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CRITERIA 3

RESEARCH, INNOVATION & EXTENSION


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Key Indicator – 3.3
Research Publications and Awards



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3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the last five years.

Following is the year-wise list of published books and chapters and papers published in national/international conference proceedings for the Academic years 2018-2019 to 2022-2023. To aid the same, the publication-specific proofs (including certificates and/or published chapters/ papers) are attached in the document year-wise.

S.No.	Book/Chapters in edited Volumes/Books	Author(s)	Page
Academic Year: 2021-22			
1.	The Role of Textile Mills in placemaking of cities in Central India: A Case of Nagpur and Hinganghat	Ar. Ajinkya Vekhande & Ar. Trupti Kamat	6-9
Academic Year: 2019-20			
1.	Heritage Village of Garli	Ar. Kamakshi Vaidya, Ar. Himika Lakhanpuria, Ar. Rejish Ramchandran, Ar. Nikhil Shah, and Ar. Dipanwita Chakravarty	11-14
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1.	Bhutan: An insight into Architectural Geography	Ar. Harshada Katkar	16-22
2.	Ladakh: Villages from the Himalayan Valleys - Volume 1	Ar. Shomika Sarkar Ar. Dipti Shukla	23-28
3.	Investigative Biomimicry	Ar. Sonam Ambe	29-33

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1.	Human perception about Beauty in Architecture of Informal Spaces	Ar. Harshada Ponkshe	35
2.	Comparative envelope analysis between traditional and contemporary construction for energy efficiency in a hotel in Matheran	Ar. Shraddha Kapadia	36-39
3.	Learning from Traditional Indian Cities - The Ghats of Benaras	Ar. Ritu Deshmukh	40-41

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4.	Man-Made Traditional Water Systems along Rivers of India: Case Study - Palaspa River, Panvel, Maharashtra	Ar. Ritu Deshmukh	42-44
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2.	Assessing the Potential of Development along Metro Corridor—A Case of Pune	Ar. Nikhil Badrike	51
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2.	Traditional Architecture of Sikkim	Ar. Kamakshi Vaidya	62-65
3.	Thermal Analysis of Concrete Arch Dam due to variation in seasonal temperatures	Dr. Deepak Patil	66-67
4.	Identification of Industrial Heritage of Central India	Ar. Ajinkya Vekhande	68-70
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THE ROLE OF TEXTILE MILLS IN PLACEMAKING OF CITIES IN CENTRAL INDIA: A CASE OF NAGPUR AND HINGANGHAT

Ajinkya Vekhande ⁵, Trupti Kamat ⁶

Abstract:

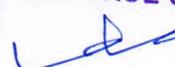
Introduction of mass-producing factories inspired by the Industrial Revolution brought a major change in the economic scenario of many Indian cities in the nineteenth century. Handloom and Powerloom based textile mills had a major share amongst the various forces responsible for the rapid urbanization of these cities. The paper analyses the origin, growth, decline and present condition of textile mills through primary survey, documentation and literature review. It also reviews the ideas and proposals conceived by associated stakeholders in order to understand their implications on the survival of these mills. The two cities of Nagpur and Hinganghat have been chosen for this study as here, the textile mills were the main contributors in making these cities major manufacturing and trading hubs in Central India.

Due to the various governing policies and indifference of the capitalists, these mills seem to have lost their original value. They have fallen prey to ownership disputes between the stakeholders, abandonment and conditions of deterioration, eventually losing the associated character of place. The study comments on how the proposals and interventions could prove detrimental to the value of these mills. It also stresses on the urgent need for the preservation of what remains of them, using the tools of Industrial Archaeology and recommendations of conservation by Industrial Heritage.

Keywords: Textile Mill, Industrial Heritage, Industrial Archaeology, Textile policies, Urban Place-making

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THE HERITAGE VILLAGE OF GARLI



A VISUAL NARRATIVE



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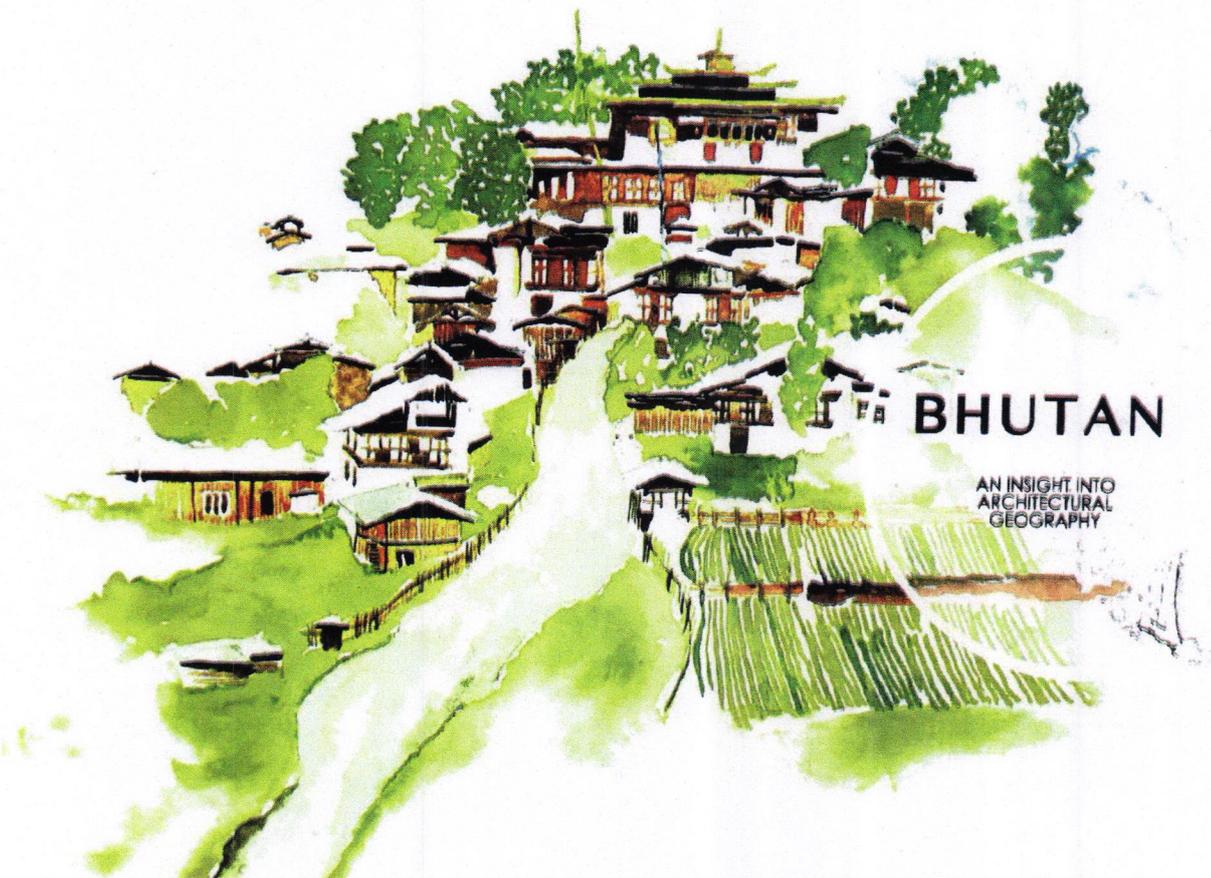
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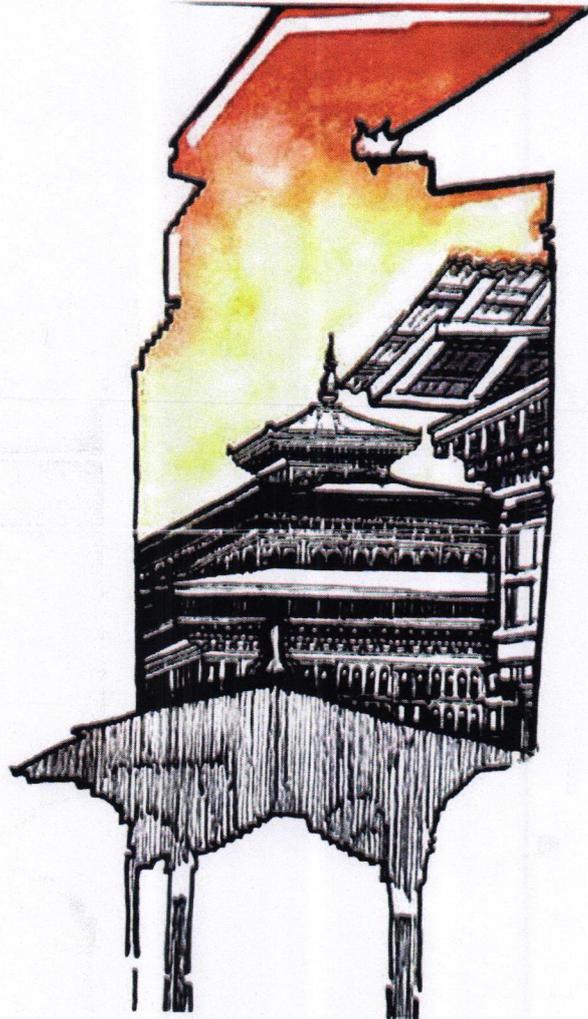
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Prof. Harshada Katkar
Prof. Ahsaas Tarwani
Rutvij Khopkar



Harshada Katkar (Asst.Prof., BVCOA)

Harshada Katkar is an Urban Designer, Architect, and an educator. She graduated with a B.Arch degree from V.N.I.T. Nagpur and did her post graduation in Urban Design from SPA, Bhopal.

