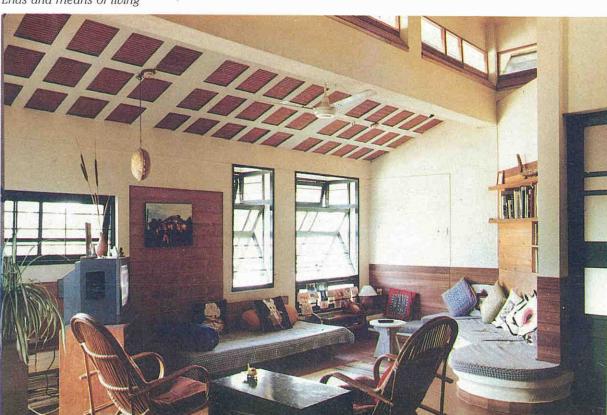


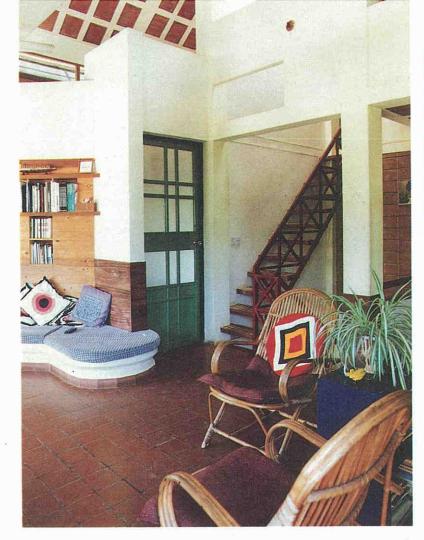
Levels of dining



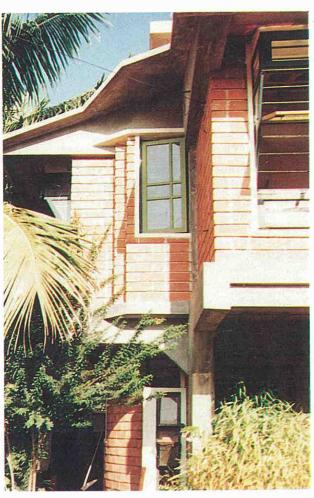
Room for enlightened living

### Ends and means of living





Living to climb up to glory



Caring and caressing every corner



The play of chiaroscuro

## Manmade Harmony

Architect's own House, Chandigarh Architect: H.S. Kohli, Architects Atelier, Chandigarh

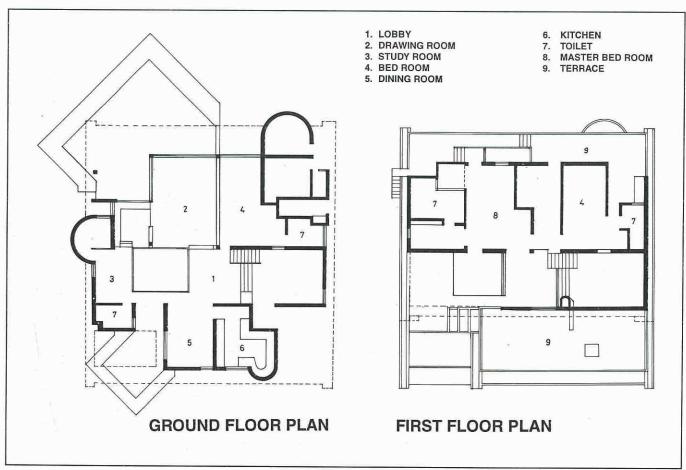
Architect H.S. Kohli, who left this world at the pinnacle of his career, was a known innovator, thinker and a creative genius. The syntax of his structures and the idiom of his detailing left the beaten path of accepted architectural concepts to create a new semantics of gracious living. "Detailing details" was the pivotal idea of his approach to architecture. His own house in Chandigarh's Sector-36 is a faithful representation of his design philosophy.

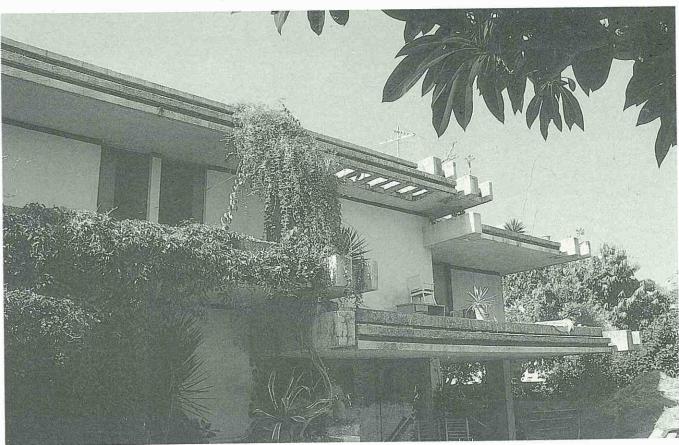
Built on a plot measuring 636 square metres, the house is an agglomeration of cascading cantilevers, platforms, solids and voids. With a view to create the maximum area possible for the garden, the house is conceived on two levels. The lower level accommodates a living-room, a dining-room, a kitchen, a study and guest-room, while the upper level houses the master bedroom, the children's study and a prayer alcove.

The plan revolves around three patios which help in

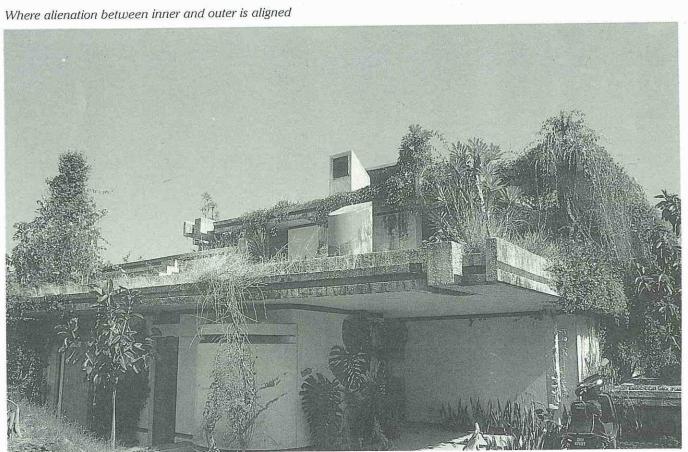
creating a micro-climate of their own within the house. The central patio opens to the sky by sliding back a horizontal screen and insulating shutters. The second patio near the entrance has low walls on three sides and is visible only from inside the house. The third small patio between the master bedroom and the toilet is fitted with fountains and showers which cool the air and create an atmosphere of lightness in the room.

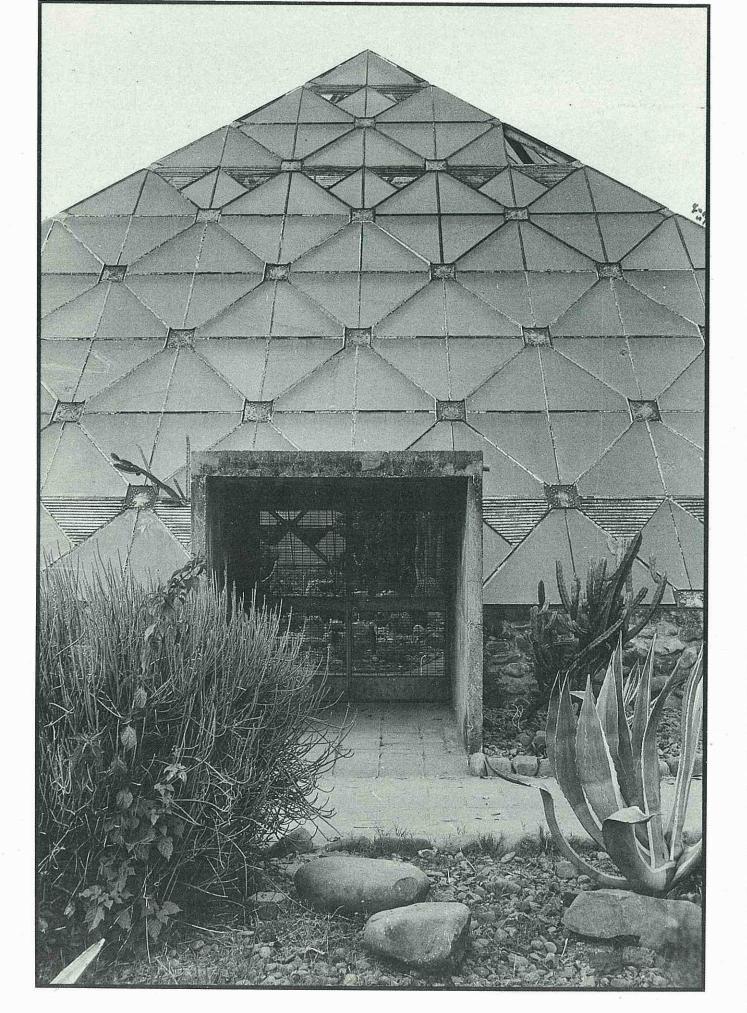
A deliberate effort has been made to subdue the impact of the built-up bulk, and let the outside become a counterfoil. The whole house has been sunk by half a metre. The living spaces are extended outdoors by depressing a large part of the garden to the floor level to create a continuous interaction between the inside and the verdure outside. All room heights have been kept low with the upper level only two metres higher than the entrance level. The entire interior as well as exterior is painted white uniting the inside and outside in one luxurious whole.





Where landscape ascends, hangs, stands and undulates





# Drama of Slopes

Modern architecture with its clean, free-flowing lines and imaginative structuring of space has had a great impact on building designers. However, it has not escaped censure for these very qualities have, more often than not, degenerated into an "assembly-line" design. The uniform height of present-day buildings and the absence of stimulating silhouettes in the creative play of roofscapes are often said to be the major factors which create a sense of oppressive monotony in many modern buildings. In an attempt to avoid standardised design some contemporary architects crown their buildings with innovative roofscapes in slanting configurations. Such roofs are provided to cope with torrential rainfall or heavy snowfall in mountainous regions and maintain a contextual relationship with the traditional architecture of the region. These roofscapes also create regional variations in the so-called dull and drab "matchbox" look of modern architecture. In the plains, sloping roofs are sometimes provided to add grandeur to the buildings and make them look distinctive. A sloping roof, whether it's provided as a utility or for aesthetic reasons, i. a pleasant difference from the rigid contours of some contemporary buildings. These are often ill-conceived in design and lack innovative detail in the pretext of modernism. This, however, does not imply that a slanting roof is merely an addition to provide aesthetic appeal. If the architect and owner agree to have a slanting roof, it should become a facilitator for the evolution of the design as a whole and integrates well with it, rather than appear as an "after-thought"

## Rural Ambience

40

House for Nandita and Pravin Ghatge, Kolhapur, Maharashtra Architect: Shirish Beri, Kolhapur

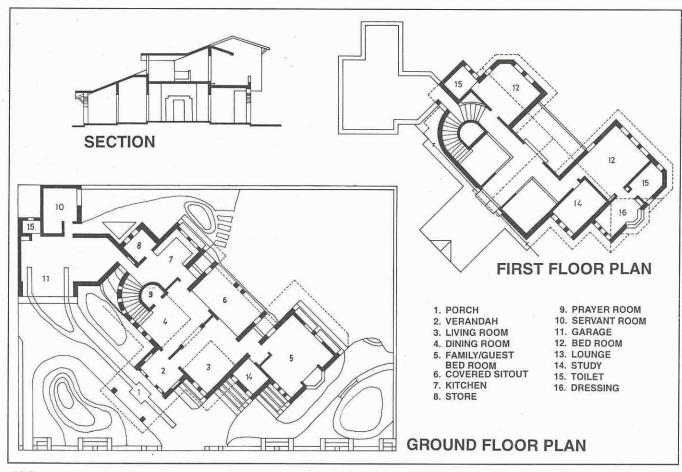
The owners of this house longed for a villa which would resemble a rugged countryside house. In order to translate their ideas into reality, the architect adopted a three-pronged strategy, that is, creation of large outdoor spaces, preservation of existing trees on the site, and choice of natural materials.

