Architectural Voices of India

Architectural Voices of India:

 $A\,Blend\,of\,Contemporary\,and\,Traditional\,Ethos$

Ву

Apurva Bose Dutta

Cambridge Scholars Publishing



Architectural Voices of India: A Blend of Contemporary and Traditional Ethos

By Apurva Bose Dutta

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Cover Theme Description (conceptualised by Apurva Bose Dutta)

The metaphorical use of birds and their nests on the cover depicts architects and man-made architecture and buildings. Birds are one of the most skilled species at building dwellings. The most natural architects on the earth, their nests are borne out of nature using different materials, such as mud, twigs, leaves, faeces, volcanic sand, etc. These dwellings are created to adapt to the surroundings in the most effective and efficient manner. Even by creating and living in different types of abodes, these diverse species of birds (adults as well as fledglings) communicate within themselves, live in harmony, and seamlessly blend into the changing environment.

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FOREWORD

THE RESPONSIBILITY OF THE ARCHITECTURAL CONVERSATION

DR VIKRAMĀDITYA PRAKĀSH

PROFESSOR OF ARCHITECTURE, UNIVERSITY OF WASHINGTON, SEATTLE

From twelve thousand miles, and almost half a lifetime, away from India, it is fascinating for me to try to bring into focus the picture of architectural practice in India that this book has collaged. As a collection of interviews with architects, this book belongs to that rare species known in academic circles as "oral history"—a faithful recording of a conversation, meant to document the living voice of a person that, one hopes, conveys something of an impression of his or her lived life. By talking to architects about their lives and loves, families and philosophies, this book offers an insight into something of an alternative universe, i.e. a world of words and ideas, a world whose relationship with the actual built work remains indirect; the work is probably expected to illustrate the word, but that relationship is perforce tangential and evocative rather than illustrative.

The illustrations show that a rich and diverse body of work is being produced by this representative body of contemporary Indian architects. The text of this book suggests that in India today, the profession is not only alive and well, but is also working hard to step up to the requirements of the times, cognisant of its own historical lineage, mindful of its responsibility to the present and desirous of a better, brighter future.

But for me, the fascinating thing about this book is not that it offers architectural voices that should be measured against their built work; rather, the voices assembled in this book together weave a narrative that is so much larger, so much more subtle, and uncertain, than the rigid certainties of the work that they purport to explain. Yes, this book has a strong biographical quality, as if the lives and loves of architects are somehow explanatory of their work. To a certain extent, they are, but they tell other stories too.

Like what? Like the fact that the profession feels it must execute its responsibility to its clients, whether it is the paying client, or the public, or the nation or the environment; that, in spite of the mounting commercialization and uncertainties of our times, it remains committed to the search for a certain idealism in the act of practice; that Sri Lanka and Japan seem to be important reference points, not so much Singapore and Dubai; that after Le Corbusier and Kahn, Correa and Doshi still seem to retain the mantle of masters; and that spirituality and architecture as a "way of living"—and not just the marketing job of making things "world-class"—still appears to be one of the core values of an architectural life.

So, that bodes well and is evidenced by the continuing strength of this profession, which is now seventy-odd years old, and the seeds of which were firmly planted, and early on by the aspirations of the Nehruvian nation-state. That the profession still dines off the legacy of its Nehruvian seedling is evident from the fact that with its strengths, the old anxieties of the Nehruvian age are also still at play. The profession continues to be anxious about its relationship with a mythical "West", it still feels like it is in a mode of "catching up" (with sustainability being the latest standard set by the West), and even when it disavows this, it tries to discover the roots of its sense of self in—what is from my perspective—the trap of false oppositions, such as tradition versus modernity, history versus the future, the spiritual versus the material, and so on.

It is, of course, not easy to or obvious how one could step out of and beyond these foundational concepts of modern Indian architecture. It requires a DNA-level transformation in thinking, a change in the terms and tones of conversation, which is bound to be a slow and evolutionary process. Often such changes are difficult to discern; they become evident only after they are normalized.

Changes in conversation require a culture of questioning and critique that is traditionally the responsibility of academics and publishers. It is usually in the schools of architecture and in the print media that the conversation of architecture, as in this book, takes place. But, if the architects interviewed in this book are to be believed, architectural education in India today is woefully unprepared to execute its basic responsibility to provide professional training, far less to foster the culture of architectural critique and criticism. Amazingly, one of the architects interviewed in this book has started his own six-week internship programme. I presume this is a nuts and bolts practice education programme. That's great. But, I wonder, who is shouldering the responsibility of the conversation?

viii Foreword

In the last two decades, I have observed the spectacular ballooning of schools of architecture in India. When I went to architecture school in India, there were a handful of schools and NASA was an intimate affair. Today, with the much greater range and variety, the possibilities of a rich conversation on the architecture of India are endless. After all, the frontiers of architecture today, in terms of sheer numbers if not criticality, are in places like China and India. Over the last few years, I have been invited to several conferences and lectures in schools of architecture in India. Most of these discussions are closely practice-oriented, generally focusing on big issues such as sustainability and urbanization.

As far as I know, there are few, if any, conferences on the discourse of Indian architecture. What are the changing concepts with which we are describing, and might describe, architecture in India today? What are the ways in which we could relearn from our history and culture? What are the intellectual openings that might lead the Indian architect of the future to as yet unknown futures? What are the new terms of debate that can be fielded to help us not only sidestep the usual western framing of issues, but also "talk back" to the West, and help the global architectural community rethink the core issue of architecture?

Specifically, from my own narrow academic perspective as an architectural historian and theorist, it seems to me that we need to seed a series of new undergraduate and postgraduate architectural history-theory programmes in India, which currently has none. I know that there are some good courses on preservation, but somehow, architectural history-theory has never taken off as a discipline in India. Even a new basic text on the history of architecture of India has not been written for decades.

Amartya Sen has argued that one of the things that defines India is its critical tradition—what he terms the ethos of the "argumentative Indian". I tend to agree. Architectural history and theory are not a particularly "American" or western thing. Brahmins were writing and advocating the *Vaastu Shastras* over a millennium ago, long before any western Renaissance architect put pen to paper. In 1834, Ram Raz was one of first architectural theorists of the modern world to write an Enlightenment text on architecture. Ananda Coomaraswamy, with Stella Kramrisch, sought to redefine the meaning of architectural pleasure itself, not just for Indian architecture, but for architecture in general.

Admitting the biases of my own profession, I offer the following observation. A strong culture of architectural history-theory—i.e. the culture of thinking about and discussing what architecture is and isn't, which is to say what it was, is and could be—is necessary for a strong and vibrant architectural profession. History-theory is the datum, the benchmark, that architectural practice refers to and measures itself against, even if in opposition or difference. This is certainly the case in Europe and Japan, and to a lesser extent, in the United States, where I live and teach.

For a vibrant profession, Indian architectural history and theory must move beyond an "explanatory" role for architectural practice. It must become the framework for "argument". Apurva Bose Dutta's interviews, in the pages that follow, offer a potential opening.