Research topics such as developing urban areas and implication of theories like gentrification in Indian context are her key areas of interest.

Apart from spearheading a couple of architectural projects in Navi Mumbai, Harshada has also been a core faculty at Bharati Vidyapeeth College of Architecture for last few years, where she is constantly trying to evolve a holistic pedagogical approach. She has a paper on Pedagogical model for elevating aesthetical and qualitative value of learner's design to her name that got published in Thanima - International conference. She co-ordinates several study tours and workshops in Bharati Vidyapeeth College of Architecture.

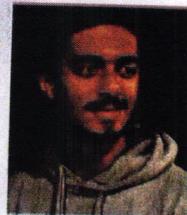


Ahsaas Tarwani

A graduate in Architecture from Nagpur University, Ahsaas initiated his career with an unexpected course, engaging with tribal communities of Odisha and Maharashtra to bring out culture inclusive development, and since then he has been involved in working with/for

under-represented communities of urban and rural areas of the country. An avid traveller and abstract - artist, he has gathered vast experiences of cultural-scapes of the Indian Subcontinent through his extensive travels.

A relatively young architect with keen interest in sustainable design forms, he runs his studio through Mumbai and Nagpur. Ahsaas loves to learn and teach, and so explains his association with architectural education, where he is striving to develop lateral strategies of teaching concurrent with the contemporary school of thought. When at his home city, he also plays the host to Urban sketchers-Nagpur forum, a city wide sketching platform.



Rutvij Khopkar

Rutvij is a 4th year architecture student at Bharati Vidyapeeth College of Architecture and part of the study tour group that visited Bhutan. He has been actively involved in the basic sequencing and compilation of this book.

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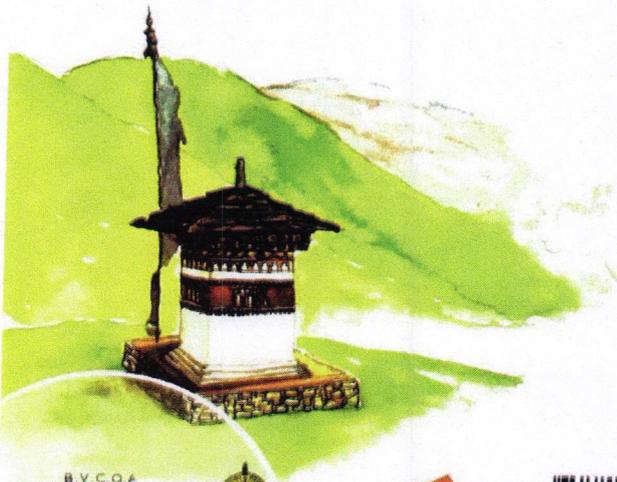
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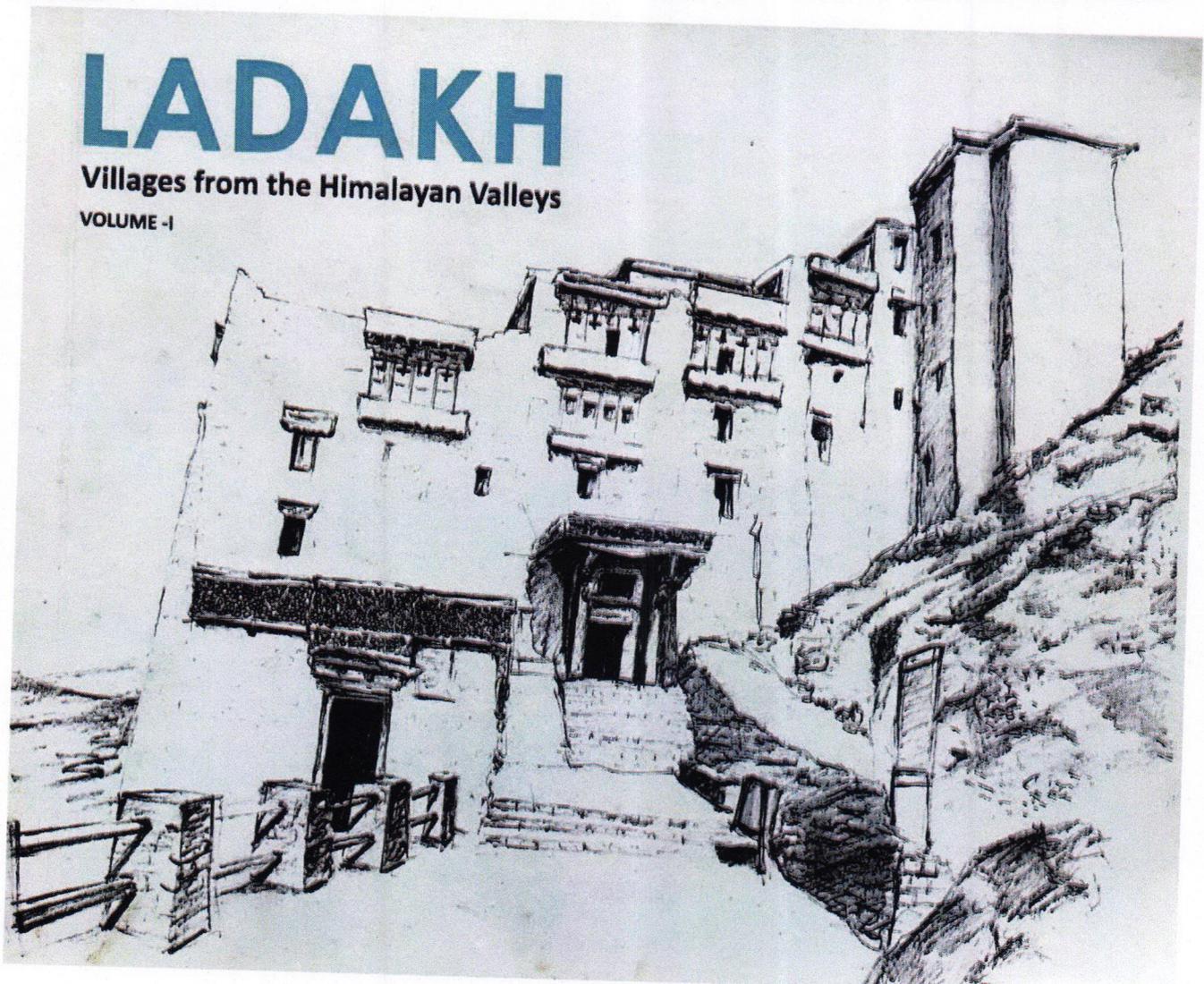
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Ladakh

Villages from the Himalayan Valleys

Volume -I



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Debasish Borah

Debasish Borah is architect by education with a Master's degree in Architecture Theory & Design from CEPT University, Ahmedabad. His tryst with Ladakh happened in 2010 and since then he has been travelling and working in the region. He has travelled extensively in Ladakh, Kargil, Nubra, Changthang and Zaskar areas. He worked as a research associate at CEPT University in 2013 and published a monograph titled "Architectural Expressions: People, time & ideology". He has worked as a research consultant at INTACH for cultural resource mapping in Ladakh and Sikkim. His second book on traditional building construction technology in Ladakh is under publication. He conducted a workshop on local building construction of Ladakh in October 2014 in Leh. He divides his time at home in Assam, Ladakh and Ahmedabad. Currently he & Helene are based in Ladakh working on various projects.