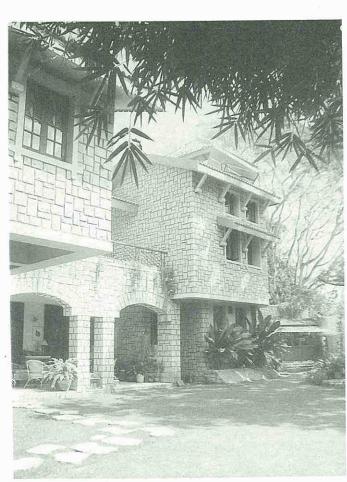
To obtain the required open space, the house is located diagonally in the plot. This creates a large triangular private garden at the back, besides two front open corners with a small undulating lawn and a sandpit. These outdoor areas not only act as breathing spaces around the house but are also extensions of functional areas inside the house. All the existing trees on the site are retained and made part of the architectural vocabulary. Their sun-spangled foliage creates a countrylike environment.

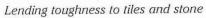
The choice of building materials like natural stone, clay tiles and naturally finished wooden doors and

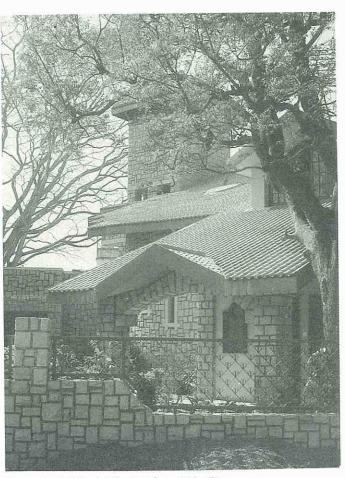
windows too contribute a lot towards creating a rugged ambience. The sloping roofs, dormer windows, water-tank tower, segmental arches, bay windows as well as brackets and flower-beds growing out of the stone masonry walls create a unique visual experience expressing the personality of the owners.

The internal planning of the house is also geared to create a feeling of space. The main living-dining area opens out into a covered sit-out space which extends into the garden at one level and flows into the passage and family-lounge above at another level. Similarly, the family space next to the dormer window enlarges into a sit-out terrace nestling between the two bedrooms on the first floor. The living spaces and the water cascade in the rear corner of the plot can be seen the moment one steps into the house through the entrance porch.



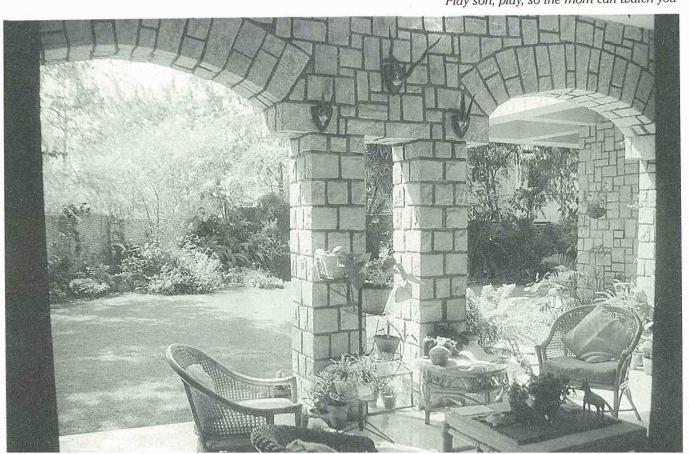






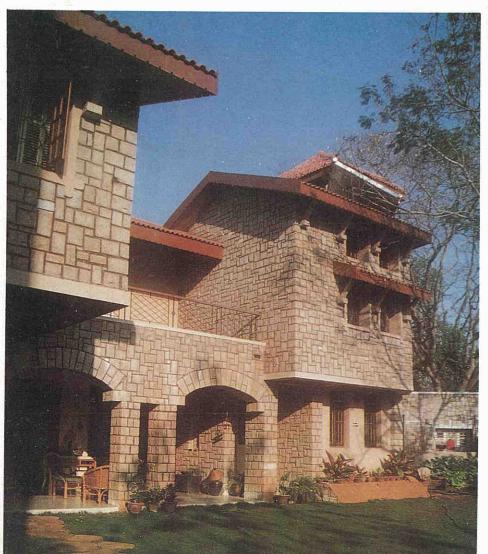
I searched, I found (nature) and I built





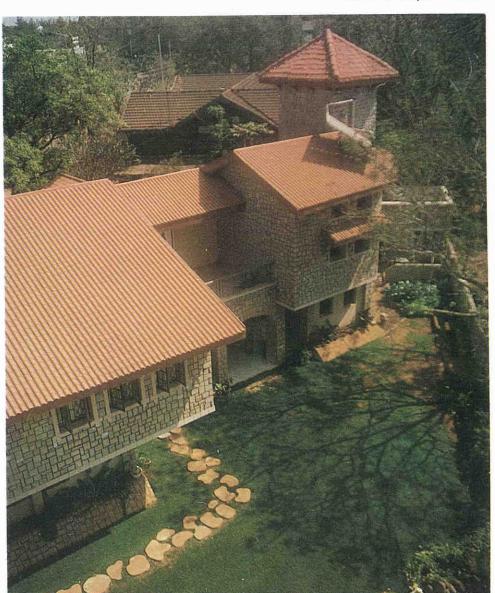


Peaceful coexistence-between nature and architecture

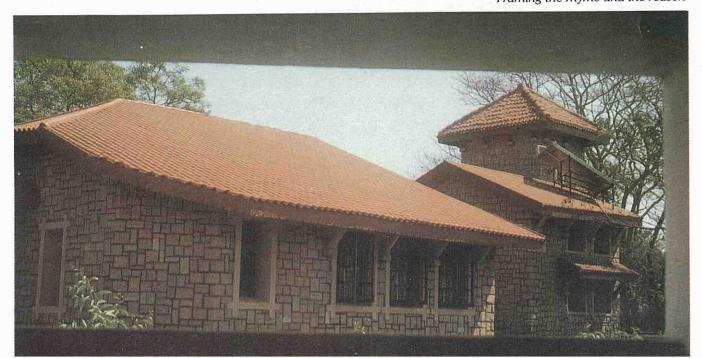


Stones studded like gems in a cabinet

Through the lens' eye



Framing the rhyme and the reason



### Tiled Aesthetics

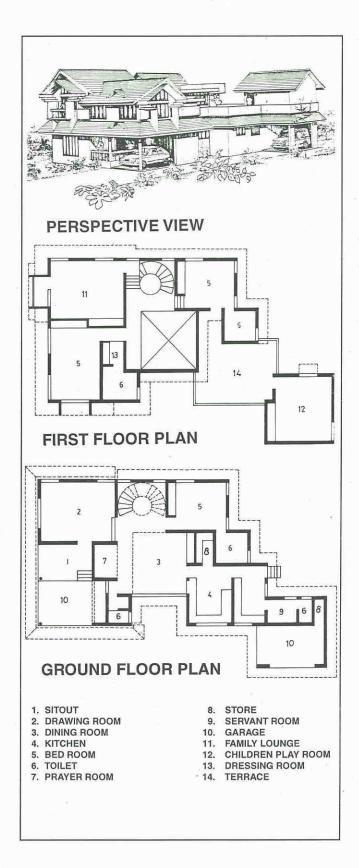
House for K. Ramachandran, Trichur, Kerala *Architect:* C.S. Menon, Enarc Consultants, Trichur

This house for a well-to-do businessman is located in Adiyatt Lane, a posh residential area in Trichur. The 943-square-metre plot has narrow frontage. Exploiting the depth of the plot, the architect placed the building at the farther end of the site. The resultant open space in the front not only protects the house from the noise of heavy traffic but also serves as an attractive foreground. The green of the front garden complements visually the red and white contrast of the built-form.

The external expression of the house is visualised keeping in mind the traditional, architectural style of Kerala. The roof on the first floor has a slanting profile and is finished in decorative clay tiles which are locally available and known as "Spanish tiles".

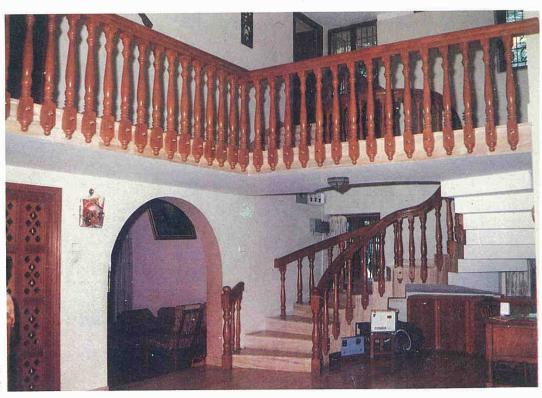
Having a covered area of 380 square metres, the house accommodates a drawing-room, a dining-room, a kitchen and one bedroom on the ground floor. In addition, there is parking space for two vehicles. On the first floor there are two bedrooms, a spacious family lounge and the children's play room. The split-level arrangement of these rooms not only adds to the visual charm but also helps in achieving the requisite height on the ground floor. The enclosed courtyard at the back is ideal for miscellaneous household chores. The double-height dining-room can be seen from a balcony on the first floor. This ensures visual communication between both floors. An attractively-designed circular staircase adds charm to the interior.

The structure consists of load-bearing brick masonry walls with reinforced-concrete slabs. Flooring in all the common areas is in pink marble whereas the individual rooms have a terrazzo finish. All the wet areas are either finished in ceramic tiles or black Cuddapah stone. The entire joinery is in locally available timber.