Seattle, 2017

PREFACE AND INTRODUCTION

Architecture builds and frames the environment, influences the way the society develops, and caters to the need for better living. Working as an agent of change, it gives rise to a discourse that endeavours to enhance our lifestyles. Thus, it is a profession that is cherished, needed and respected. As individuals interact with built-up spaces, whether as designers or as those who inhabit these spaces, they are impacted by architecture, the impact being all-pervasive.

Architecture as a profession has undergone major transformation in India. Contemporary Indian architecture has been commended for its accomplishments at the two extremes of the spectrum of requirements—luxury living and affordable accommodation. The spirit of Indian culture, the biggest strength of Indian architecture, has been innovatively adapted to suit modern needs by a fair number of architects in the country.

Indian Architecture Today

Indian architecture and design have been grappling with several meta-issues—finding an identity, finding solutions to the dearth of land to house the increasing population, combating concerns related to global warming and syncing with technological advancements. Retaining our traditions and shunning the trap of copying western buildings, and overcoming the problems of depleting resources, shortage of manpower and poor infrastructure (in most parts of the country) are some of the other challenges.

Indian architecture is also facing the dilemma of non-contextual architecture. It is burdened by the lack of integrated urban planning and by the propensity to use glass and steel facades. It is in the process of finding suitable definitions for "sustainable" and "green architecture", and is preoccupied with debates over outsourcing work, the invasion of the market by foreign architects, and the diminishing control of architects over buildings. The fast pace of commercialisation of the profession which has been eroding its purity, issues with construction, a need to create developments which focus on functions and durability and don't end up looking the same, are other important factors to be considered in Indian architecture today.

Other aspects that need consideration are education, and licensing and other laws related to the profession. There must be an emphasis on quality education, which may be achieved by setting basic standards and evaluation parameters for it. Encouraging the study of the sub-disciplines of architecture (landscape/architectural journalism/ lighting/ restoration/ architectural photography) and publishing research-oriented and good quality architectural journals could also be helpful. The procedure related to the granting of licence must be reviewed to protect the profession from declining standards. Effective regulatory bodies must be set up to monitor the profession, ensure minimum standards of design and work towards the creation of functionally designed cities. Building laws must be made simpler to remove roadblocks and discourage corrupt practices.

The Catalysts

To understand any field in its entirety, it is essential to study the catalysts responsible for its genesis and growth. Thus, to understand architecture, it becomes vital to recognize the creators, the interpreters and the translators of this field, that is, the architects. Living in the midst of changing urban landscapes and the growth of assorted building forms, one needs to pause and reflect on these "architects" who make all this happen, and to understand their theories, philosophies, and visions to appreciate their designs and experience the true essence of architecture.

My foray into architectural journalism 12 years ago was imbued with a certain extent of uncertainty due to the novelty of the field back then. If the five years I spent in pursuit of my architectural degree gave me a basic understanding of the various aspects of the profession, my interactions with the architecture and building industry during my journey as an architectural journalist, taught me the practical side of architecture, and familiarized me with its role and its functions. Over the years, I started admiring the missionaries (architects) who manage to give a concrete shape to someone else's dreams and weave their own dreams into them.

I believe that the motivation to write this book existed in my subconscious even before I started interviewing India's distinguished architects on a regular basis for an international magazine, nine years ago. As the international correspondent of the publication, I intended to conduct comprehensive interviews that would probe on subjects that demanded attention. Each of these interviews left an indelible impact on me and led me to discover many facets of the field that I had been unaware of. It would have been unfair to have let these experiences stay with me. Every experience was collecting at the tips of my fingers, waiting to get disseminated.

I felt that putting all the interviews together, along with additional new sections and experiences could lead to a relevant architectural discourse and serve as a reference on Indian architecture, which remains in a state of conflict and requires extensive deliberation. It would also be the perfect means of documenting the lives of these "star architects". While few portions of some interviews in this book have been published in the aforementioned magazine during 2008–2012, they have been revisited, revised and updated to accommodate the architects' present feelings and opinions. New interviews that were important for this discussion were additionally conducted.

The Framework

The interviews have been put into a framework which highlights the architects' individual experiences, inspirational journeys and experimentations in design, as well as the influences on them. They bring out their thoughts on the core practical and theoretical issues in architecture, and on how contemporary Indian architecture needs to be projected and how its problems need to be converted into opportunities that can benefit the nation as a whole. They also touch upon the virtues of the design and architecture industry overseas, the changing dynamics of the field with technical advancements, the emotions connected with building, and visions of the future.

To maintain a thread and help the reader appreciate the similarities and differences in the views of the architects, the interview questions have been grouped under various sub-heads. Under these sub-heads, an attempt has been made to pose similar questions that are also relevant to each architect's individual journey and expertise. The questions have been kept brief to focus attention on the answers.

Each of the 17 chapters, corresponding to 17 architects, bears a special flavour—the title is emblematic of the architect and his work. The introduction preceding each tête-à-tête offers a sneak peek into the architect's profile and seminal practice. Each chapter has two additional sections written by the architects themselves—an informal section about family, office or work life, and the other about a project that made them delve deeper into the meaning of architecture.

The interviews required a lot of preparatory research to understand the philosophy and working principles of the architects. A constant effort was made to understand the minds of the architects and recognize what they stand for and why. There has also been a desire to understand what it is that keeps them so emotionally involved with their projects and how they deal with the disappointment when their designs do not see the light of day.

The Dilemma of Selection of Architects

Indian architecture has been enriched by a great many architects who have contributed to the profession in their own distinctive ways. However, there are a few who have gone a little farther, bringing India onto the world architecture map through their exceptional design understanding and approach. My attempt has been to cover architects with a distinct style. They are diverse in age group, architectural philosophy, the typology of buildings they deal in, and their geographical locations. All the luminaries featured in this book are recipients of national and international awards, and have pioneered change in architecture through their collaborations with merited design organizations. It has been an exciting experience to interact with architects with such varied philosophies and approaches and understand the vast reach that design has made for itself in India.

With so many illustrious architects in India, the task of choosing those I wished to cover in this book was difficult. I must admit that I was unable to include a few who I would have wanted to become a part of this book. However, their subject to availability to be a part of this entire process, coupled with my constraint of featuring all of them in "a limited space", were important factors to be considered. Thus, there are regrets for the few I couldn't manage to include in this book, which inspires me to not let my pen rest after this! I chose to present the chapters in alphabetical order because sequencing them on the basis of any other criterion would have been a daunting task.

I hope this book serves to inspire and motivate readers as they read about the journeys of these acclaimed Indian architects, who through the strength of their beliefs and their determination to contribute to the welfare of mankind and the environment have enriched the profession. I would be happy if it could serve as a source of reference for architecture in India.

For me, my first book is the culmination of years of learning and realization. It is dedicated to architectural journalism, a subject that has been opening channels of communication and familiarity between the common man and the missionaries, the "architects".

Apurva Bose Dutta Bengaluru

ACKNOWLEDGMENTS

Acknowledgment and gratitude are two mere words in the dictionary, but they embrace plenty of emotions and chords, and express recognition of the encouragement, motivation and support received. Writing the acknowledgments of a book, according to me, is the most important and fulfilling part of writing the book. The acknowledgments are written when your work is complete; you are relaxed because you feel a sense of satisfaction at having worked to the best of your ability; and you look back on the journey of the book and smile. You smile because it has not been your journey alone—there are many who have contributed to it. Though the deepest emotions are the most difficult to put into words since words might diminish them, I will try to do so because it is now time to thank everyone who has made this book possible.