H el ene Th ebault

H el ene Th ebault a young French designer is joining our team as a facilitator for the "Narratives of Ladakh" Summer Program 2015. She has lived in India for 2 years to investigate on crafts and cultural practices within architectural perspectives and worked with the Design Innovation and Craft Resource Center (DICRC) in CEPT University (Ahmedabad) and then specialized in design for social impacts in Srishti School of Arts, Design and Technology (Bangalore), as part of a Transcultural design Masters program from l'Ecole de design Nantes Atlantique (Nantes, France). Hungry for encounters, discoveries and challenges, she then travelled to Ecuador to join a team of young architects (Al Borde) experimenting with recycled materials, questioning the role of architects and designers in society. Along with two partners, she contributes to Virgule, a collective blog flourishing with photographs, articles, sketches, etc; sharing thoughts and stories across the journeys of its members. H el ene is also a member of "Already Happening" (AH) a young collective driven by the potential maximization of existing systems, structures, and initiatives. She loves bookshops, unplanned trips, music festivals, and swimming.

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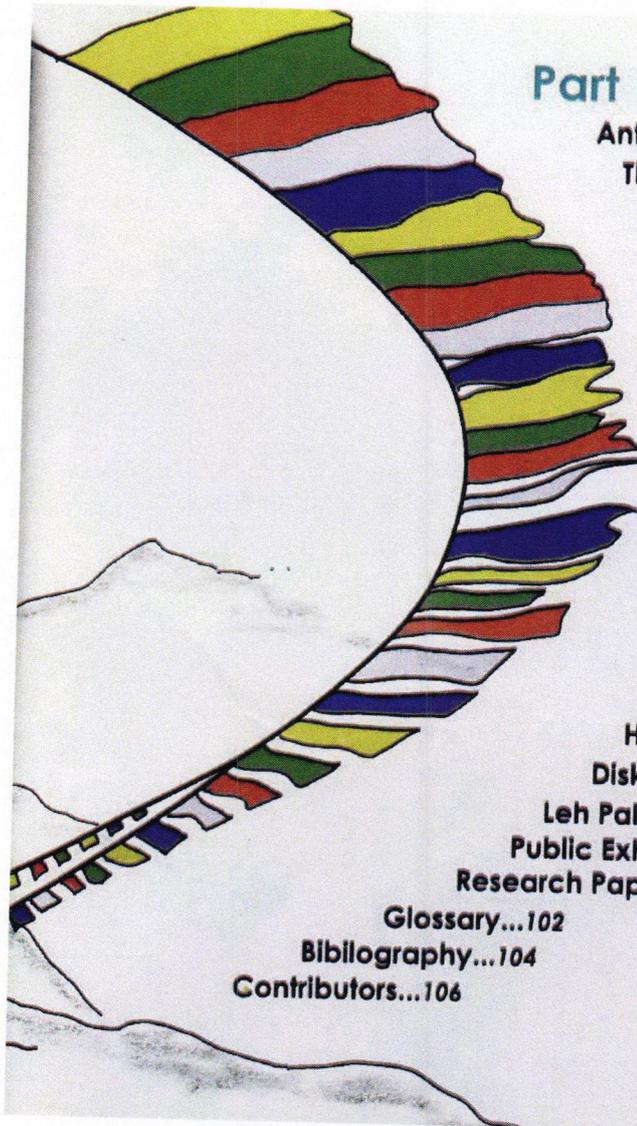
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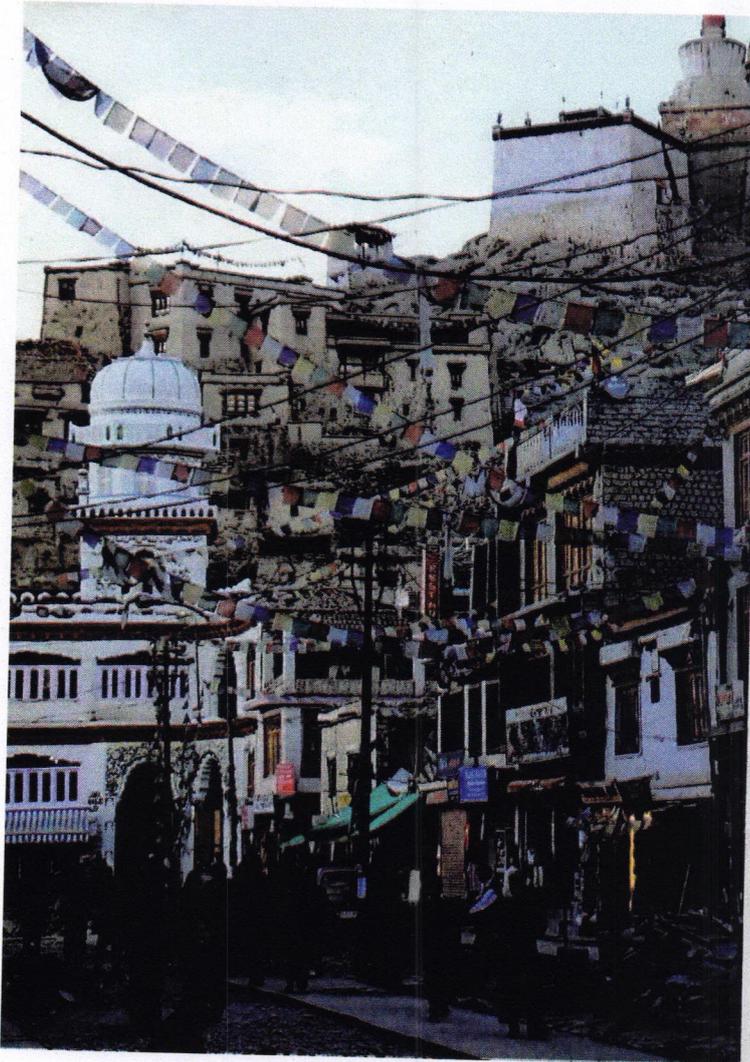
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If Himalayas are the landscape of the mind; Ladakh defines it as a landscape. Ladakh; the region which are world's highest mountains are opened to the outside world in 1970's. Before that the entire region lived in oblivion inside their own world; ice cold winters and warm summers with green apricot trees blossoming in its barren landscape. The short summers are celebration for the people, dancing and drinking only to pave way for the apricot leaves to turn yellow and red; paving the way for arrival of long cold winters.

Closing down of Tibet by China and similarity of the region to Tibet, encouraged people to travel and explore Ladakh. The unique landscape of white chortens, terraced Gompas, wooden mosques scattered in the barrenness of the land made it stand out and encouraged more and more travellers to explore and search for the lost "Shangri-la".

Of course, no one found Shangri-La; but in the process discovered something even more profound and rich. The place which is still older than time, which had long trade relations with Central Asia, where the Himalayas and the Karakoram ranges rest. Its art and architecture inspired from India, Tibet, central Asia and made richer by amalgamation of Muslim cultures from Persia.

The architecture is perplexing at times, not only because of the terrain it is built on, low rooms, or small openings; but it is different also in the way we perceive it from our sense. The texture of earth on walls, the stone-clad pathways, timber roofs and mud floors transports us to hundreds of years. The old houses built close to each other forms a labyrinth which is difficult to decipher; thus making us even more confused.