Exploiting local material and subculture



A dialogue between wood, the workman and the architect

## Royal Space

House for P.S. Bajwa, Chandigarh *Architects:* Designers Consortium Pvt Ltd, Chandigarh

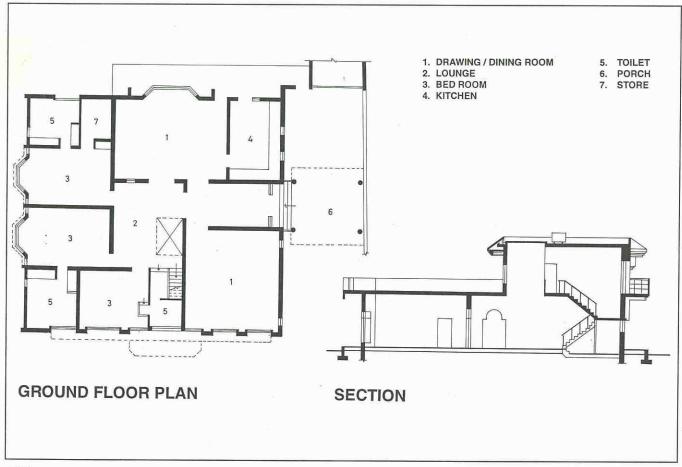
The owner, a politician-industrialist, wanted his house to resemble a royal villa. He chose a partly built-up plot and asked the architects to retain the royal architectural characteristics of the existing building.

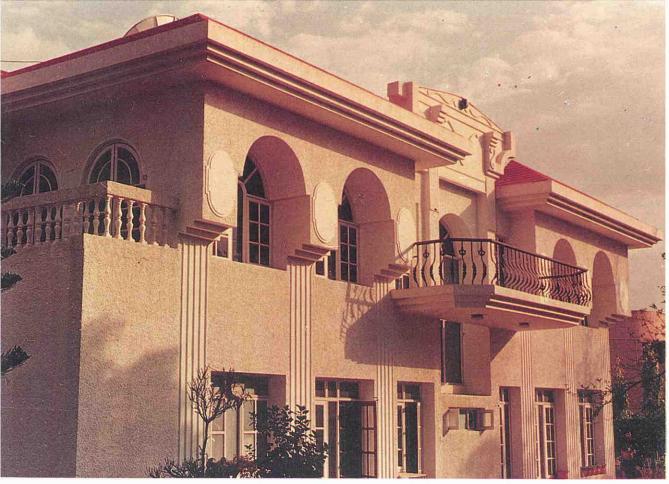
The final plan retained the major structural walls and necessary ingenious additions were made so that the overall expression of the structure preserved its air of majestic grandeur. The relief work done in cement plaster and sponge plaster complement each other. Very few alterations have been made to avoid disturbing the characteristic style of the house.

The layout of the house is very simple. On the ground floor formal areas include three bedrooms while the first floor has a prayer-room and two bedrooms. These units have been juxtaposed in a functional manner. The kitchen at the back is easily accessible from the outside as well as from the servant quarters.

The corner location of the house facilitates the conversion of one of the entries into a service entry. The landscaped court in the front provides an elegant foreground to the building thereby enhancing the beauty of the structure. The oriental style is further emphasised by installing a wrought-iron main gate and lights at the entrance. The simple interior has been enlivened by doing plaster of Paris work in terms of intricate cornices, bands and wall panels. The expensive furnishing is in rich colours and materials to give a royal touch. The interior and exterior complement each other beautifully.

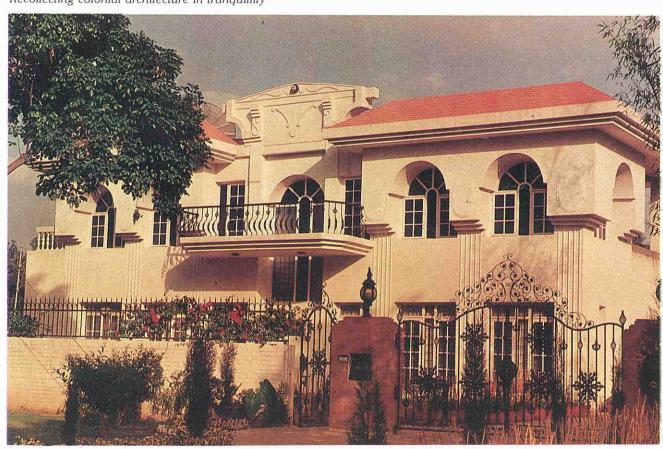
The existing thick brick masonry walls help in providing better temperature control inside the house. The south-west orientation of the house was a determining factor in the choice of insulation material in the plastering of external new brick walls. This has helped considerably in reducing the heat intake during summer.





Architectural nuts and bolts for grandiloquence

Recollecting colonial architecture in tranquillity



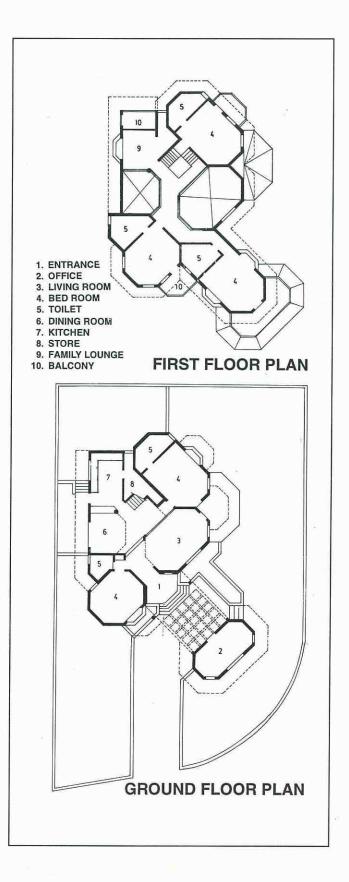
## **Cascading Silhouettes**

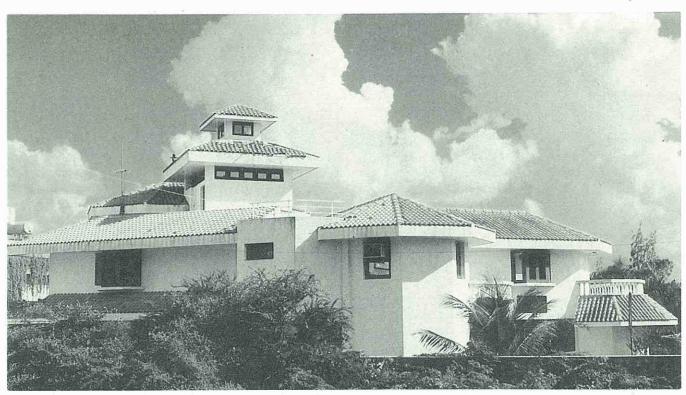
The Jatwanis' House, Surat, Gujarat *Architect:* Ashok Desai, Surat

This meticulously designed bungalow stands on a luxurious plot of about 790 square metres. The building is set back from the road which in turn creates a wide expanse of lawn in front. A driveway leading to the car porch has been tastefully merged with the raised gardens. The overall composition of cascading roofs and white stucco surfaces imparts a distinct architectural identity to the house.

The abstract configuration of the plan includes mainly the octangular spaces. These spaces are so arranged that the sloping roof lines above are synchronised and thus harmonise the overall expression. The ground floor accommodates a living-room, a dining-room, a kitchen, two bedrooms and an office. To ensure privacy in the house, the office has been so placed as to make it accessible from the porch itself. The entrance to the house with its wide flight of steps, built-in plant beds and a richly adorned brass door welcomes guests in typical Gujarati tradition.

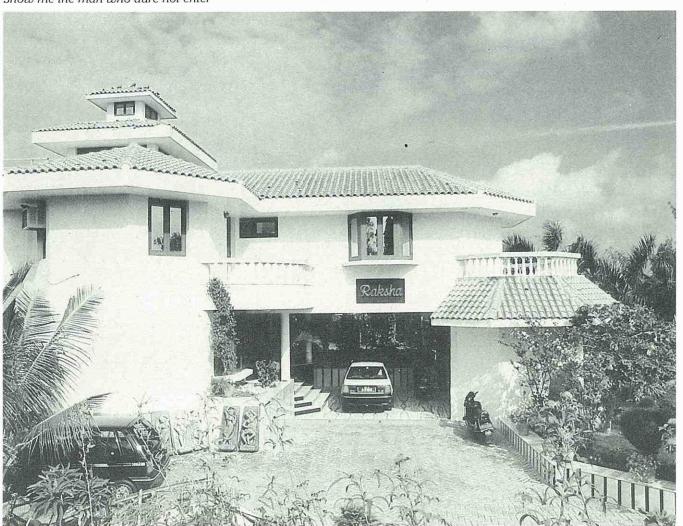
On the first floor there are three bedrooms and a family sitting-room. The master bedroom is judiciously placed over the porch. This location not only imparts a sense of dignity to it but also facilitates in keeping a watch over the house. Except for the bedrooms, all other areas of the house are designed to give a feeling of flowing space. The living and the dining rooms have double-height volumes and are partially separated by a linking bridge which passes through them. The family sitting-room on the first floor overlooks the diningroom and establishes a visual link among the interior spaces. Externally, this room opens onto a balcony which presents a charming view of the lush green fields nearby. The central staircase serves the dual purpose of creating visual interests and binding the cascading roof lines. A skylight above the staircase not only provides an interesting play of light and shade but also enhances the charm of the external composition.





Meghdoot asking: "Who did roofscaping?"

Show me the man who dare not enter



## Geometric Insights

The Javads' House, Bangalore, Karnataka *Architect:* Jaffer A.A. Khan, Bangalore

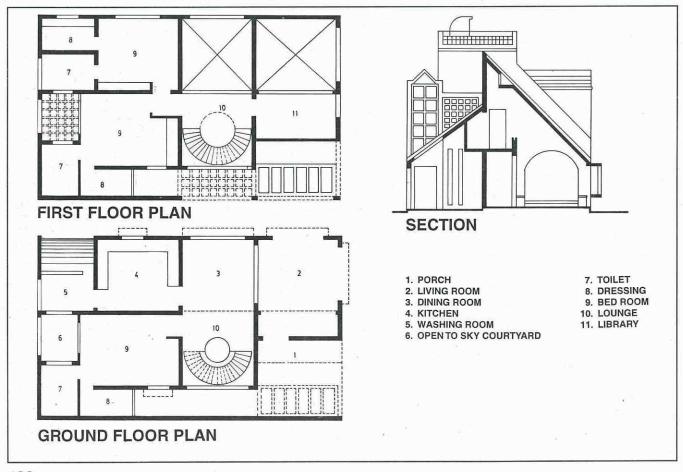
Architect Jaffer A.A. Khan, who did his postgraduation in England, seems to have been influenced by traditional English architecture. This is evident from the house he has designed for the Javad family at Bangalore. Though the house uses modern construction techniques and materials, yet its design incorporates elements found in the colonial houses of the sixteenth and seventeenth centuries. These elements include distinctive gabled roofs with long lean-to slopes.