My first book has been a beautiful journey, right from its conception to its execution and final production. At every stage, my dedication and passion have held the hands of many people who have made this journey possible. Of greater weight has been the emotional support, which has helped me complete this labour of love and on the strength of which I could believe that though the journey might be long and arduous, it would eventually yield positive results.

I feel a deep sense of gratitude to the architectural fraternity—first and foremost, the architects who consented to being featured in this book. I thank them for having been forthcoming with their views and thoughts, which have elevated this book to a higher level. I thank them for the patience and faith they reposed in me. Besides the incredible interactions with them, the process of repeatedly going through their words of knowledge (as a part of manuscript submission), which could have been a strenuous task, was a comprehensively stimulating and inspiring job for me because of the thought-provoking statements put forward by them. There were many who went way beyond contributing for their own chapters; I would like to thank them from the bottom of my heart for all the encouragement and support!

My heartfelt gratitude to the architects' respective offices and those who untiringly made arrangements and coordinated with me for the material that has given this book its final form. Gratitude is also due to the many architects with whom I have worked in my professional career. They have been very positive about the subject of architectural journalism, which is my special interest, and have never ceased to encourage me to pursue it whole-heartedly. A special thank you to Prof Neelkanth Chhaya for being an important part of this book journey.

For pushing me to write a book, for inspiring me to take the plunge and attempt this kind of book, for being there at every step, a simple thank you is not enough, but then I am sure that being a father, my father, Dr (Prof) SM Bose, will realize how grateful I am to him. The great architect Frank Lloyd Wright once said, "The thing always happens that you really believe in; and the belief in a thing makes it happen." I must admit it was my father's belief in this book that led me to work on it.

I thank *Archi Times* and its managing editor, Mr Murtuza Shikoh, for allowing me to use the interviews that I had originally written for the magazine; Cambridge Scholars Publishing for publishing this book; Dr Vikramāditya Prakāsh for agreeing to write the foreword and giving the book additional visibility with his significant words; and Chandana Banerjee and Medha Dubey for refining the text.

A very special thanks is reserved for Dr (Mrs) Bandana Malhotra, whose profound affection for me was evident in the way she provided me with support, suggestions and advice throughout the journey of the book.

I can't miss this opportunity to thank the rest of my family—my mother, my two sisters and brothers-in-law, and adorable nieces and nephew. The support they have always given me and the happiness that they, together with my father, have shown about my achievements and initiatives have been the greatest source of joy in my career path.

My long journey with my first book has been gratifying, yet at times, extremely exhausting. When you put a lot of love into something you are doing, a slight hitch can pull you down. Bearing the brunt of the pressures I went through while working on this book, and seeing me through all the highs and lows was my husband, Joydeep Dutta. I have to thank him for the immense and constant emotional support he gave me, for his inputs and involvement in the many decisions pertaining to the book, and for helping me with several chores to ensure that my work became easier and less tedious.

God—nothing has been complete in my life without your presence! Thank you for all the strength you have given me. Please continue to be there and shower me with your love and blessings, always.

Someone once said, "Don't just dream. Live your dream." My heartfelt gratitude to all of you for being a part of this dream that I am living!

LIST OF ABBREVIATIONS

AAJJA Alumni Association of Sir JJ College of Architecture

AMC Amdavad Municipal Corporation Archaeological Survey of India ASI American Society of Interior Designers **ASID Building Information Modelling BIM** BIS Bureau of Indian Standards

Computer-Aided Design **CDSA** Centre for Development Studies and Activities Centre for Environmental Planning and Technology CEPT

Confederation of Indian Industry CII

COA Council of Architecture

CAD

CPWD Central Public Works Department

CSIO Central Scientific Instruments Organization Chhatrapati Shivaji Maharaj Vastu Sangrahalaya **CSMVS**

Delhi Development Authority DDA Delhi Urban Arts Commission **DUAC**

Floor Area Ratio **FAR FSI** Floor Space Index

GIFT Gujarat International Finance Tec-City

Green Rating for Integrated Habitat Assessment **GRIHA**

Heritage Education Conservation Architecture and Restoration **HECAR**

HUDCO Housing and Urban Development Corporation

IAS Indian Administrative Service **IGBC** Indian Green Building Council IIA Indian Institute of Architects IIID Indian Institute of Interior Designers Indian Institute of Management IIM

Indian Institute of Management, Ahmedabad **IIMA** Indian Institute of Management, Bengaluru **IIMB**

Indian Institute of Technology IIT

INTACH Indian National Trust for Art and Cultural Heritage **IPANA** Indian People's Association in North America **ISOLA** Indian Society of Landscape Architects Information Technology Enabled Service **ITES** Leadership in Energy and Environmental Design **LEED**

MLA Member of the Legislative Assembly

NASA National Association of Students of Architecture **NDRAC** New Delhi Redevelopment Advisory Committee National Institute of Plant Genome Research **NIPGR**

National Building Code **NBC** National Capital Region **NCR**

Passive Downdraught Evaporative Cooling **PDEC**

Postgraduate Institute of Medical Education and Research **PGIMER**

Royal Institute of British Architects **RIBA** School of Planning and Architecture SPA The Energy and Resource Institute **TERI**

Torrent Research Centre TRC

Unknown Craftspersons' Trophy **UCP Trophy**

UP Uttar Pradesh

US Green Building Council **USGBC**

The Unified Traffic and Transportation Infrastructure (Planning and Engineering) Centre **UTTIPEC**

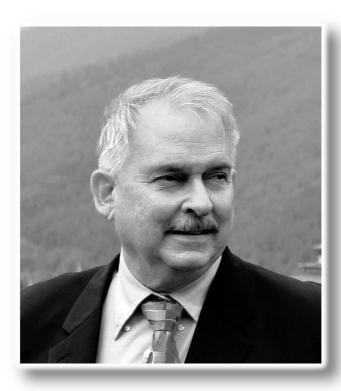
WAF World Architecture Festival

In Pursuit of Nirvana

Christopher Charles Benninger

"I see architecture as a long journey of self-realization. It is through creation and through the realization of my works that I reach a state of transcendental ecstasy; maybe a brush with nirvana."

PROFILE



Prof Christopher Charles Benninger enjoys an enviable position in the world of architecture today. This can be attributed to his intellectual approach to design, as evident in his architectural theories and efficient solutions for contemporary urban issues. While his designs speak of a strong commitment to values and principles rooted in tradition and ideologies of sustainability, a core feature of his work are his attempts to associate himself with projects that warrant a detailed study, analysis and exploration of architecture. Born in the US, Benninger, an alumnus of the Massachusetts Institute of Technology (MIT) and Harvard, settled in India in 1971.