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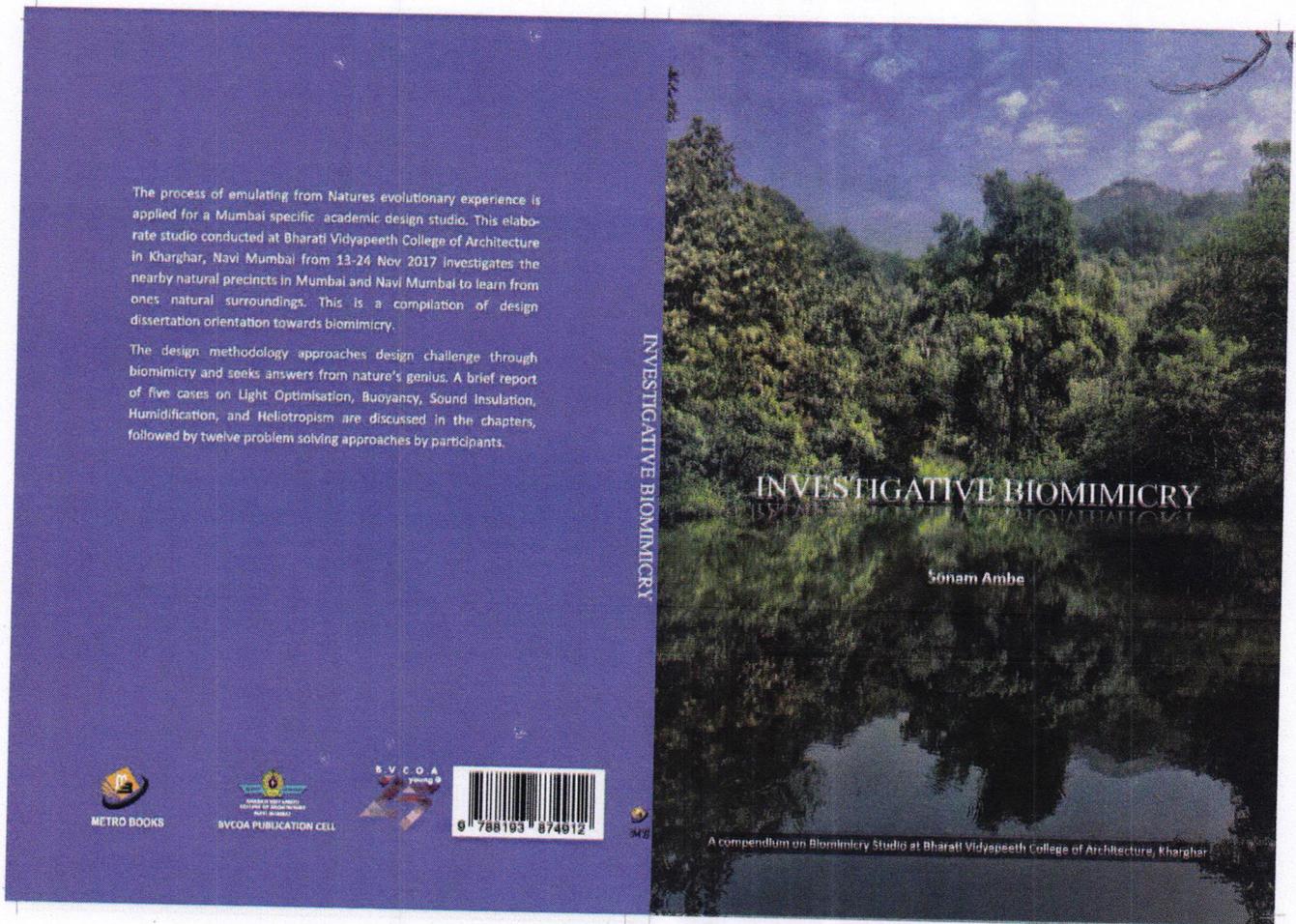
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3. Investigative Biomimicry by Ar. Sonam Ambe



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The Bharati Vidyapeeth Publication Cell presents
INVESTIGATIVE BIOMIMICRY
A compendium on Biomimicry Studio

Workshop conducted by
Sonam Ambe

Launched at



On the occasion of 25 years celebrations of



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Seema Hardikar, Horticulturist

Institute co-ordinators

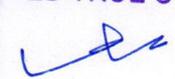
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Investigative Biomimicry, The Brief

Sonam Ambe, Studio Lead



Sonam graduated from Sir J. J. College of Architecture in 2010, following which she pursued social sciences at IIT Bombay. She was awarded the IITB Institute Silver medal and M.Phil Gold medal for her academic performance. Here, she was introduced to cross disciplinary studies and biomimicry came to her life through the beautiful campus of IIT Bombay. She is passionate about nature and loves to spend her free time in the wild. She believes that she appreciates design, development and capabilities differently from the main stream perceptions because of her cross disciplinary education. This is her first pedagogical exploration on biomimicry.

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Content

This compilation is the outcome of the Biomimicry workshop at the Bharati Vidyapeeth College of Architecture, Navi Mumbai. It is laid down in the following chapters.

1. Environments, Ecosystems and Bios.....01
This chapter discusses the environments of the forests visited during the workshop. These are the Parsik Hills, Godrej Mangroves at Vikhroli and the Karnala Bird Sanctuary.
2. Observation Methodology.....06
The observation strategies are discussed in detail alongside students journal entries and nature logs.
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The design guide to ' How to apply life's genius to resolve a design challenge?' is discussed.
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5. Bibliography.....57
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Academic Year: 2022-2023

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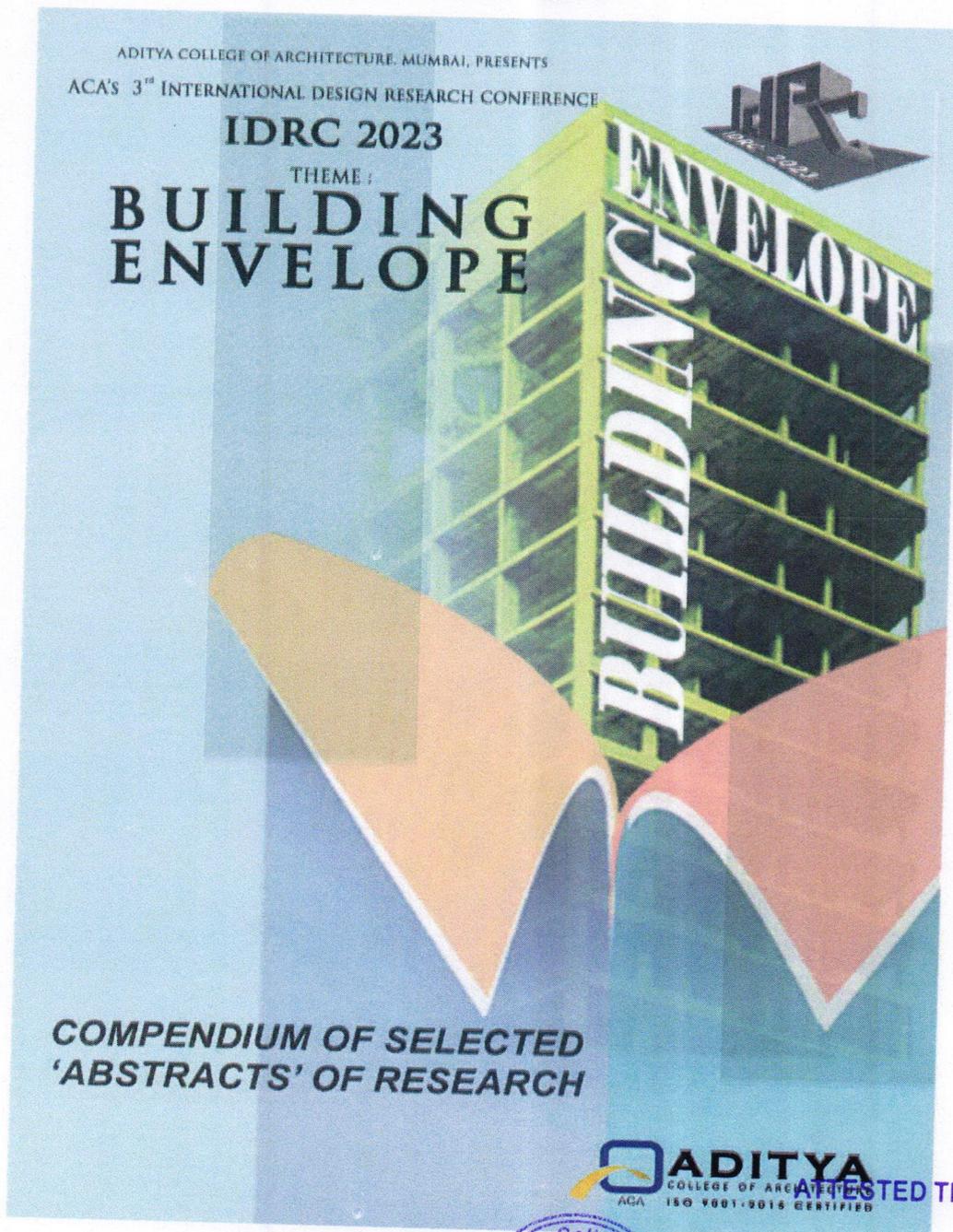
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2. Comparative envelope analysis between traditional and contemporary construction for energy efficiency in a hotel in Matheran by Ar. Shraddha Kapadia



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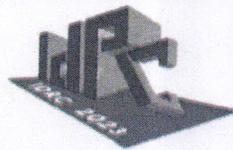


ADITYA COLLEGE OF ARCHITECTURE

3rd INTERNATIONAL DESIGN RESEARCH CONFERENCE

"Building Envelope"

Mumbai – January 21st, 2023.