The roof of this two-storeyed house extends downwards to the first floor level and features dormer windows. This system of roofing together with free-flowing, double-height spaces inside, fulfils climatic requirements as well. An inclined ceiling and dormer windows provide an efficient exhaust system which facilitates air movement in summer. In addition, the roofscape helps in smooth drainage of storm water.

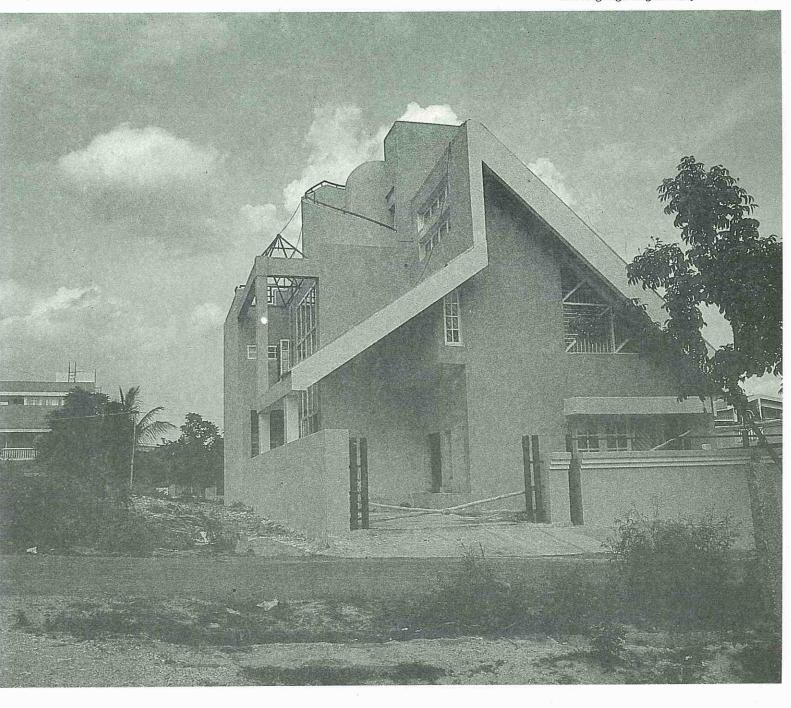
The organisation of space in the interiors is in consonance with the grid-iron pattern of the reinforced-

concrete structure. The ground floor accommodates a car porch, a living-room, a dining-room, a kitchen, a lounge and a bedroom with an attached dressing-room and toilet. The first floor houses two bedrooms, a lounge and a library. A lavishly designed helical staircase provides access to the upper floor. A water fountain near the staircase is pleasing and soothing. A feeling of spaciousness has been achieved by increasing the height of the living and dining-rooms. These rooms can be seen from the lounge and the library on the first floor. Instead of rigid compartmentalisation, the lounge and the library have been provided with a metre high linear flower-bed in reinforced-concrete.

The front court of the house is tastefully landscaped enhanced by a soothing water cascade. The house, a complex of geometrical forms interacting with each other on different sides, is a pleasant relief from modern match-box architecture.



Lending legs to geometry



### Of Architecture and Antiques

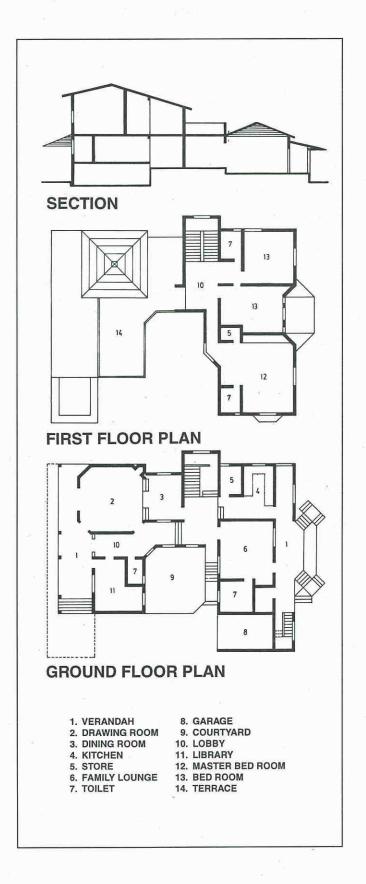
House for L.K. Kataruka, Patna, Bihar *Architects:* Biswajit Sengupta, Sen and Lal Consultants, Patna

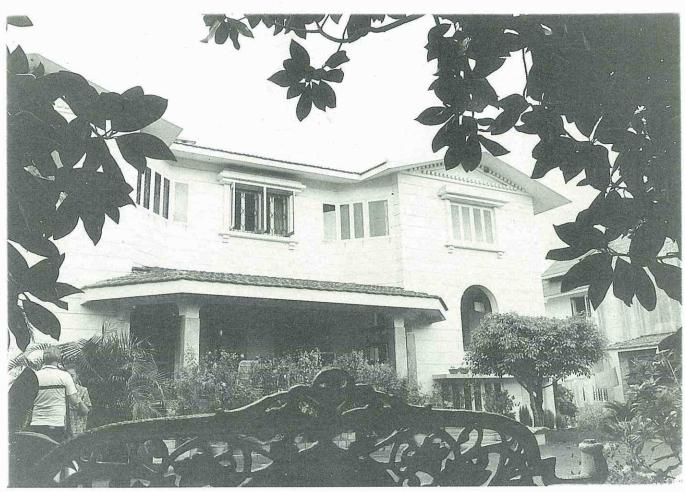
The owners of this house are avid collectors of curios and antiques, besides having a passion for gardening. They wanted their house to reflect their tastes and lifestyle. Keeping this in mind, the architect included in the blueprint a prominent area for displaying collections, an extensive area for landscaped courts, and to entertain friends and visitors a large back lawn which could be viewed from inside the house.

In order to satisfy his client's wishes and specific needs, the architect designed the house with large front and back verandahs overlooking the lawns. A fairly deep front verandah extends along the entire width of the building. The rear verandah, where the family spends much of its time, is an extension of the lounge. Directed by the social activities of the family, the rear lawn has been kept comparatively larger than the one in the front. It is so landscaped as to ensure complete privacy. From the front verandah a wide corridor leads to the interior of the house. It is ideal for displaying collections of paintings and sculptures. One side of this corridor opens onto a semi-enclosed courtyard which is used by the owners to accommodate their bonsai garden.

The whole house reflects the elegant taste and wealth of its owners. In the drawing-room an exquisite chandelier hangs from the pyramidal ceiling. The orientation of the windows of all the rooms is towards the magnificent verdant lawns all around the building.

A large open terrace at the first floor level is designed as a roof garden of potted plants. This space is enclosed by a high parapet wall to screen the house from the busy road and the neighbouring houses. Adequate ventilation at sitting level as well as for the large number of potted plants has been provided by vertically elongated perforations in the parapet wall.





Old wine in new architectural bottle

Details of a cool head and a warm heart



### Patterns of Light

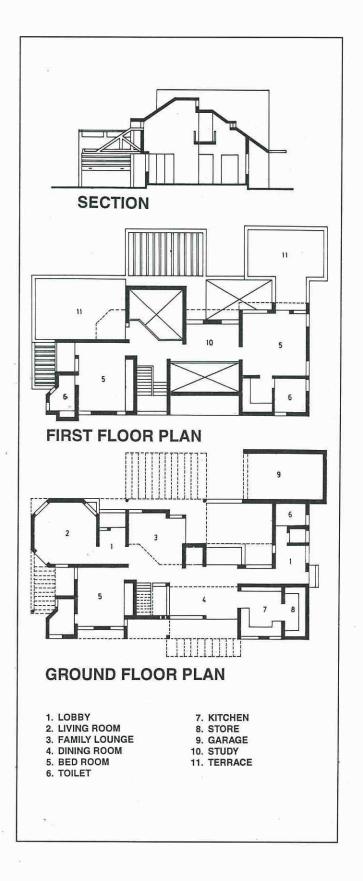
The Hanumanthus' House, Mysore, Karnataka *Architect:* B.S. Bhooshan, Mysore

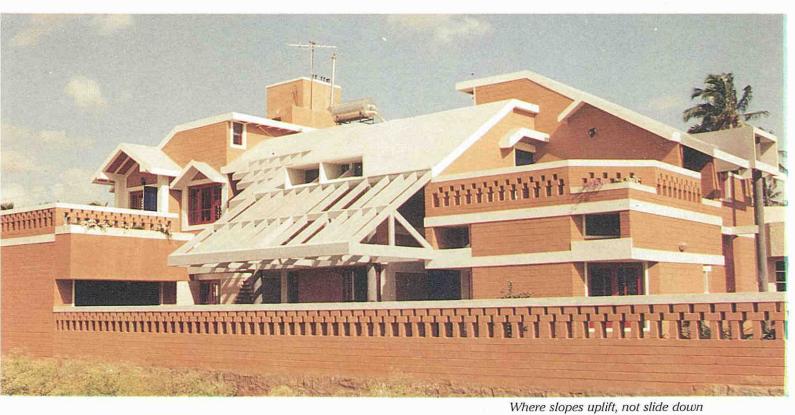
This simple yet elegant house for a young doctor couple with two children and an aging mother is airy and receives plenty of light. Sufficient open space has been provided for plantation. The form of the house is dominated by slanting roofs and a trellised entrance canopy which casts interesting shadow patterns on the porch. The innovative roofscape consists of irregularly sloping planes on different sides, and gable ends at various points. A towering pillar in the front visually rolls up the sloping roof to make room for a symbolic and witty ventilator.

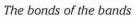
The flat site measuring 372 square metres is located in the developing extension of the city on the Bangalore road. The ground floor is designed to include the mother's bedroom, a living-room, a family-room, a dining-room, a kitchen, a prayer-room and a garage. The upper floor houses two bedrooms and a study room, all having independent access to either a balcony or a terrace. The family-room and the dining-room have high ceilings and open to a skylight.

Outdoor spaces for specific functions are so well-crafted as to make an integral part of the built-form. The core of the house comprising a family-room and a dining-room reflects the dynamics of movement in the house, while the sleeping areas are more quiet. A wooden staircase built with delicate battens and steel frames adds to the visual interest of the internal volumes.

The walls are load-bearing and are made of environment-friendly stabilised mud blocks. To highlight the original earth colour, these are painted with soil-cement slurry. The roof is made of filler slabs with hollow clay blocks. These blocks help in reducing the weight of the slabs. This composition not only provides good thermal insulation but also enhances the aesthetic appeal of the ceiling.