Benninger is convincing, inspirational, spiritual and honest, be it in the matter of his buildings, literary pieces, lectures or opinions on architecture. His narratives, whether those in the form of spaces that unfold in his designs or those that you discover as you read and reread his writings, are engaging and possess the power to make one ponder, unlearn and relearn! He has given the country some serious lessons in urban development through his principles of "intelligent urbanism" and efforts to reclaim cities. His projects straddle capital cities and new towns, and educational campuses, corporate headquarters, housing estates and complexes, hotels resorts, and hospitals, besides his individual product pieces and art works. His thoughts on architecture carry equal weight as his projects and have found a prominent place in architectural journals. The same may be said about the many insightful books authored by him. It is the candid and mesmerizing quality of each of his writings and designs that remains with the reader/viewer.

Benninger's journey in architecture has been impressive. One for building institutions, he set up the School of Urban Planning at the Centre for Environmental Planning and Technology University (CEPT University) in Ahmedabad and the Centre for Development Studies and Activities (CDSA) in Pune. Much later, in 1999, he along with Ramprasad Akkisetti, established Christopher Charles Benninger Architects (CCBA). Though this was viewed as a retirement plan, in the past two decades, CCBA has become a much sought-after "design house" in the country, with studios in Pune and Thimphu, and is well respected in design circles globally. The design of the India House, CCBA's head office in Pune, is iconic in itself and has acquired international acclaim.

LET'S TALK

Of Inspirations, Ideologies and Determination

Apurva Bose Dutta (ABD): What drew you to architecture?

Christopher Charles Benninger (CCB): My romance with architecture began around the age of 14, when my aunt gifted me *The Natural House*, a book by Frank Lloyd Wright. I think I had never read through an entire book prior to this magical gift. But after our Christmas dinner, I picked up this testament and since that night, I have never put it down, or stopped reading it over and over again in my mind. It was a mirror into which I gazed, and I could envision my world and my future.

I feel my childhood schools were sound places of education, but surely not outstanding places of learning. They were populated by the spoilt children of university professors, and the buzz was always "ideas and issues" amongst my classmates. We were more into chess than football, and avid debaters rather than baseball players. While the normal American youth whiled away their years in romance and sports, I and my friends mapped out the university degrees we would be pursuing. By the age of 16, I had already collected a good archive of architectural books, and had read everything Frank Lloyd Wright had ever written. I was exploring the Sarasota School of Architecture along the Florida west coast (Paul Rudolph and Victor Lundy), and they provided me with live examples of creativity and exploration. So, I enrolled in the Faculty of Fine Arts and Architecture at the University of Florida as a teenager. Here, I found a fertile ground for young architects to challenge themselves and learn.

We had great teachers like Turpin C Banister, the historian, and Robert Tucker, a probing intellectual. Harry Merritt and Dan Branch were *designaholics*, who inspired us to work all night, only to have our designs ripped apart in the morning! Blair Reeves was a great humanist teacher who gifted us a love for simple good taste, and introduced us to Charles and Ray Eames, the Bauhaus, Mies van der Rohe, the modern spirit and the world of design. These *gurus* inspired us to find our true passions. They encouraged us to follow our instincts in the search for the truth. They encouraged honest arrogance and scoffed at hypocritical humility, while insisting we behave as gentlemen. These were the golden years of self-analysis, exploration, discipline and rationality. This is when I learned that there is only one kind of good luck in life, and that is to have great teachers.

Prof Harry Merritt was a Harvard graduate and wanted his best students to go there. Upon acceptance in 1966, I went directly into the studio of Jose Louis Sert and Jerzy Soltan, both long-time colleagues of Le Corbusier and followers of Walter Gropius. Sert's childhood friend, Juan Miro, was often on the campus and Walter Gropius, though retired, would occasionally be found strolling through our studios. My stint as a student at Harvard was deeply enriched by a longer experience as an assistant professor at Harvard's Graduate School of Design, and as an apprentice in Sert's studio.

ABD: How do you explain the importance of architecture in your life?

CCB: I discovered architecture not as a profession, but as a spiritual path. I see architecture as a long journey of self-realization. It is through creation and through the realization of my works that I reach a state of transcendental ecstasy; maybe a brush with *nirvana*. One cannot "think design"; one can only draw it. If one picks up a good pen or soft pencil and touches it to paper, the truth begins to flow out as if some soothsayer is leading one in a séance. The same is true of writing. I love to plan cities, or to draw little things and tiny designs, too. I love the universal interconnection of the act of creating at all levels.

ABD: It is apparent that the face of urbanism in India is changing. What motivated you to get so intimately involved with urban planning?

CCB: I was motivated to take up urban planning as it is like designing a large house. But it is a very complex house and it brings systems instead of isolated capsules into play, and networks instead of cute shells under analysis. The gamble is greater as the potential losses can impale upon masses of lives, and the future is immense. I think I love complexity, the riddle of problem-solving and the multi-tasking required to understand the different levels, dimensions and aspects of a city design, all at the same time. In the end, a house is a city and a city is a house.

ABD: You have a great love of travelling. How have your travels and the cultures that you have come across and imbibed from found a place in your designs?

CCB: I have travelled through many countries in every continent, with a lot of curiosity and passion. I have learned a great deal from the people I have met along my way. Life, to me, is like a long journey, and I love to explore along its

¹ People addicted to involvement in the process of design

way. On my adventure from London to Mumbai over-land in 1971, I crossed Europe, Turkey, Iran and Afghanistan. I came down the Khyber Pass into Pakistan. India and Pakistan are united in terms of the people seeking a simple, good life. The people of Iran and Afghanistan are warm and loving, and make the best of friends. Nothing except bad governance separates us all.

When I travel, I am more interested in meeting people; all kinds of people. The way people build and the way they use spaces tells me a lot about their culture. Architecture is an elemental thread that unites all people everywhere. Our common human needs are a binding factor. It is only the interests of a few powerful entities that create hostility. We have to begin with the starting point that there is only one "architecture", and that there is only one human race. Fortunately, most of us are simple people with simple ideas and needs. I learned from my travels to like simple buildings, satisfying simple needs.







Centre for Development Studies and Activities, Pune

Architecture in India

ABD: "We cannot have smart cities created by dumb administrators" —you have made a powerful statement on Indian cities. Multiple efforts are being made to discuss Indian cities, and several platforms and media are being utilized to do this. However, there have been no positive outcomes, which implies that something is going tremendously wrong. What do you think is wrong—our analysis of the physical environment or our efforts to find apt solutions and implement them?

CCB: At the most fundamental level, urban development, as it is known internationally, is unknown in India. Urban development must be for the benefit of the people and by the people.

Political leaders see cities as milch cows from which huge funds can be skimmed off from contractors of large infrastructure projects and developers. Corruption flows from the top down and from the bottom up. At the bottom, urban planning offices are more involved in taking bribes than imagining beautiful cities. Every rule is cleverly written to leave room for loopholes and discretionary powers, and an official can change the meaning of a rule designed for public safety or public hygiene.