ONLINE CONFERENCE DATES

January 21st, 2023.

VENUE

Aditya College of Architecture,
Aditya Educational campus,
R M Bhattad Road, Ram Nagar,
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REGISTRATION

12/9/2022

CALL FOR PAPERS

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3/10/2022
Full paper submission
10/12/2022

FURTHER DETAILS

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CO-ORDINATORS

Ar. Rasika Chodankar
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Ar. Varsha Swar
Asst. Professor
varsha.s@aditya-arch.edu.in

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ADITYA COLLEGE OF ARCHITECTURE 3rd INTERNATIONAL DESIGN & RESEARCH CONFERENCE		
Programme schedule - 21st January 2023.		
Session details	Timings	
Inauguration of the IDRC 2022 -23 in Banquet hall, ACA Campus; lighting of lamp and felicitations of dignitaries	09:30 am - 09:45 am	Ar. Varsha Swar, IDRC Co-ordinator.
Welcome Address by Principal	09:45 am - 10:00 am	Ar. Sarita Deshpande, Principal, ACA.
About IDRC	10:00 am - 10:15 am	Ar. Rasika Chodankar, IDRC Co-ordinator.
Address by Guest of Honour	10:15 am - 10:30 am	Ar. Deepak Chitnis, Head of Design, Lodha Group
Address by Chief Guest	10:30 am - 10:45 am	Shri. Kedarnath Rao Ghorpade, Independent Consultant, Former Chief Planner MMRDA.
Inauguration of the IDRC		
Compendium of selected abstracts by Chief Guest		
About IDC Review	10:45 am - 11:00 am	
Announcement of IDC winners		Guest of honour - Ar. Deepak Chitnis
Address by Key Collaborators	11:00 am - 11:15 am	Immediate Past President PEATA (I) - Ar. Semir Hingoo
Key Note Speaker 1	11:15 am - 12:00 am	Ar. Damith Premathilake, Founder DPA Studio, Sri Lanka.
QnA and Concluding remarks /Vote of Thanks		
Key Note Speaker 2	12:00 am - 12:45 pm	Ar. Sanjay Patil, Director, Principal Architect, Environ Planners
QnA and Concluding remarks /Vote of Thanks		
Key Note Speaker 3	12:45 pm - 01:30 pm	Ar. Ujjwala Haware, Haware Engineers & Buildings Pvt. Ltd.
QnA and Concluding remarks /Vote of Thanks		
LUNCH BREAK - 01:30 pm - 02:00 pm		
Introduction of review Committee	02:00 pm - 02:15 pm	Ar. Rasika Chodankar, IDRC Co-ordinator
Address by Reviewer		Dr. Roopal Deshpande, Principal - Smt. Manoramabai Munde College of Architecture, Nagpur.
Research paper presentations	02:15 pm - 03:30 pm	Paper presentations sequence: 1) Rajratna Jadhav - Phd Student participants 2) Chris Thurlibourne - Phd Student participants 3) Sakshi Ghodake - UG Student participant
TEA BREAK - 03:30 pm - 03:45 pm		
Research paper presentations	03:45 pm - 05:15 pm	Paper presentations sequence: 1) Arsheen Palkar - PG student participant 2) Shradha Kapadia - Academician 3) Pruthviraj Bhople - Practitioner 4) Akshay Joshi - PG student participant
Valedictory	05:15 pm - 05:30 pm	Ar. Varsha Swar
Vote of thanks and end of the day's session		



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COMPARATIVE ENVELOPE ANALYSIS BETWEEN TRADITIONAL AND CONTEMPORARY CONSTRUCTION FOR ENERGY EFFICIENCY IN A HOTEL IN MATHERAN

Ar. Shraddha Kapadia, Bharati Vidyapeeth College of Architecture, Navi Mumbai

Buildings are usually skin dominated, having smaller internal heat generation as compared to the heat gain/loss through the envelope (Givoni 1998). The building envelope can contribute up to 73% of the total heat gain/loss (DOE 2004). Energy efficient building envelopes can reduce dependency on fossil fuel and environmental pollution.

This paper explores the analysis of thermal performance of envelope in a hotel in Matheran with respect to energy efficiency. The essence of tourism in Matheran is environment and so to conserve its quality, there is a need to induce environmentally sound development and operations. All this underlines the implementation of green sustainable measures and need to achieve greater efficiency in existing hotel envelopes as no new construction is allowed in Matheran.

It is very important to investigate heat gain parameters for different envelopes based on their material characteristics. Thus, the objective is to make a comparative analysis of two different building envelopes, the traditional load bearing Laterite stone construction and contemporary RCC framed brick structure (traditional and contemporary) in the Matheran hotel and determine the most energy efficient one from their energy-saving potential.

Both the envelopes are investigated through ECOTECT and eQUEST software's simulation modelling for thermal performance. The analysis of the simulations implied that the traditional construction building envelope has better thermal performance, thus more energy efficient.

Further, the study concludes by making the contemporary envelope more energy efficient by modifying it (roof, wall and fenestration properties) and simulating the same for better thermal performance.

SUSTAINABLE BUILDING ENVELOPE OF DHAKA CITY

Tanveer Ahamed Bin Ali Naser¹, Lecturer, Department of Architecture, BRAC University, Bangladesh

Rafia Rukhsat Tohfa², Lecturer, Department of Architecture, BUET, Bangladesh

Tansen Alam Sangit³, Lecturer, Department of Architecture, State University of Bangladesh, Bangladesh

A building's envelope is the final realisation of the design, and a huge factor in how successful it is as an environment, for work or leisure. The envelope is the building's outer skin and its connection to the city – it must make sense in both roles at once. Recently, sustainable building systems have been introduced in developed countries to improve the overall performance of buildings and to prevent greenhouse gas emissions, the main reason for climate change. For achieving building sustainability building envelope treatment plays a major role. It is very important contributor to the comfort parameters and attractiveness of any building.

As a developing country till recent decade Bangladesh was following the western building architecture which was creating unsustainable condition and the temperature of the cities are increasing day by day where the glass box like buildings can be considered as one of the culprit. But in recent decades some of the architects of Bangladesh working on this and designing sustainable building envelope to reduce the temperature of the building alongside the beauty. This paper aims to highlight the innovation of Bangladeshi architects on sustainable building envelope to encourage the society to create more sustainable building envelope treatment to reduce global warming.

KEYWORDS: Building envelope, Building Facade, Sustainability, Thermal

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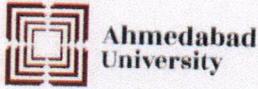
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3. Learning from Traditional Indian Cities - The Ghats of Benaras by Ar. Ritu Deshmukh



Ahmedabad
University



CERTIFICATE
OF PARTICIPATION

THIS CERTIFICATE IS PRESENTED TO

Ritu G Deshmukh

For successful participation at the
4th Conference on Heritage Management Education and Practice
held on 2-4 December 2022 at Ahmedabad University, Ahmedabad, India.

PROFESSOR NEEL KAMAL CHAPAGAIN
CONFERENCE CHAIR

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Understanding Varanasi

Habitat and Rituals

Habitat and Water

Habitat and Tourism

Habitat and Activities

Riverfront Architecture

Sewage Dumping

Symbolic Value of River

Improvement of River

Issues Faced

Removing Dhobi, cows... out of city core?

Water supply by network or traditional systems?

Pyres places growth replacing daily uses?