### **Opulent Space**

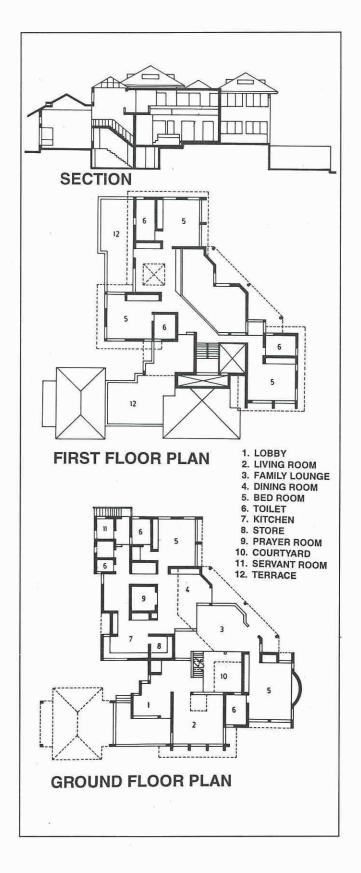
The Gurus' House, Mysore, Karnataka *Architect:* B.S. Bhooshan, Mysore

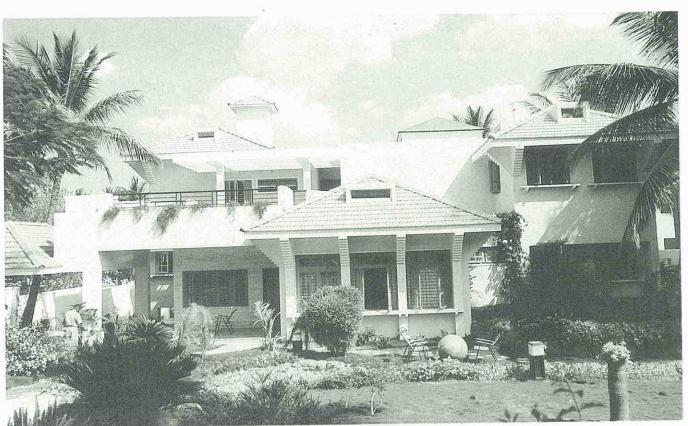
This posh villa for a leading industrialist of Mysore is designed to reflect the owner's sophisticated yet unassuming character. In consonance with the scale of a house accommodating large volumes, the design is conceived of as an assemblage of various components with independent external expression. Visually, the concept is emphasised with independent pyramidal roofs of different rooms which are linked by flat areas and organised in different levels to form a dramatic composition capped by a tower like water tank.

Greenery is an integral component of the design. The huge front-yard is beautifully landscaped with pools, cascading water and lush lawns. The scale of the house from the level of the entrance remains consistent with the large traditional houses of Mysore. The site with an area of over 1,800 square metres slopes three metres from the front to the back. This slope has been effectively utilised by placing the garage and the office below the street level.

The main floor is one metre below road level and is approached by a meandering drive and a stepped footpath. Rooms are arranged around a small internal court with a fibre-glass roof. A wooden torana supported by rosewood pillars separates the entrance foyer from the rest of the house. Next to the torana is a wooden staircase through which the court is visible. The dining-room opens into a large rear court meant for social gatherings. The master bedroom and the guest bedroom are kept on the ground floor while bedrooms for the three children are on the upper floor.

The construction is conventional, using load-bearing brick walls and framed reinforced-concrete structure. The walls are lime plastered internally in typical Mysore style. To differentiate functions, a variety of floor finishes like granite, wood and terrazzo have been used. The external finish is a combination of plaster—both rough and smooth—and paint.

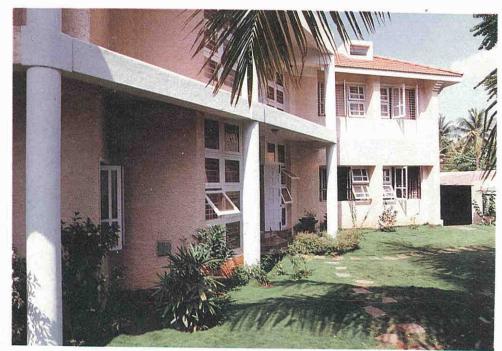




Geometry—the soul of the calculus of architecture



Taste ecstasy, all those who enter



Windows meant to look over, not "overlook" the courtyard

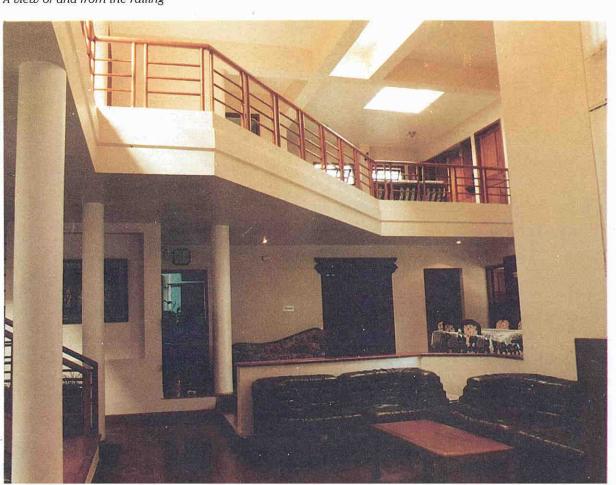


Joy of climbing



Delicate dreams of sturdy architect

#### A view of and from the railing



### Flights of Fancy

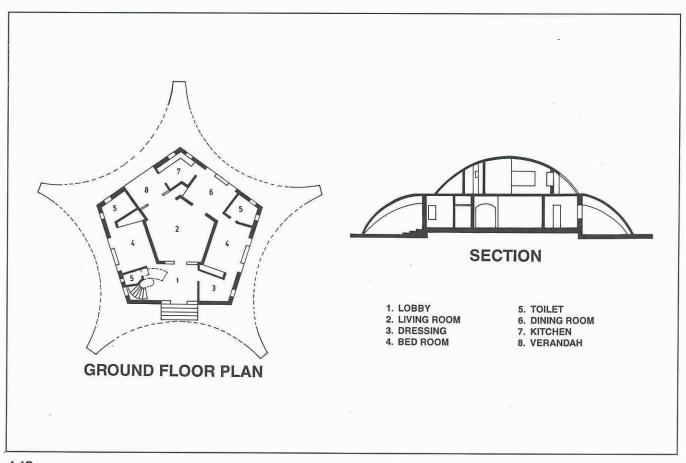
House for Sanjay S. Sandhu, Dehradun, Uttar Pradesh Designers: Sandeep and Kirsty Chakravarty, Dehradun

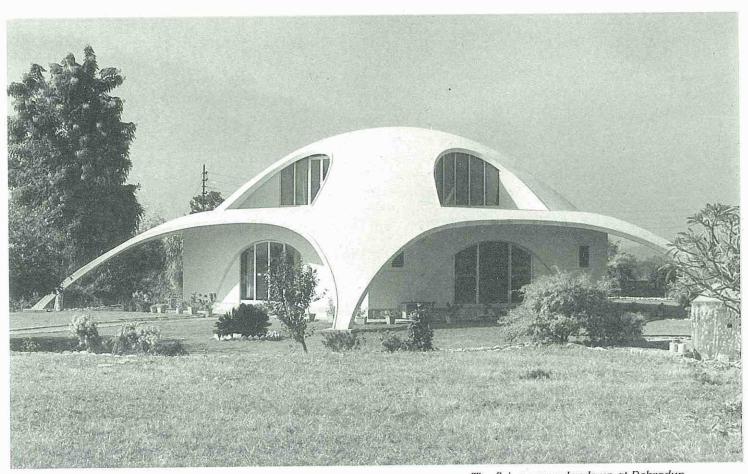
Though desirable, it is not essential to have a formal degree in architecture to become a good designer. If there is a sound instinct for form and a developed aesthetic sense, something innovative can always be created. This is evident from the house Sandeep and Kirsty Chakravarty have designed and built for Sanjay S. Sandhu. Located at Dhoran Khas, a village on the high bank of the river Rispana, it was the first farm house in Dehradun. The unusal design, plastic in form, fits naturally into the scenic setting of verdant fields against the backdrop of the Shivalik Hills.

A glance at the house unfolds Chakravartys' design approach which obviously works "from outwards-to-inwards". A unique and aesthetically pleasing form is their prime consideration. Once the form is decided, they confidently situate the functions and necessary amenities within it. The saucer-shaped form with a domed canopy, supported by slender pillars curving into the ground, has been realised in shell concrete

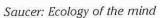
construction. To economically tackle the problem of shuttering, a temporary brick *jaali* topped with wooden planks was devised. Thick mud plaster was applied over these planks and finished with a loose aggregate of stone and lime mortar to achieve uniform curves.

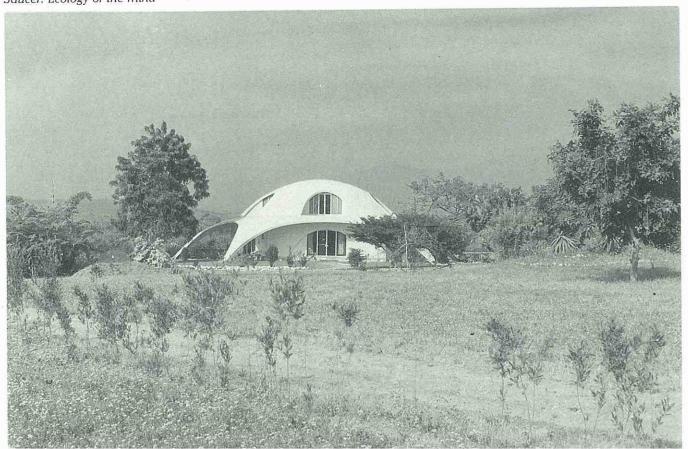
At the core of the house, the pentagonal plan accommodates a living-room, two bedrooms, a dining-room, a kitchen and an entrance lobby around it. All the rooms get a magnificent view through wide windows. The living-room, too, in spite of its location in the centre, affords the same view through the dining-room, the lobby and the verandah. On the first floor, under the upper dome, there is a large, airy hall with arched openings on all the five sides. One can enjoy a panoramic view of the surrounding countryside from here. The white matt painted exteriors and uncluttered interiors enhance the elegance of the built-form, creating a visual delight in the Doon Valley.