Unless the problem of corruption is discussed and strategies to erase it are evolved, there is no real meaning in all our laments about the inability to create "smart cities". The only statutory plans we have are Development Plans, which have no vision, and no provisions for the improvement of urban lifestyles and comfort. Even metropolitan transport stations, which could generate planned, pedestrian growth, are out-of-scale, and are pedestrian nightmares. Bengaluru is an excellent example of how out of scale and over-designed the stations are. Where are the new pedestrian plazas, new cycle lanes, quaint sidewalk cafes and arcades for pedestrians? I see these emerging all over China, Europe and America, but not in India.

We have no plan to house our people. Seventy-five per cent of the people of the Mumbai metropolitan region cannot afford the equated monthly instalments required to buy any type of house on the market. Is this smart?

Our seminars and conferences are dominated by people who have never studied urban planning, urban design or the sociology of cities. These meetings are filled with management jargon, data on the future, new IT³ interventions, and

² Panel discussion, Z-Axis Conference, Goa, 2015

³ Information Technology

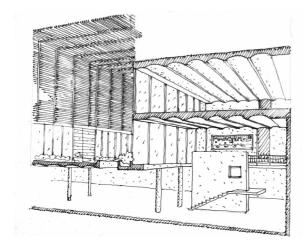
confusion. There is an old adage: "If you can't convince someone, confuse them." This is largely what the smart cities movement is all about.

We need to start the discussion with an assessment of people's access to basic services, such as accessible potable water supply, sewerage systems, solid waste collection, storm water drainage systems, street lights, paved roads and footpaths. We need to come up with 10 basic infrastructural requirements and map where they exist and don't exist, and come up with crisis management strategies to intervene and provide these. That would be smart.

ABD: Are there any revelations of Indian architecture that are noteworthy and have caught everyone's attention?

CCB: I feel Indian architects have recently come to grips with the fact that there has been a gap in our history. There have been lost periods during the early invasions, colonial times, after Independence, and now with globalization. These times saw traumatic disruptions in our cultural continuity. Suddenly, India finds that it is the oldest civilization in the world, and simultaneously, the newest society. We have had to reinvent ourselves suddenly. But this loss has been a long process, and rediscovery is a long and continuous process. In fact, all societies need renewal and self-discovery. In that sense, we are path-setters.

But ours is not a loss due to stagnation. Rather, it is a loss due to disruption; multiple disruptions over centuries. There is an innate search for meaning, and for identity, a desire to prove that we in the sub-continent are different—not only in India, but in the vast erstwhile colonial world. We all struggled against waves of disruption; against colonialism, government regulation and the abrupt invasion by globalization. All these disruptions displaced our primordial roots, which lurk within our spirits, and we are trying to reconnect with them. I feel that "reconnect" is what Indian architecture today is all about. But it is not about kitsch or ethnic architecture, or decorating buildings with religious motifs. It is deeper within the nature of our culture and the way we live.





Sketch of the India House, Pune (by Christopher Benninger)

View of the Indian Institute of Management, Kolkata

Global Architecture

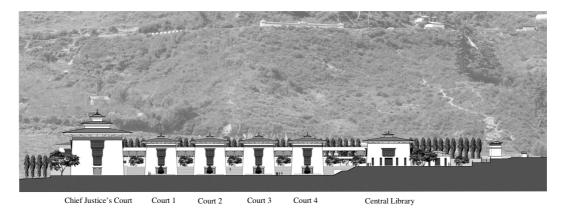
ABD: You have an additional design studio in Bhutan and you are working on projects there. How would you evaluate the architecture practised there?

CCB: It was fate that took me to Bhutan, though my love for adventure and curiosity about people did play a role. In Bhutan, we are driven by a great tradition, a great civilization and by wise people. They know who they are. They value their past and their future. Thus, the architecture of Bhutan is part of a long continuum, both past and future. All of us on this earth are just visitors within any given niche of time. We are not here to change anything, but to serve within the culture and to follow our *dharma*. We have to invent the future, weaving a new tapestry from the threads of the past. My studio in Bhutan is a deep well of spiritual sustenance.

ABD: You have worked on projects globally, including in countries such as India, Indonesia, Sri Lanka, Nepal, America, Malaysia and Bhutan. Is there any country other than Bhutan whose architectural sensibilities you admire?

⁴ One's inherent nature or innate character, almost an inner cosmic order, leading on a path of behaviour towards inspiration, creation and self-discovery

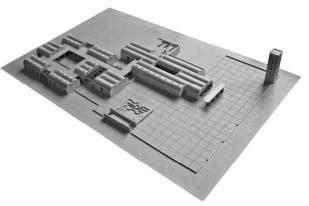
CCB: Bhutanese architecture has had the greatest impact on me, as there is a seamless integration of Drukpa culture, the local materials, craftspeople and lifestyle, and the resulting built form. Architects have not gifted the Bhutanese harmony; it is ingrained in the culture. Other countries are lost in a "search for self", and expressing that confusion through wild and strange shapes and forms, or just resigning themselves to the little "boxes" they copy from magazines. Bhutan has an ancient architectural "system of build" that is followed by the rich and the poor, by the mighty and the ordinary people. Architecture binds the community into a harmonious whole. The built form has emerged from the geography and culture, and a highly selective technology. The Bhutanese have not tried to envisage their future along the lines of MIT or the Architectural Association in London. Their architecture is a putative element of their culture.



Sectional Elevation of the Supreme Court in Thimphu, Bhutan

(Below Left) Women's Residence, College of Engineering, Pune; (Below Right) Model of Bajaj Science Centre, Wardha





Architectural Education: In Need of an Overhaul?

ABD: Your contribution to education has been immense—from establishing prestigious institutions in Pune (CDSA) and Ahmedabad (School of Urban Planning in CEPT), to being on the board of governors of several institutions and to designing world-class campuses for educational institutions. What do you feel is missing in architectural education today?

CCB: I believe my work at the CDSA had a fundamental impact on the way I look at the larger environment, and the way I look at my buildings as a part of that bigger picture. At the CDSA, we always begin our work by going to the field, meeting the people for whom we are planning, and analysing their situation and the stresses they are under. We have always considered issues like sustainability, equality and poverty alleviation. The CDSA is focused on micro-level planning, planning of common resources and participation; it is focused on people and on humanity in its most basic sense. It pioneered concepts like micro-watershed planning, integrated rural development, slum upgradation and access of the poor to shelter. These are all elemental to "the new architecture" we are looking for.

What is missing in architecture, as a whole, is a grounding in these fundamental problems of urbanization and objective reality. There are no courses in the social sciences imparting a knowledge of and promoting sensitivity towards the Indian people and the real stresses they are under. We are not addressing the crises of the urban masses who have no hygienic and humane shelter. Our educational practices are deepening this gap.

ABD: Since you were educated in America and have been associated with academics in India, you must have observed differences in the methodology of architectural education in the two countries. Could you elaborate on this?

CCB: My formal education was in America. My informal learning was here in India. They are part of the same journey. In both scenarios, I had great *gurus* and many of them, like Balkrishna Doshi, Josep Lluis Sert, Jerzy Soltan and Joseph Zalewski, spent their formative years in Le Corbusier's atelier in Paris. It is true that American education is more ordered, technical and "professional". But over the past decades, it seems to have become lifeless and hollow. In my time, it was the *gurukul*⁵ of masters, who gained respect in their studios, due to their built projects and at their construction sites.