Maintaining habitat by using tourism

Learning From Traditional Indian Cities
The Ghats of Benares

Documentation Team : Students of B.V.C.O.A and ENSA, Paris la Villette
 Illustration credits : Rishikant Patra, Section Credits : Sameet Sane, Poster Credits : Parmeshwari Thordkar

Ar. Ritu Deshmukh
 Professor B. V. C. O. A., Doctoral candidate T. J. U
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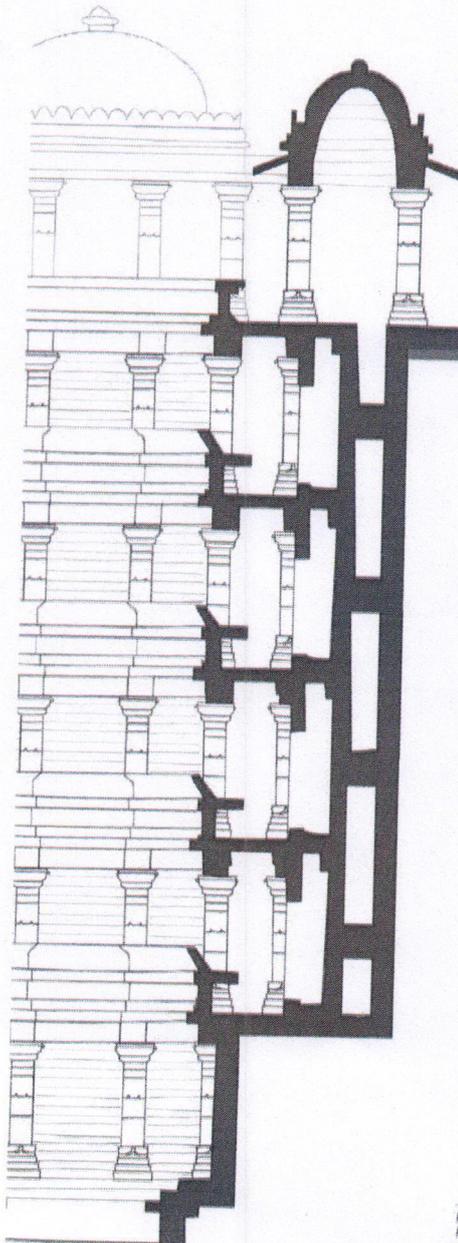
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4. Man-Made Traditional Water Systems along Rivers of India: Case Study - Palaspa River, Panvel, Maharashtra by Ar. Ritu Deshmukh



Traditional Water Systems of India:

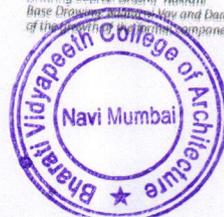
A Heritage for the Future

DATE: 22-23 September 2022
TIME: Day One - 8:30AM - 16:30PM
Day Two - 9:00AM - 16:30PM
VENUE: FA 101, CEPT, Ahmedabad

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Base Drawing: Kulkarni and Dada Hari ni Vav: Stepwells of Gujarat
of the Stepwells of Gujarat: Components | Kalsi, Ekagrat Singh | 2006

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SESSION SCHEDULE
22 September 2022

SESSION TWO

- 11: 40 AM **Introduction Session 2**
Session Chair: Shikha Jain
- 11:45 AM **Community values and aspirations in Heritage Conservation**
The Case of Indra Kund, Delwara, Rajasthan
Khushi Shah, Shruti Hemani
- 12:05 PM **Concept of "Jannat" in Islamic Art and Architecture Special**
Reference to Water Bodies of Deccan Sultanates
Session Chair, Mansee Bal
- 12:25 PM **Exploring Nahar-e-Ambari, Aurangabad: A sustainable an-**
cient water supply system
Dhanashri Mirajkar, Pranay Kumar Tode
- 12:45 PM **Man-made Traditional Water Systems along Rivers of India:**
Case Study: Palaspa river, Panvel, Maharashtra
Ritu G Deshmukh
- 13:05 PM **Discussion**
Moderator: Maureen Certain
- 13:20 PM **Lunch Break**

SESSION THREE

- 14:30 PM **Panel Discussion: Mansee Bal, Shikha Jain, Rémi Papillault**
Moderator: Jigna Desai
- 15:30 PM **Question Answers and Discussion**
Moderator: Sneha Anand
- 16:00 PM **Concluding Remarks**
Maureen Certain

- 16:30 PM **A visit to historic city of Ahmedabad and its Water Systems**
(organized by Center for Heritage Conservation) – will be
charged 600 Rs per person

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Date :

Man-made Traditional Water Systems along Rivers of India: Case Study: Palaspa river, Panvel, Maharashtra

Ritu G Deshmukh

About the Author

Prof. Ritu G Deshmukh is presently working as an Academician with Bharati Vidyapeeth College of Architecture, Navi Mumbai as Professor Founder of C.R.E.A.D.H.L.E.(Center for Research, Enquiry Action and Documentation of Heritage, Landscape and Environment) Alumni of VNIT, Nagpur (B.Arch.) and SPA, New Delhi(M.Arch.-Arch.Conservation)

Abstract

River can give, and take what they give: They have hence been the cradle and graveyard of civilisations over centuries. They have sustained societies, carved their course, developed cultures, gave form and function to our Settlements, helped create socio-economic structures and thus formed multifold and inter-layered narratives. Though this relation between water and human settlements is quite extensively studied and documented—probably since ancient times, dating back to Nalanda University—there is always a new perspective to be explored and challenged. While a lot of deep research and hard work has been put in by multiple experts in this field, there is always a siloed approach to water and heritage.

Heritage itself is a result of evolution and change over large periods of time in the environment, surrounds, people, and nature. Rivers have been instrumental in the creation of heritage of places along it. This research attempts to study and evaluate qualitatively and quantitatively the aspects of Man-made Traditional Water Systems that evolved in the Heritage Settlements along the rivers in India and then provide a direction for future growth as well as dissemination of knowledge about their significance.

In January 2015, the General Assembly began the negotiation process on the post-2015 development agenda. The process culminated in the subsequent adoption of the 2030 Agenda for Sustainable Development, with 17 Sustainable Development Goals (SDGs) at its core. These SDGs recognize the role of water bodies / rivers and its role in sustaining culture/heritage. The SDGs understand that action in one area will affect outcomes in others and that the development must therefore balance social, economic and environmental sustainability. They stress on the interrelationships and a wholesome view to take care of the rich historical past of the place and its architectural importance in relation to water.

In today's context, these complex and diverse river systems of the past are stepping-stone to formulate the framework for preservation and reuse for New Systems. This research intends to link the practices of the past to the present context and try to predict the future of sustainably using these two components: water and heritage. It also plans to describe an alternative emerging present in which policymaking and design work together to recognize and build on traditional knowledge and skills

DAY ONE



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5. Sustainable Development through Heritage Conservation by Community Participation - A Case of Pragpur and Garli by Ar. Shraddha Kapadia



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 **7TH NOVEMBER 2022**

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<https://meet.google.com/fjh-suwb-cbp>

 **9:30 AM - 5:00 PM**

Organizing Secretary:
 Prof. V. K. Bugga

Chief Coordinator:
 Prof. Bandana Jain

Coordinators:
 Ar. Kaveri Rai, Swarnahiya Ganguly,
 Dale S Paul

Free Registration
 Registration Link:
<https://www.google.com/events/details/gmpevents-2022-11-07-11-07-2022>

GUEST SPEAKER



AR. SANJAY PRAKASH
 New Frontiers in Eco-Architecture



PROF. HARI K G NAMBIAR
 Transit Oriented Development Delhi 2022



AR. SURUCHI SHAH
 Historic Water Architecture of Delhi



AR. SUDHIR P. KULKARNI
 Wada Culture - Maharashtra Traditional Architecture



AANCHAL TYAGI
 Psychometric and Thermal Simulation Of A Building



PROF. BANDANA JAIN
 Space For Solid Waste Management In Group Housing Projects.



AR. BHAVIK MEHTA
 To Investigate And Access Novel Theoretical Method For Teaching Pedagogy In Climatology.



AR. SWATI DEO
 Impact Of Effective Open Spaces and Landscaping In an Urban Institutional Building.

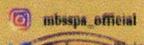


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MBS SPA, DWARKA, NEW DELHI

Sustainable Development Through Heritage Conservation By Community Participation - A Case Of Pragpur And Garhi

A.C. Srivastava Kapadia
 B. Arch., M. Arch., Associate Professor, Bharati Vidyapeeth
 College of Architecture, Navi Mumbai

Abstract

So far, sustainability concerns of new construction are the focal point owing to climate change, pollution, depletion of resources caused due to exponential development and urbanisation. In this context, the built heritage evokes the pressure never witnessed earlier. Heritage as a vital component of sustainable development was highlighted in the Paris Declaration on Heritage as a Driver of Development (KOMOS 2002). Here, the historical, cultural, social and economic aspects were emphasised. The purpose of this paper is to encourage and inform sustainable development through heritage conservation in Pragpur and Garhi, Himachal Pradesh. It begins with an overview of sustainable conservation in Pragpur and Garhi, Himachal Pradesh. It begins with an overview of sustainable development and questioning the role of built heritage in this development. For these reasons, the case of Pragpur-Garhi is emblematic to validate the potential strategies encompassing sustainability, that, adopting a far-sighted practice encompassing heritage conservation and sustainable development together.