The flying saucer lands up at Dehradun





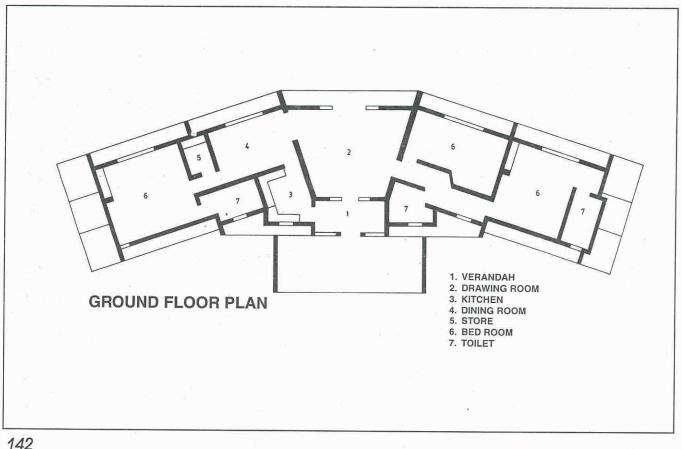
### **Brooding Bird**

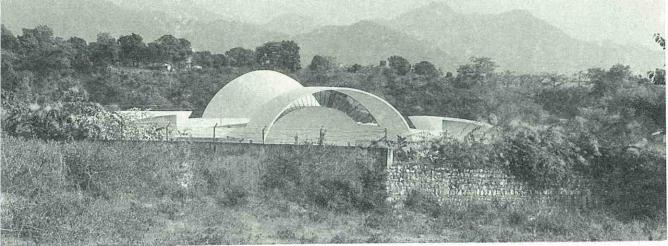
House for R.S. Sharma, Dehradun, Uttar Pradesh Designers: Sandeep and Kirsty Chakravarty, Dehradun

The 'Bird House', as the name suggests, resembles a big bird with open wings. It is located in the Kishanpur area of Dehradun, on the western bank of Rispana River. This form-oriented house takes into account the shape of the plot and its location. The site measuring 1,540 square metres is a long and narrow piece of land with the advantage of a scenic view of the river, and the mountains to the east. It is designed and oriented in such a way that all the rooms face the picturesque hilly terrain. In keeping with the Chakravartys' design philosophy, the house is more like an objet d' art, an evocative sculpture and not just a place for living. Like the designers' other creations, it has no definite, welldefined front and back areas, for example, the portico and the entrance lobby are accessible from the rear of the house.

The living-room occupies the centre of the symmetrical plan, and one steps into it directly through the entrance lobby. Both the portico and the livingroom have double-height barrel-vaulted ceilings which balance the sprawling side-wings. These wings accommodate three bedrooms, a dining-room and a kitchen. All the living areas have wide windows through which one can watch the restful beauty of nature. These windows are fitted with anodised aluminium frames and tinted glass. To ensure security, sliding steel grills have been placed in front of the windows. These grills completely disappear inside the wall cavity when pushed back making possible an unobstructed view of the lawn and the mountains. The interiors are lavishly furnished. All the bedrooms, the living-room and the circulation areas have wall-to-wall carpets, while the dining-room, the kitchen and the toilets have granite flooring. Roofs are in reinforced concrete.

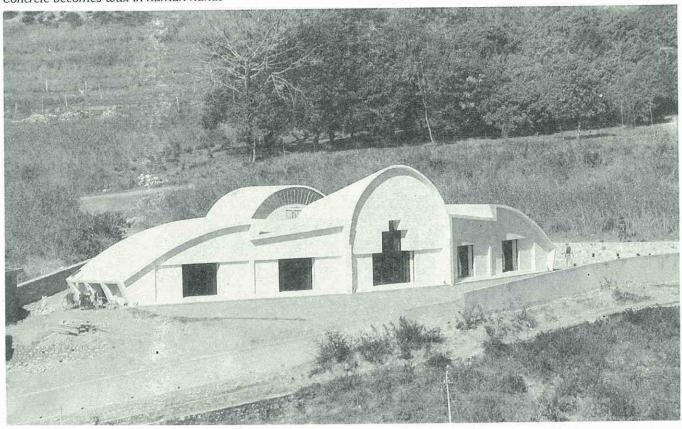
'Bird House' makes no concession to urban architectural fads; its innovative built-form moulds beautifully the space-movement continuum.



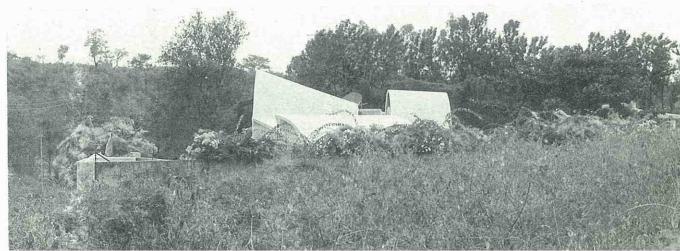


Shapes of the mind

Concrete becomes wax in human hands



Wonders of man amidst the mystery of nature



### **Fabulous Forms**

House for S.D. Chakravarty, Dehradun, Uttar Pradesh Designers: Sandeep and Kirsty Chakravarty, Dehradun

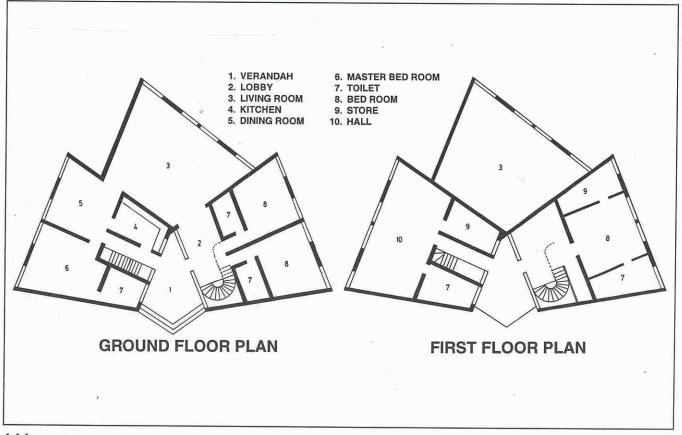
While driving on the serpentine Dehradun-Mussoorie road, one is astonished to see a structure which resembles famous Opera House in Sydney, Australia. Excellent architecture and spectacular setting apart, the blue oceanic surroundings of the Opera House seem to have been replaced by the luxuriant green of the Doon Valley. During the day, the house has the appearance of a fairy habitation and at night it glitters like a magic jewel. The site and structure perfectly complement each other making it a dream house for the lucky owners to live in and for the Chakravartys', a prestigious design project.

This unique structure crowns a mountain peak at Kothal Gate and has an access road by way of a meandering drive a little off the Dehradun-Mussoorie highway. Because of its topographical advantage, the site affords a panoramic view of the sweeping valley on three sides. The basic form consists of three reinforced-concrete shells with aproned openings. Two of the

shells face the valley and the third one faces the hills to the east.

The house is entered through a ceremonial gate-way made of two tusk-like pillars. This artistic feature breaks the monotony of the horizontal lines of the shells, and adds to the dramatic effect of the built-form. After passing through this archway, one is received by a trapezoidal patio. From here one can enter a double-height lobby. A spacious living room under the central shell is made accessible through a wide opening in the lobby. The flanking wings have mezzanine floors with individual access stairs. These wings accommodate bedrooms, a multipurpose hall, besides a kitchen and a dining-room.

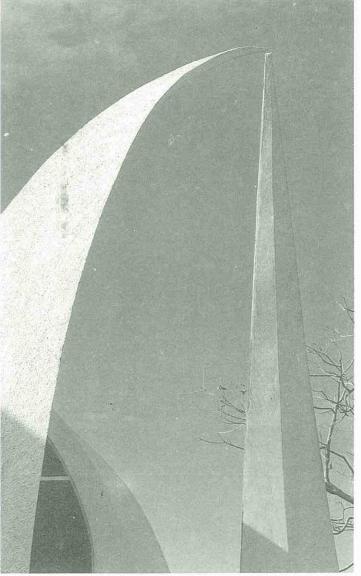
In order to realise the complex shell structure, an indigenous system of "kutcha" shuttering with brick *jaali* walls and mud plaster was adopted. The internal surfaces of the outer concrete walls are clad in brick to conceal the service conduits.





No, not Sydney opera house—a Dehradun house

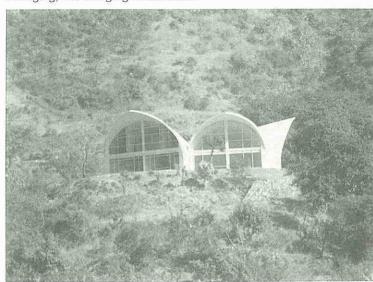
Enter, and ye shall find bliss



Kindly light in enlightening architecture



Emerging, not merging architecture



### A Sculpture to Live in

House for R.C. Sampat, Bangalore, Karnataka *Architect:* Sanjeev Mokashi, Bangalore

This innovative house with sculptural masses and a slanting silhouette is an eloquent statement of the builder's insistence on excellence. Its owner, R.C. Sampat, is a man of innovative ideas. He decided to construct two separate residential units for his son and daughter. The corner plot of  $27.50 \times 21.35$  metres is located in the prestigious Defence Colony of Indira Nagar in Bangalore.

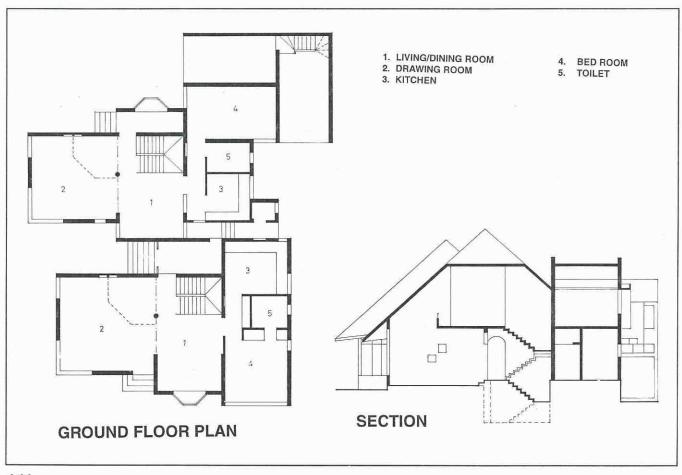
According to the architect, Sanjeev Mokashi, "the corner site by itself decided that a twin-house, and not apartments, is the ideal solution to construction in accordance with the owner's requirements." In consonance with the size, shape and location of the plot and the owner's wishes, the architect divided the plot into two units, one facing the north and the other looking to the south. The former is located towards the side road and has been kept a little bigger to ensure some open space along the road.

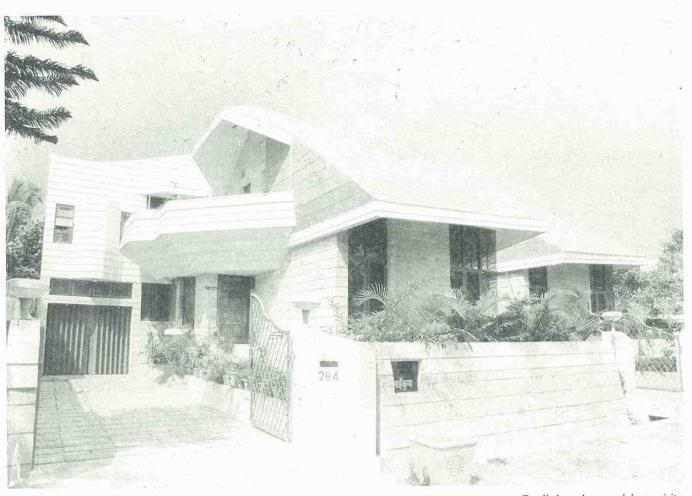
The design significance of this twin-house lies in its individual layout. Though accommodating similar re-

quirements, the units are not mirror images of each other. This imaginative design is a relief from the conventional architectural approach followed in similar contexts. The architect's ingenuity gave the twin house the appearance of a big bungalow from the outside. Inside, apart from a few variations in the size of the rooms, the juxtaposition of family and personal areas and feeling of uninterrupted space are almost identical.