What is missing in architectural education today is mentoring by wise and experienced teachers who have a world view and a knowledge of social, economic and political systems. Fresh graduates make up the vast majority of teachers. People who cannot brave the difficulties of studio work opt for a PhD, which allows them to dominate educational programmes with no practical experience. Architecture is "practice", as is surgery or any form of medicine. We can't have PhDs teaching architecture who have no knowledge of how to build a building. Most of these teachers do not read as a daily habit and are incredibly ignorant and banal. The number of schools of architecture has grown far faster than the number of true teachers. To teach architecture, one should have built buildings.

On the other hand, we require teachers to get PhDs and make them do PhDs under guides who have no idea about what intellectual inquiry is. Surely, we are creating a situation in which the blind are leading the blind. I feel a day will come when the recognized schools of architecture will become totally obsolete and useless. True students of architecture will learn on sites and in studios. If students are curious and smart, they will learn on their own and from *gurus* in the same way Frank Lloyd Wright and Le Corbusier learned architecture. Neither attended an architectural school.

ABD: You maintain that young architects in India can learn more from architecture in India than anywhere else. Please comment on this.

CCB: There was a time when American, French and British architectural schools admitted very small numbers of highly capable postgraduate students, who were then fortunate to study under truly great master architects. This has changed completely. First, the number of students in a master's class has snowballed from small groups of 15–20 brilliant students to 40 or 50 average students. The students are selected from several thousands of schools in India and abroad that have given good marks to very average graduates. The main idea appears to be to get more and more tuition-paying students. Yes, starchitects are seen on campus, maybe for a week a month, or two weeks a semester. The run-of-the mill professional teachers, with PhDs and very little studio experience, do the real teaching. You pay for the name-brand institution and star teachers, but you get only samplings of either, and no *guru–shishya* ⁶ bonding and lifelong guidance.

My opinion is that Indian students should emulate the old 19th century Grand Tour of Europe, in which youngsters spent a year or so travelling around the historic, classical heritage sites, taking notes, sketching, measuring details and understanding proportion, scale, materials, urban settings, natural settings and urban organizational rationales. In doing this, one moves around with the local people, eats in their cafes, drinks their local brew and hears their concerns. This can be done in India in an organized manner, and our students can learn much more from these thought-provoking visits and studies, and reading of the historical milieus that generated different built fabrics. I believe I learned more from travelling to historic cities and classical buildings than I did from studying at Harvard and MIT!

Architecture in Changing Times

ABD: You are one of the very few Indian architects to have taken seriously to writing. Having authored many books on architecture, what do you feel about the diminishing relevance of the print media in an age that has come to be necessarily governed by the digital media?

CCB: The print media has not declined as rapidly as the intellectual stamina of our youngsters has. Young architects live under the illusion that they need not learn a lot because it is all in the Google App right inside their mobile phones. The problem with that notion is that without a good, general education, one does not know what questions to ask Google! Without reading the print media, one remains just an ignorant bystander.

Writing is like creating architecture because it is a journey of self-discovery and poetic involvement. Like architecture, it must have something attractive to lure people into its experiential embrace. Architects have been writing books since the fifteenth century, when very few people were literate and there used to be only few copies of the book. There will always be the literate class of architects and the illiterate class of architects; the ideas of the first will rule over the heads of the second. Reading and writing are the elite habits of leaders. If one is happy being a follower, then one need not read, and one will never write either.

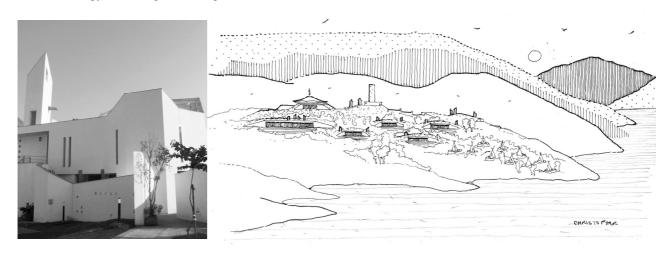
⁵ A residential school in which pupils live near their gurus

⁶ mentor-pupil

ABD: There has been a massive and unexpected advancement in digital technology, and one needs to exercise restraint in utilizing it in architecture. How do you assess the relevance of this technology in architecture?

CCB: What may be high technology in one place may be bad technology in another. In the West, architects and engineers are not really into solving the crying problems of this earth. They are doing stunts, like jockey pilots who make their planes do loops and upside-down circles in the sky. While this is driven by incredible technology, it is stupid. Software and computers are to architecture what a typewriter was to Hemingway. People wrote novels in the 19th and 20th centuries, and they will continue to write novels in the 21st century. They can write them by hand, if they want.

With computers, I can work with more teams at one time. I personally only sketch and draw diagrams. It is my team that brings in the real life and makes things work. We are a symbiotic group of thinker–doers. I am their critic and guide, and they are my critics and guides. But they have to work their computers and put things together, integrating mechanical equipment and complicated structures. Due to technology, I can do more multi-tasking and more work at one time. I am usually working on five buildings at the early design stage and five buildings in working drawings and 10 buildings on site. This is exciting, but involves multi-tasking and flipping between projects minute-to-minute. Maybe each conundrum informs the other; maybe there are sparks of inspiration that nourish one project and take off to another from there. The real technology is the great team. The team is a symbiotic unit, in which each member inspires the other. The team may be of carpenters and masons in the Himalayas, or of computer jockeys in a high-tech city like Pune. Wherever it is, technology makes a great team greater.



(Left) Centre for Life Sciences, Health and Medicine, Pune; (Right) Sketch of a bird's-eye view of the YMCA campus in Pune (by Christopher Benninger)

ABD: What is the major problem confronting architecture today?

CCB: I do not think that there is any major problem I face in architecture today. I love the entire experience and the people I work with, right from my clients to the people in my studio, and on to the craftsmen on my sites. The arguments are constructive ones, and we all enjoy them. I have known amazing patrons of architecture who have engaged me to work with them towards realizing truly great visions. By myself, I am just the number zero. My clients become my patrons when they come to life; they become the number before the zero, gifting it magnitude. It is that magnitude of the "big picture" that nourishes us all and makes us work as a diverse team. The biggest challenge for me is to meet the high expectations of my patrons and my own expectations. I tell my team that I will tolerate excellence, but I demand perfection.

ABD: How do you evaluate the globalized style of architecture, characterized by the ubiquitous steel and glass box designs?

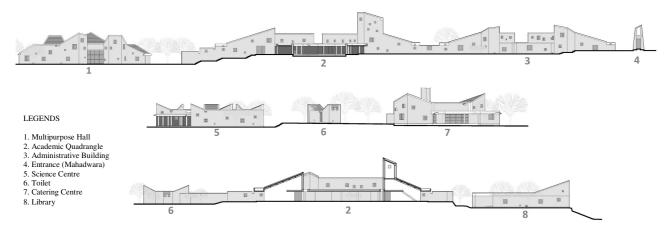
CCB: Let me be clear—there is nothing wrong with glass or steel. They are beautiful materials. But there is something wrong with the people who are employing them. The glass box is a simple cut-and-paste template applied by people with no mind of their own, no personality and no vision. They want to employ clichés from magazines quickly and cheaply; it is a kind of packaging or uniform of the culturally challenged. Often, these boxes are neater and cleaner than the messy stuff we were putting up before. Often, they are more preposterous and ridiculous. The glass box is like any other mechanism for problem-solving; it can be done mindlessly, or it can be done with some sensitivity. But glass boxes do not suit our climate, nor do they respond to our search for our primordial roots.