Introduction

In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." This explanation seems appropriate if applied for the main purpose of heritage conservation which is to secure the actual architectural character of the building, protecting architecture over replacement or demolition, providing its use for generations to come. Preservation of heritage

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References

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Research Paper - Conference

Academic Year: 2021-2022

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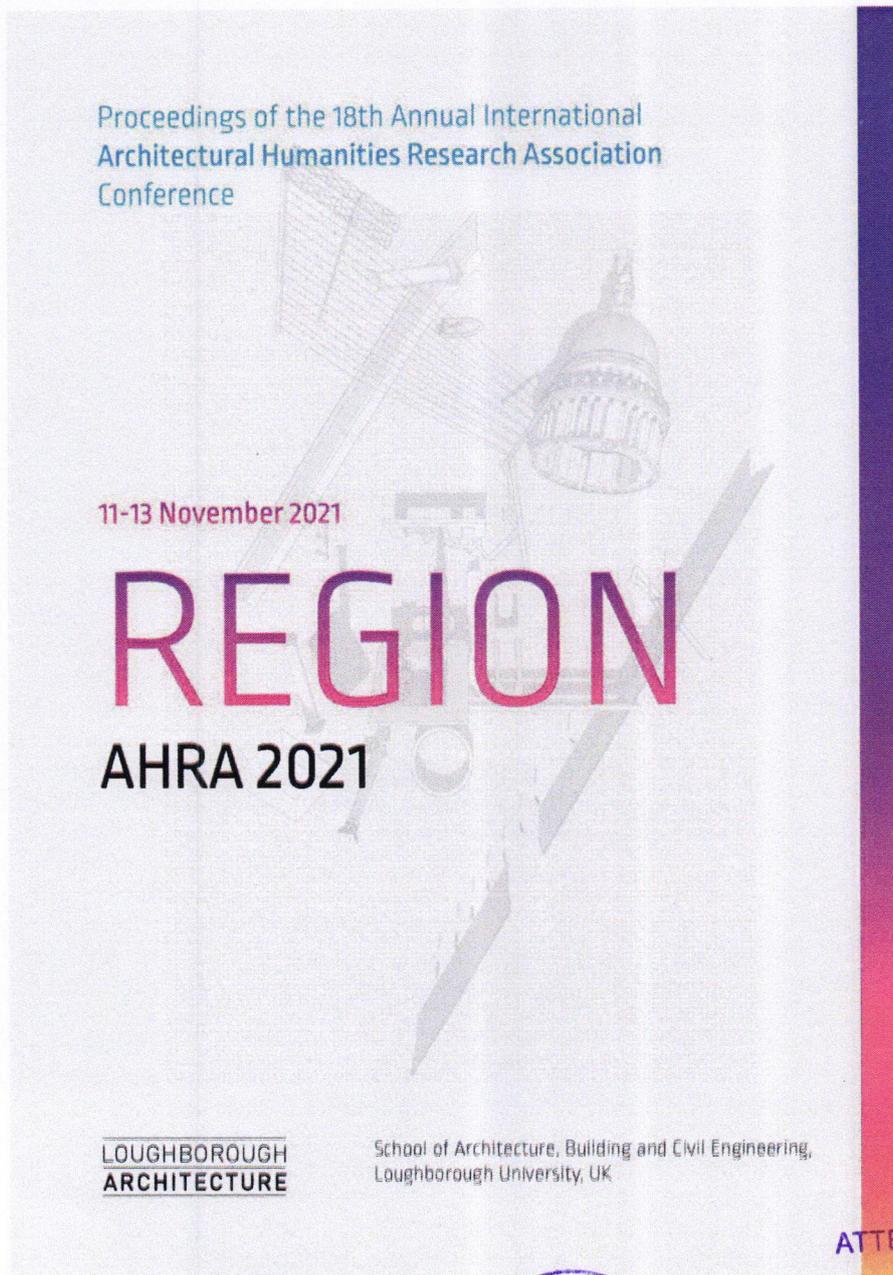
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1. Cultural Expression: An Identity in Search of Continuity, Tera Village, India by Ar. Kamakshi Vaidya and Ar. Krishna Bhadra



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HERITAGE

Cultural expression: an identity in search for continuity, Tera village, India

Krishna Bhadra¹ and Kamakshi Vaidya²

¹Architect, India; ²BVCOA, India

In Architectural expressions of Kutch, India a regional emphasis is blend of lifestyle, climate, materials, skills, traditions, culture. Built un-built spaces present a narrative of Kutch which is authentic and original in its attribute to place-making. This paper envisages a research that aims at reviving the communities practicing handicrafts of Tera Village, Kutch, Gujarat, India. This 500 years old village has been declared "heritage village" by the State Government of India because of factors which blends together and enhances the beauty of village. Being heritage asset it is still unexplored.

In order to enhance social influence of creativity, creating an interdisciplinary approach for experimentation and innovation is necessary. This can be accomplished via reviving defunct art settlements as they showcase a cultural connect with setting. The Kutch earthquake of 2001 has forced many people to migrate because globalization, trade competition, industrialization, and modernization have decreased handicrafts as a source of income.

The idea is to create global meeting platform for local handicraft communities, art lovers from all the creative personas, tourists to interact, learn and express creativity. Exploring participative building process by strengthening community support in traditional built methods to preserve regionalism. Thus, vernacular Architecture not only becomes an important medium to develop art and design, but also livelihood system and economy. The proper facilities will enhance quality of life, improve economic condition and will help artisans to connect to world and gain identity. It will add on Tourism of Tera which will enhance heritage value of the village.

Although Art, Culture with Artists forms significant role in shaping society, quality of space can enhance the user and visitor's experience. This paper presents one such research-based proposal that shows how such subjects can be handled with respect to the socio-cultural connotations, with the aid of funding from government organizations and NGOs.

Keywords: heritage, village, live museum

Location: Tera Village, Gujarat, India



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2. Assessing the Potential of Development along Metro Corridor—A Case of Pune by Ar. Nikhil Badrike

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Assessing the Potential of Development along Metro Corridor—A Case of Pune

Badrike Nikhil Vijay¹ and Arati S. Petkar²

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ABSTRACT

Pune is one of the fastest-growing metro cities in the country. To improve the transportation system in the Pune city, metro as mass rapid transit system (MRTS) was proposed. The work has been initiated since June 2019, intention to connect the different areas and the peripheral population to their workplaces and core of the city. The greater connectivity through the technology is bringing the different areas of the city closer to each other and the core area of the city. The government and planning authority published a transit-oriented development (TOD) policy, which states about the development control and promotion through rules and regulations for the TOD zone. This study hypothesizes that the Pune TOD Policy is the highly influencing factor for the development along the metro corridor, which along with the other co-influencing factors determines the development pattern of the study area. The paper focuses on exploring the impact of TOD policy on the land use, development potential, and development density of the TOD influence zone with a case study of the Pune, Maharashtra state, India. From the present study, it is observed that results show that, TOD development regulations have shortcomings concerning plot area, plot size, and adjacent road width to consume the FSI four.

1. INTRODUCTION

Increasing urbanization and urban population, which results in the rapid demand for housing and transport facilities which generate burden on urban development. The urban development is the process of growth of an area, situated in the city or a town or having characteristics of the same. It has spatial and physical attributes as well as environmental, economic, social, cultural and political manifestations. The spatial and physical form of urban development can either be a new development on virgin land or renewal of existing urban fabric. (Mukherjee R. and Nag S., 2015)

The population of Pune is about 5.058 million as per the census 2011. Along with the population of the city, the demand for transport facilities is also increasing. The city has a prodigious history of educational institutes and it has developed as a major educational institutional hub in recent decades. The city holds nearly half of the total international students in the country along with home to the biggest IT Park in the country called Rajiv Gandhi IT Park at Hinjewadi. The increasing population of the city has created congestion on the available road network hindering the transportation system. To improve the transportation system, the Pune Metro as Mass Rapid Transit System (MRTS) proposed in the city, the work has been initiated since June 2019.