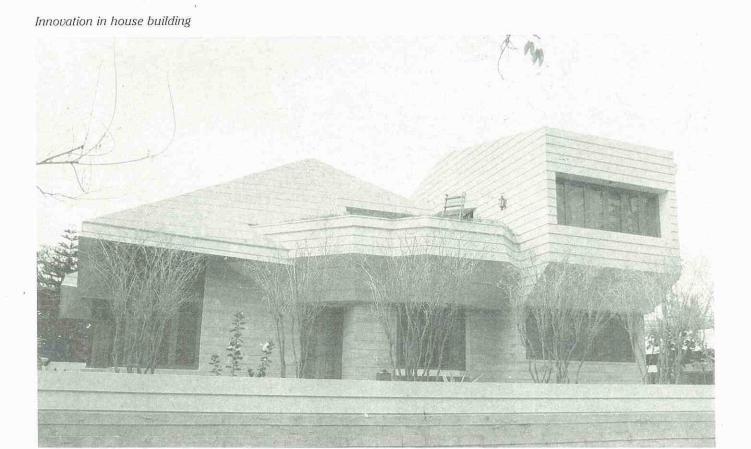
Each house accommodates a living-room, a dining-room, a kitchen, and a bedroom with an attached toilet on the ground floor. On the first floor, there are two more bedrooms and some seating space. The spacious living-room has been kept double-height and can be over looked from a projecting lounge above. The basement contains a multipurpose, audio-video-room.

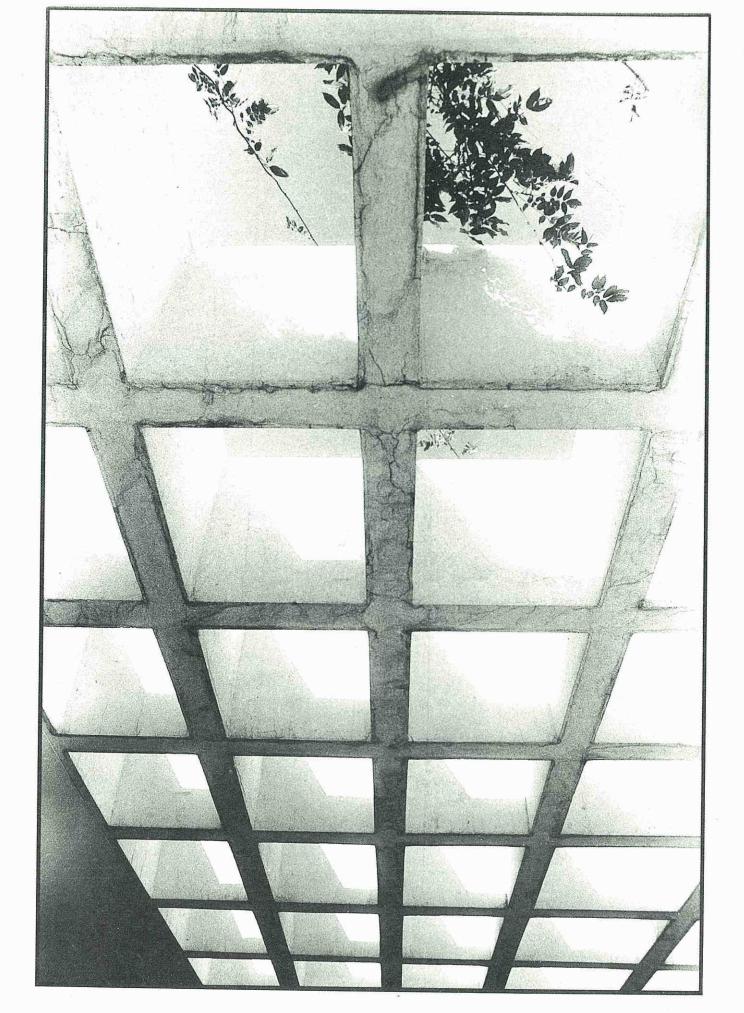
The structure comprises reinforced-cement-concrete columns, lintels, beams and slabs. Stone or brick masonry make up the walls. Externally, the building is clad in sandstone in tones of pink and red.





Declining slopes, rising spirits





#### Notes

- Peter Serenyi: "From Lutyens to young Indian architecture: Sixty years of housing in New Delhi", Techniques and Architecture, August-September 1985, pp. 56.
- Robert Cable: "The architectural treatment of reinforced concrete", *Indian Institute of Architects Yearbook 1925–26*, pp. 31–32; Evenson, *The Indian Metropolis*, pp. 165.
- R.S. Deshpande: Modern Ideal Homes for India, United Book Corp, Poona, 1939, pp. 78, 80.
- 4. Ibid.
- 5. Ibid.
- Norma Evenson: The Indian Metropolis: A View Toward the West, Oxford University Press, Delhi, 1989, pp. 169.
- 7. Ibid.
- 8. Ibid.
- 9. Norma Evenson: *Chandigarh*, The University of California Press, Berkeley and Los Angeles, 1966, pp. 48.
- Max Martin: A House for Everyman, Sunday Mail, October 21–27, 1990, pp. 5–9.

- M.B. Achwal: "Laurie Baker: The master craftsman" Voluntary Agencies and Housing, UNICEF, 1979.
- Quoted in "Kahn revisited" by S. Bahga in *Design*, Jan.-March 1985, pp. 15–22.
- 13. Ibid.
- 14. Architecture + Design, March-April 1988, Vol. 4, No. 3, pp. 18-48.
- William J.R. Curtis: Balkrishna Doshi: An Architecture for India, Mapin, Ahmedabad, 1988, pp. 18–19.
- 16. JIIA, Vol. 58, No. 03, March 1993, pp. 18.
- "Prime Minister's Message" in Architect of the Year Awards 1993,
   J.K. Cement Works, Kanpur, p. 1.
- Y.P. Singhania, Foreword: Architect of the Year Awards 1993,
   J.K. Cement Works, Kanpur, p. 3.
- 19. Editorial, Indian Architect, Vol. 4, Aug. 1962, p. 5.
- 20. Saini, Harish: Project Information Sheet (unpublished).
- Satnam Namita and Associates: Project Information Sheet (unpublished).
- 22. Chaney, Iqbal: Project Information Sheet (unpublished).
- 23. Beri, Shirish: Project Information Sheet (unpublished).

### Glossary

chhajja : overhanging cornice, eave

deori : forecourt or entrance lobby

haveli : dwelling built by rich people, retreat

*jaali* : lattice-work in stone, brick or concrete

mohalla: neighbourhood

purdah : curtain, especially for screening

women's apartments or seclusion of

women

shisham : local tree

sthapaty : Hindu architect

swastika: an ancient Indian symbol, a cross with

arms bent at right angle

## Select Bibliography

Agan, Tessie: The House—Its Plan and Use. Oxford and IBH, New Delhi, 1970.

American Houses. Process Architecture, Tokyo, 1985.

Architecture Record Book of Vacation Houses. American Heritage, New York, 1970.

Bahga, Sarbjit, Surinder and Yashinder: *Modern Architecture in India—Post-Independence Perspective*. Galgotia, New Delhi, 1993.

Bhatt, Vikram and Scriver, Peter: Contemporary Indian Architecture—After the Masters. Mapin, Ahmedabad, 1990.

Brenda and Robert Vale: The Self-Sufficient House. Macmillan, London, 1980.

Charles Correa. Concept Media, Singapore.

Conran, Terence: *The House Book*. Mitchell Beazley, London, 1974. Curtis, William: *Balkrishna Doshi—An Architecture for India*. Mapin, Ahmedabad, 1988.

Design, Vol. 4, No. 10, 1960 (Oct.); 1988 (Jan.-March).

Dunstee, David: Key Buildings of the 20th Century. Vol 1, Houses: 1900–1944. Architectural Press, London, 1985.

Encyclopaedia of World Architecture, Vol. 1. Macmillan, London, 1977.

Gardinee, Stephen: Evolution of the House. Constable and Co, Great Britain, 1975.

Haraguchi, Hideaki : *A Comparative Analysis of 20th Century Houses*. Academy Editions, Great Britain, 1988.

Harrison, Henry S: Houses—The Illustrated Guide to Construction, Design and Systems. Realtors National Marketing Institute, USA, 1976.

Hermann, Muthesius: *The English House*. Granada, Great Britain, 1979.

Hoffmann, K: House. Julius Hoffmann Verlag, Stuttgart, 1962.

Jeremy, Robinson: Affordable Houses Designed by Architects. McGraw-Hill, USA, 1979.

King, Anthony D: *The Bungalow*. Routledge and Regan Paul, London, 1984

Mumtaz, Kamil Khan: Architecture in Pakistan. Mimar, Concept Media, Singapore, 1985.

Page, Marian: Historic Houses (Restored and Preserved). Whitney Library of Design, New York, 1976.

Prasad, Sunand: "In the 21st Century will the haveli have been completely destroyed". *Design*, Oct.–Dec. 1987, pp. 11–20.

Rosalind, Ashe: More Literary Houses. Facts on File Publications, New York, 1983.

Shipway, Verna Cook and Shipway, Warren: Mexican Homes of Today. Architectural Book, New York, 1964.

Sherwood, Ruth F: *Homes—Today and Tomorrow*. Chas A. Bannett, Peoria, Illinois.

Singh, Surendra: Engineering Materials. Vikas, New Delhi, 1985.

Taylor, Brian Brace: Raj Rewal. Mapin, Ahmedabad, 1992.

The House and the Art of its Design: Progressive Architecture Library, Reinhold, USA, 1963.

Wagner, Walter F. and Schlegel, Karin: Houses Architects Design for Themselves. McGraw-Hill, USA, 1974.

Wagner, Walter F: A Treasury of Contemporary Houses. McGraw-Hill, USA, 1978.

Whiting, Penelope: New Houses. Willmee Brothers and Haram, Birkehead, Britain, 1964.