Flash Forward

ABD: There are lots of intentions that can be realized through architecture. How do you want your practice to make a difference to Indian architecture in the coming years?

CCB: I feel that architecture remains the "mother art", and that it allows humanity to have a direct interaction with culture and what we call civilization. Architecture, in the larger sense of space-making, urban ordering and logical planning, is what brings people together to employ logical and rational decision-making as democratic groups. This is the essence of civilization. This is how societies have matured and evolved into higher and higher states of existence. One of our intentions must be to create public spaces that attract people to come together for peaceful, intellectual dialogues. In these spaces, they can read and hear poetry, intelligent dialogues and debates. They can listen to music and be inspired to compose music.

Another intention must be to create beauty in the putative sense; create a sense of wonder and a realization that human beings are evolved, logical, magical, rational and poetic creatures. If one visits Madurai and other Chola temples, one realizes that mankind has an intelligence and a degree of magnanimity that is a gift beyond the natural world. One realizes that people or humanity is special. At such times of realization, people experience existential moments of ecstasy, and know it is great to be alive, to be a human being and to work for other human beings. This is called being civilized.



Site Sections through the Academic Quadrangle, The Mahindra United World College of India, Pune



YMCA International Camp Site, Pune

LIFE AND WORK AT THE CCBA STUDIO

CCBA is situated at India House, in Pune. It offers a large spatial domain for design, debate and exhibitions. There is a central atrium court for large gatherings, lectures and drama. There is an auditorium for staff meetings and small events. The India House Art Gallery is Pune's largest private gallery, where numerous exhibitions of Indian and international artists are held.

The studios and galleries are dedicated to critical architectural and artistic thinking; to exploring timeless ideas and concepts with fresh commitment. We work on limited commission types—there are no "clients", but "patrons of architecture", who become involved in the design process. While young architects represent the most brilliant graduates, newcomers research and document typologies from the studio's archives, moving on to presentations and technical drawings, and then working drawings of large projects.

The architectural team at CCBA is composed of highly qualified architects, guided by four directors, two associates and seven senior architects. In addition, there are model makers, trainees and administrative staff. When a new project enters the studio, it moves through the stages of inception report, concept design, detailed design, tender documents, working drawings, supervision and closing out processes. At the very inception, I work on the situation analysis and design parameters with a small team. One of the team members then sees the entire process through, including site supervision and client meetings. My colleagues in the studio arrange for weekly films, lectures and presentations by the studio colleagues.

Christopher Benninger



Christopher Benninger at the CCBA Studio

THE PROJECT THAT REDEFINED ARCHITECTURE FOR ME

Suzlon One Earth Global Corporate Headquarters, Pune



Lotus Pools and Gardens integrate with work areas

I consider Suzlon One Earth one of my most important creations, along with the award-winning Mahindra United World College of India, which I designed 20 years ago. In the case of Suzlon Energy Limited, a world-leading wind energy company, I pledged to create the greenest office in India. Relying on sustainable technologies and employing non-toxic and recycled materials, in a 10-acre urban setting, we managed to obtain a LEED⁷ Platinum and TERI-GRIHA⁸ Five Star certification for the project. With almost 10 per cent of the total energy generated on-site through photovoltaic panels and windmills, the balance of energy is produced off-site at the client's windmill farms, thus making this a zero-carbon energy project.

Drawing clues from vernacular architecture, while respecting nature and the culture, this sustainable and efficient design provides three-fourths of the workstations with external views. Aluminium louvers, acting as a protective skin, allow daylight and cross-ventilation. LED lighting systems, solar water heating, recycling of the complete sewage grey water and rain water harvesting are the other essential measures taken for energy conservation.

Glass exhaust chimneys, with tropical plants growing within them, act as visual connectors between all floors and allow for aeration of the basement parking. The hot air rises dramatically, exhausting the polluted air from the basement. Fresh air is introduced through planted sky courts along the sides of the basement. The focus of the complex, located in the crescent cafeteria in the central courtyard, is a granite, traditional obelisk, or deepstambh, which reaches from the basement up towards the sky, with a waterfall as the backdrop.

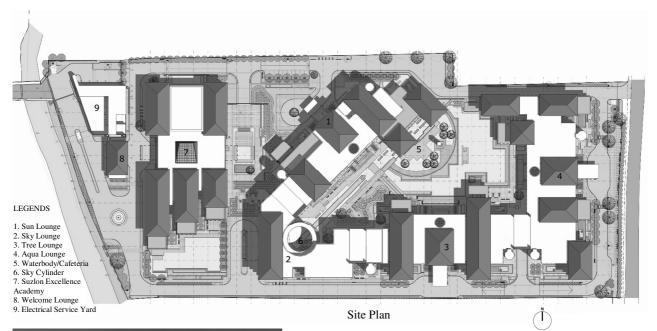
It is a highly complex system that looks simple. It is a very hi-tech green building that has an air of sophistication. My patrons continued to push me to create great architecture. Moreover, I had the chance to work with a large team of talented sub-consultants and that was exhilarating. The project involved a huge team of infrastructural, structural, green, interior, construction management, *Vaastu*⁹, branding and landscape designers.

Christopher Benninger

⁷ Leadership in Energy and Environmental Design

⁸ TERI-Green Rating for Integrated Habitat Assessment

⁹ A traditional system of Indian architecture that outlines the principles of design, layouts, orientations, etc.



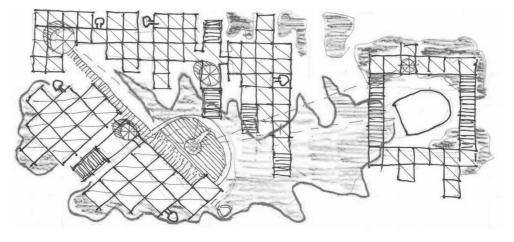


Water interconnects spaces



Central Pedestrian Garden

 $Conceptual\ Sketch\ ({\tt by\ Christopher\ Benninger})$



For more images/drawings of projects designed by Christopher Charles Benninger, please refer Centrefold - "Glimpses of Projects"

Chapter Two

Building (with) in Nature

Ravindra Bhan

"I believe it is the attitude of the people and the way they relate to their surroundings that gives rise to coherent and holistic design."

14 Chapter Two

PROFILE



Very few people have delved into the intricacies and nuances of landscape architecture or worked on improving it in India. Any mention of this increasingly relevant discipline of architecture would remain incomplete without the mention of the *guru* of the subject in India, Prof **Ravindra Bhan**. Professor Bhan has been a pioneer in the subject in India. His designs exhibit an affinity with nature. He builds around nature without tampering with it, and this adept understanding of it has helped him to champion the complexities of integration of nature into urban design.

In 1974, Bhan was selected by the Ford Foundation to establish the first formal training programme in landscape architecture in India, at the School of Planning and Architecture (SPA) in New Delhi. After heading the programme for five years, he established his own practice, Ravindra Bhan & Associates, in Delhi. He has worked with the architecture firm, Architects Co-Partnership in England, and with the architect Reima Pietila in Finland. He has also had brief work stints with Skidmore, Owings and Merrill, and Minoru Yamasaki Associates (in the US), and Prof Ian McHarg in Philadelphia. Bhan has been part of the first master plan of Delhi and the first Yamuna riverfront development plan.

Though landscape architects have been celebrated for the sensitivity that they bring to the built environment, they have been overshadowed by other architects until recently. Today, when there is a greater interest in the subject, the younger generation definitely needs teachers like Bhan to inspire them to pursue a discipline that has, unfortunately, not been given its due in Indian architecture.

LET'S TALK

Of Inspirations, Ideologies and Determination

ABD: Please familiarize us with your education and professional background. What inspired you to take up architecture and specialize in landscape architecture?

Ravindra Bhan (RB): My interest in nature is deep-rooted because of my upbringing in the picturesque surroundings of Kashmir. My school days were spent in the midst of immense natural beauty, which led me to appreciate the various facets of nature and played a role in influencing and guiding my career. My parents, who had an abiding interest in the arts, encouraged me to pursue painting, photography and music as my hobbies. I became interested in Indian classical music and started learning a few musical instruments. In fact, later while I was pursuing my studies at the University of Pennsylvania in Philadelphia, USA, I collaborated with my friend Sumit Ghosh, who played the sitar. We would often perform at a local cafe and earn some pocket money.

During my college days in Srinagar, I devoted a considerable amount of time to painting and photography, participating in various competitions and exhibitions. One of my painting and photographic exhibition was inaugurated in Srinagar by Percy Brown, the well-known painter and architectural historian. I also contributed photographs regularly to leading publications of the country. After finishing college, I decided to pursue photography as a career and joined a three-year course on cinematography in Bengaluru. However, after studying for only a year, I was disillusioned with the method of teaching and decided to give up the course.

It took me a while to decide my future course of action; I finally decided to join SPA Delhi in 1952. The faculty was headed by Elizabeth Ghuman, a British lady. She was a sensitive architect and was instrumental in giving my thoughts a direction. She encouraged and helped me to develop an interest in landscape and a sensitivity towards the inherent natural order.

As a student, I was fascinated with the architectural developments in the European countries. I thought working abroad and pursuing my studies there would be a good learning experience. I left my architecture studies midway and joined the office of AP Kanvinde for whose work I had great admiration. After working there for about a year, I was introduced to Shivnath Prasad, who showed interest in my academic work. At that time Shivnath Prasad was heading the Department of Town and Country Planning Organization, which was set up to work on the Delhi master plan, which was being formulated for the first time post-Independence, with the help of experts from the Ford Foundation. I received an offer to join the team, and I readily accepted. The working environment was exciting and new ideas were encouraged. I got involved in many interesting assignments and later worked on the first Yamuna riverfront development plan. I stayed with the organization for two years.

In 1958, I left for England and joined Architects Co-Partnership in London. The firm had been set up by seven young talented architects who had graduated together from the Architectural Association School, London. I worked with them for seven years while pursuing my architectural studies part-time. A casual meeting with Reima Pietila, the famous architect from Finland, through a mutual friend in London had a great influence on my career. On his invitation, I shifted to Finland to join his office and stayed with him. This was to be the greatest experience of my life. Pietila was one of the finest human beings I have met and a great architect to work with. Working with him gave me a new insight into the profession of design and architecture. His non-conventional methods, design ideas and ways of developing design were unconventional. Among other things, I worked closely with him on the design of the Kaleva church in Tampere.

My stay in Finland was extremely rewarding. The discussions and frequent interactions with friends of Reima and his wife, Ralli, and many renowned architects, painters, industrial designers and textile designers were a great experience. I left Finland after a year-and-a-half and joined Minoru Yamasaki's office at Michigan, USA. During that time I worked on the World Trade Centre project in New York.

Through all those years, somewhere at the back of my mind was the desire to complete my formal education. Eventually, I did so at Washington University, St Louis Missouri, USA. My prolonged interaction with a visiting faculty from Japan, Shuko Monakata, a world-renowned woodcutter, and my experience of teaching graphic design to undergraduates were very helpful and immensely rewarding.

After graduation, I worked briefly for Skidmore, Owings and Merrill in New York. Later I met Ian McHarg in New York who helped me to pursue my postgraduate studies in landscape at the University of Pennsylvania in Philadelphia. I joined his office and worked with him as a senior designer for more than seven years and participated in the teaching programmes at the university.

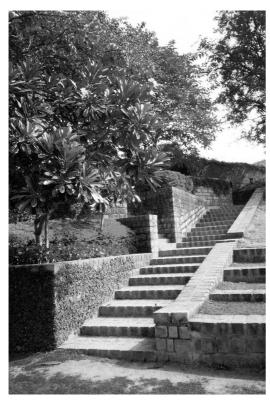
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ABD: Amongst all the iconic architects you have mentioned, who were your major inspirations who took you on the path of landscape architecture?

RB: I have been greatly influenced by Reima Pietila, who designed some very beautiful buildings as an integral part of nature and laid stress on the use of local traditional materials. The other major influence was Prof Ian McHarg who also happened to be the head of the department of landscape architecture at the University of Pennsylvania. He advocated preserving the relationship between man and nature in his book, *Design with Nature*, which revolutionized the concept of landscape architecture in the 1960s. The book was being designed in his office during the time I was working with him. I worked on a lot of drawings and sketches for the book, which gave me the opportunity to get closely related to it. I owe Ian McHarg whatever I have learnt about landscape architecture.

ABD: What is your approach to design, and how would you characterize your "special-kind-of-architecture"?

RB: Design is a very complex venture that depends on who you are designing for and the location of the design. One must also take into consideration the availability of local building materials and the climatic conditions. It is of crucial importance to understand the symbiotic relationship between the surroundings and the built form to create an appropriate design that is suitable and sustainable. My approach to the design process is to utilize the inherent design potential of nature to arrive at a design solution.



(Left) Architecture and Site Planning of the Anand School, Parwanoo; (Below) Site Development and Landscaping of the Iskcon Temple, New Delhi



ABD: Landscape design covers a very broad area in designing. Could you elaborate on the role of landscaping and of a landscape architect in the built environment?

RB: Landscape architecture deals with the design of the total outdoor environment with an understanding of the natural world in man's domain. Man and nature are linked together. To create a sustainable, healthy and liveable environment, an understanding of nature as a process is very important. The components of nature such as rocks, soil, water, vegetation, climate, birds and mammals are all linked together and are interdependent on each other. A landscape architect plays a key role in any sort of development as he/she understands how and where to develop, without abusing the natural environment.

Any built form creates a considerable disruption, both in the physical and natural environment of a place. A landscape architect manages the development in such a way that the balance between man and nature remains within tolerable limits.