#### Index

Achwal, M.B. 8 Agra 64 Ahmedabad 9–11, 13, 19, 26, 42, 56, 58, 86, 100 Amritsar 13, 14, 46, 64, 74 Architects Act 8 Arni, Nikhil 13 Australia 144

Baker, Laurie 8–10
Bangalore 4, 13, 102, 106, 130, 134, 146
Bangla 1
Baroda 12–14, 26, 32
Beri, Shirish 16, 54, 98, 120
Bhatti, S.S. 34
Bhatt, Dhansukh 100
Bhooshan, B.S. 12, 94, 112, 134, 136
Bihar 132
Bornbay 4, 7, 72, 104, 106, 108
Bungalow 1, 2, 3

Cable, Robert 4
Calcutta 4, 90
Chhajja 58, 104, 106
Chakravarty, Sandeep & Kirsty, 140, 142, 144
Chandigarh 6–9, 19, 24, 28, 30, 34, 40, 44, 48, 50, 60, 66, 78, 84, 116, 126
Chaney, Iqbal 88
Chicks 2
Chulah 5
Coorg 102
Corbusier, Le 6, 8–11, 88
Correa, Charles 11
Council of Architecture 8
Cuddapah 124

Dehradun 140, 142, 144
Delhi 4, 11, 12, 14, 15
Deori 68
Desai, Ashok 128
Designers Consortium 24, 44, 66, 126
Deshpande, R.S. 4, 5
Dhawan, Ashok 14, 15
Dholpur 60, 64
Doshi, Balkrishna 11
Doshi, Girish 14, 15
Drew, Jane 6, 10, 19

England 130

Fatehpur Sikri 6 Fry, Maxwell 6, 10, 19

Gandhi, Mahatma 6, 8 Gandhi, Hiren 15 George, Walter Sykes 4 Granite 136 Gropius, Walter 6 Gujarat 11, 14, 26, 32, 42, 56, 58, 72, 80, 82, 86, 100, 104, 128 Gurdev Group of Architects 60 Gurgaon 20, 92 Harappa 19 Haryana 6, 20, 24, 28, 48, 60, 84, 92 *Haveli* 30, 58 Himachal Pradesh 40 HUDCO 9

Indus Valley 19 Institute of Architects 8

Jaali 6, 8, 64, 140
Jaffar, A.A. Khan 130
Jain, Kulbhushan & Minakshi 13, 56, 58
Jaipur 12, 64
Jaisalmer 24
Jaisim, K.J. 13
Jeanneret, Pierre 6, 7, 10, 19, 50
J.J. School of Arts 7
Jodhpur 58

Kanvinde, Achyut 11, 12, 36 Karnataka 94, 102, 104, 106, 112, 130, 134, 136, 146 Kathpalia, Radhika & Rajeev 14 Kerala 124 Khajuraho 6 Kahn, Louis 6, 8–10, 19, 42 Kishanpur 142 Kolhapur 54, 98, 120 Kohli, H.S. 116 Kota 100

Madhya Pradesh 90 Madras 4 Maharani Bagh 36 Maharashtra 12, 54, 88, 98, 108, 120 Malhotra, Jeet 7 Mangalore 98, 100, 104, 108 Marble 7, 66, 104, 106 Menon, C.S. 124 Metropolitan 4,97 Mohalla 2 Mohanjodaro 19 Mokashi, Sanjeev 146 Mount Abu 14 Mukherjee, Dulal 90 Mussorie 144 Mysore 12, 94, 112, 134, 136

Nadhavade 98 Namboodripad house 8 Nehru, Jawaharlal 6 New Delhi 4, 12, 20, 36, 92 Nicholls, Henry 4

Opera 144 Otla 64 Panchkula 24, 28, 48, 60, 84 Paonta Sahib 40 Patel, Hasmukh 26 Patna 132 Plaster of Paris 104 Punjab 6, 30, 46, 64, 78 Pune 16, 54, 88 Punkha 2

Rajasthan 14,58 Raipur 60 Raje, Anant 42,86 Rajkot 72,80,82 Rama Krishna Ashram 82 Rameshwar, P.V.K. 12 Rohe, Mies Vande 6

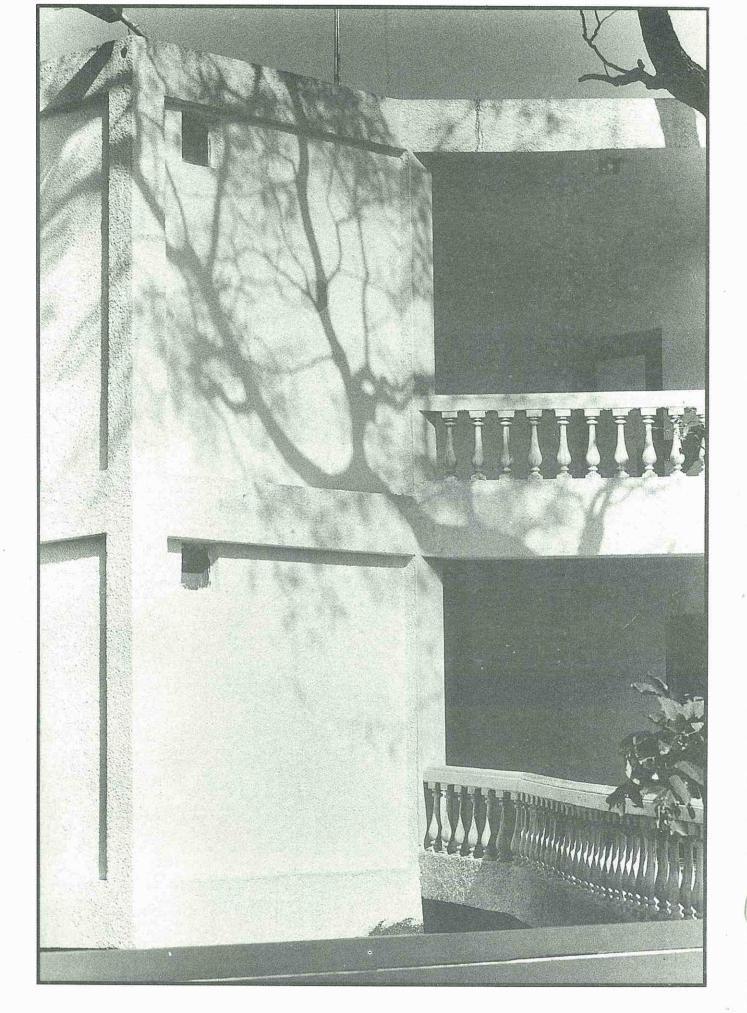
Saakaar Foundation 40, 50, 78, 84 SAS Nagar 30, 78 Saini, Harish 24 Sandstone 64, 146 Sanil Kumar, K.V. 14 Sarabhai House 9 Sathapathy 6 Satnam Namita and Associates 17, 48 Saurashtra 72 Sengupta, Biswajit 132 Serenyi, Peter 4 Sharma, Manmohan 20, 92 Sharma, Ram 11 Sharma, S.D. 28, 30 Shirgaonkar, A.M. 12-14, 32 Shroff, Rumy 104, 106, 108 Singh, Dalbir 13, 16, 17, 46, 64, 74 Sirmour 40 Stein, Joseph Allen 10 Stucco 106, 128 Surat 104, 128 Swastika 36 Sydney 144

Talati, A.J. 16
Taj Mahal 6
Tata, Jamshedji Naoroji 3
Thackar, P.M. 16
Thimmaiah and Prabhakar 102
Trichur 124
Trivedi, Kishore 70, 80, 82

Uttar Pradesh 140, 142, 144

Verandah 2 Vij, Naveen 20

Wankaner 72 Wright, Frank Lloyd 6



### **New Indian Homes**

#### An Architectural Renaissance

In the history of post-independent India, this is the first concise yet comprehensive publication on the contemporary house designs.

The book covers 51 selected houses located in different parts of India. These modern homes are grouped into five categories according to their external thematic expressions. A brief write-up in the beginning of each section gives an effulgent introduction to the essence of the houses included in that section. Each house is explained through very informative description, specially-drawn drawings and good quality photographs. It includes nine residences designed by the architects for themselves. Photographs and drawings have been especially selected and re-rendered to highlight the built-form rather than the interior decoration.

#### The Authors

Sarbjit Bahga, Surinder Bahga and Yashinder Bahga

graduated from the Chandigarh College of Architecture in 1979, 1984 and 1986 respectively. Sarbjit Bahga works for the Department of Architecture, Punjab, while Surinder Bahga and Yashinder Bahga have set up their own architectural consultancies.

Their completed works include an eclectic and impressive range of religious, educational, administrative and residential buildings, urban design, interior design and landscape projects. According to Peter Serenyi, a leading American architect and a well known critic, "Their buildings are interesting and responsive to function, climate and materials." Some of their works have been selected for the international exhibition at the Vth Asian Congress of Architects, held at Lahore, Pakistan.

Besides architecture, their multi-faceted personalities find eloquent expression in creative writing. They have won appreciation as photo-artists. Their works as well as articles have appeared in different professional journals and national dailies. The contribution of Bahgas to architecture, architectural literature and photography has been recognised by various organisations. *New Indian Homes: An Architectural Renaissance* is their second book which follows *Modern Architecture in India: Post-Independence Perspective*, their first book which was published in 1993.

The first chapter entitled "the Metamorphosis of Indian House" deals with the evolution of the present form of a house from a Bengali peasant's hut—bangla. It discusses various factors which influenced the house design in India since the early days of the Raj. The role of the architect in developing the house-form is highlighted.

Noted academician-architect-author Prof. Christopher Charles Benninger, the founder-Director of the Centre for Development Studies and Activities, Pune, has written the foreword to this treatise. Renowned architects Jane B. Drew, Prof. Peter G.H. Dale who is Vice-President of RIBA, and Achyut Kanvinde have described this publication as a valuable addition to the literature on the architecture of new houses in developing countries.

The publication aims to serve as a valuable reference not only for the people who are going in for new construction of their dream houses, but for also the architects and other allied professionals engaged in house-building activity who wish to achieve excellence in the field of residential architecture.

The book contains interesting material to be of deep interest and appeal to the readers, besides filling a long-standing void for a pictorial compendium on this subject. In addition, glossary of terms, detailed bibliography, reference notes and index increase the book's utility to the serious readers, the professionals and scholars.

Students of architecture will find it extremely useful as a rich resource material.

Text studies 51 unique Indian houses depicted under five distinct themes: ① Brick, ② Stone, ③ Stucco, ④ Nature, and ⑤ Slopes. Write-up on each house is accompanied by a detailed drawing depicting relevant plan/elevation. Photographs of views of the house from strategic points and angles create an impressionistic visual impact on the reader. The interiors and details, wherever given, enhance the conceptual imagery.

- 160 pages printed on art paper with colour and black & white pictures
- 105 black & white + 80 colour illustrations
- 51 drawings

SPC

### Galgotia Publishing Company

6 A/4 WEA, Karol Bagh, New Delhi-110 005

ISBN: 81-85989-05-02

Price: Rs. 495/-