Literature indicates MRTS has an impact on the development through changes in land use and real estate market. Around the metro station, within the influence area result can be felt in the form of congestion, land use changes, densification of areas, the concentration of activities and increase in the land value. For the controlled and promotional development in the city,

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3. Significance of Daylight aperture design in Reading spaces of Library "A step towards sustainable approach" by Ar. Ruta Pawar

Identity and sustainability

Significance of Daylight aperture design in Reading spaces of Library A step towards sustainable approach

Under Subtheme: Identity and sustainability

Your unique identity code IS004

Ar. Ruta Pawar ^a Ar. Sujata Patil ^b

^a Associate Professor, Bharati Vidyapeeth college of Architecture,
Navi Mumbai

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Pune.

Daylighting is an art and science of design but in spaces like libraries, it affects physical and psychological health of the user. Change is the only constant in fact of the daylighting and the human eye has adaptation towards this. Human perception of the space also is altered with the time, as the exploration of the space and satisfaction of the occupants are prime requirements in any case. Daylighting is a key factor of design to create well-lighted space to achieve visual comfort of the user and promotes energy conservation to reduce environmental impact. Daylighting helps readers to be more comfortable and productive to perform reading tasks. The focus of the paper is about various approaches in fundamentals of daylighting, daylight aperture design, and strategy to enhance uniform daylight in the deeper spaces of the library. The methodology includes post occupancy evaluation of libraries in moderate climate to understand design aspects in planning, effect of daylight aperture and contribution of colours in the reading spaces. The daylight analysis will be based on qualitative and quantitative methods in consideration with seasonal changes and daylight availability. This paper will lead to the conclusion based on the effectiveness of daylight apertures and design innovations towards the betterment of daylighting to perform tasks effectively.

KEYWORDS: - Daylight, Illumination, Reading spaces, Apertures, Sustainability.



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4. Architectural Character of Built Heritage of the Pune Cantonment "A need for Respect and Appreciation towards Heritage" by Ar. Ruta Pawar and Ar. Neha Pradhan



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Architectural Character of Built Heritage of the Pune Cantonment A need for Respect and Appreciation towards Heritage

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India has a strong history of Architecture and a unique civilizational legacy. However, it is highly neglected and unprotected. In current trends of rapid urbanization, Architectural education helps learning about the past to understand the present so that educated decisions about the future can be taken. Heritage when we talk is always in the form of tangible and intangible. At institutional level its protection has limitations; an approach based upon the documentation methodology is an effective tool towards preservation. The paper aims to investigate the transformation in the built heritage around Cantonment town in Pune due to urban growth. The study focuses on the elements like understanding the evolution of a cantonment town, its diverse demography, socio-economic development and architectural uniqueness of the built environment, including lifestyle, rituals, traditions and livelihood-adding meaning to the unbuilt environment. The methodology focuses on the mapping of the area, which covers, revealing the layers of core with time, understanding streets and edges within the precinct, characters of alleys and open spaces, impacts of markets and living heritage on the development within the study area. The detailed measurements and drawings of the significant built heritage and public spaces were done to understand the Architectural character of the era. It further focuses on the learning outcomes related to unplanned and inappropriate new development and identification of significant changes happening due to urbanization. Paper concludes the assessment of policies and actions of Pune Cantonment Board towards the new development control norms and disregard for the treasured heritage in the precinct.

KEYWORDS: Cantonment, Built Heritage, Architectural character, Urbanization, Policies.

1. Introduction

"People without the knowledge of their past history, origin and culture are like a tree without roots" as paraphrased by Marcus Garvey this fact fits perfectly in Indian context. India is one of the oldest and culturally rich civilizations that spanned over five thousand years. We have a huge amount of built heritage that is highly unprotected and neglected. In India lack of awareness, inadequate documentation, non-involvement of academia, improper regulation and rapid urbanization leads to misuse of built heritage. Indian contemporary cities are mostly the result of colonialism with the impact of British philosophy. Among them is Pune city with its unique cultural character dominated by the Peshwas alongside its adjoining Cantonment which emerged as a Military Station under the British regime in India. The paper aims to study the Evolution of Cantonment during the colonial period and to understand the diverse demography and architectural characteristics of built heritage in cantonment. It further tries to identify the impact of unplanned growth and encroachment on the existing built heritage. It also attempts to discuss the short fall of policies regarding new development and its implementation that leads to disregard of heritage in the precinct.

1.1. History and Origin of Cantonment

British East India Company ruled India from 1765-1858 and expanded operations of its military. It examines one of the most essential yet overlooked phenomena used to shape colonial territorial governance during the eighteenth and nineteenth centuries—the "Cantonment" or permanent army encampment.

Monopoly over the spice trade from India raised rivalries amongst various European kingdoms. In order to expand their trade territories in India, numerous battles were fought between Europeans and native Indian kingdoms and among European Kingdoms as well. During these battles European armies were not able to tackle the extreme climate of India as it has hot summers, cold winters and troublesome monsoon. There was an incident of battle between European and French troops at Trichinopoly in 1754 where the European army took shelter under a giant stone Hindu shrine during rains. Accommodating temporary camp shelter was out of the question and thus the Cantonment emerged in the early nineteenth century.

Earlier cantonments were established as if winters billeting that were transitory holding camps with shelter and basic facilities for sustenance and were placed within enemy land. There were many constraints in the placement of cantonments - based on topography, internal planning and hierarchy of quarters. For stability within the Bengal and Bihar region, the permanent shelter for cantonment took place under Robert Lord Clive.

Under Clive, Bankypore (Bankipur) in Patna was converted into a permanent camp and a new military station site was developed



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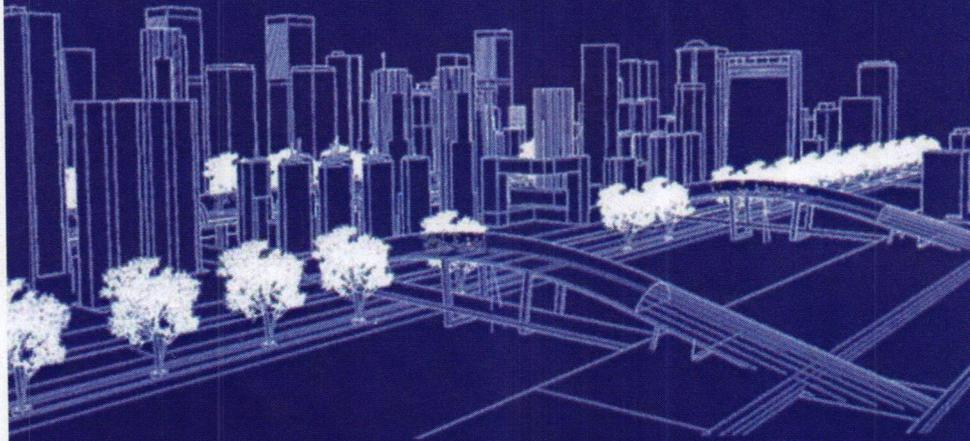
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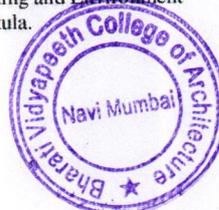
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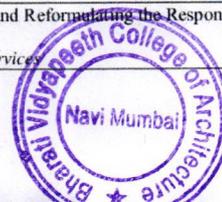
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The Spaces That Encourage Cohesive Social Fabric: A Case Study of Small Pocket of Sadar Bazaar

Harshada K. Ponshe

Bharati Vidyapeeth College of Architecture, Navi Mumbai, India

Abstract

The research was started with the hypothesis that 'the morphology of public spaces contributes to the quality of social interaction and cohesiveness of that area'. This paper discusses different aspects of built and unbuilt spaces promoting social interaction. Built spaces represent all types of residential, commercial, religious, educational, mixed-use and other structures. Un-built spaces represent vehicular access-ways, streets, small lanes, pedestrian connections, open spaces, parks, plazas, front yards and backyards of built forms or even the small pockets in between buildings. Some of these are consciously created while some are organically developed. The main focus of this study is organically developed areas in between the buildings which promote the social interactions at the neighbourhood level. Along with this, the study elaborates on the physical form of built structures, their density, height, orientation, position, and sizes of openings, the geometry of unbuilt spaces and their relation with built areas. To check the hypothesis; the methodology used is a descriptive and analytical method. Under this method; tools used are a case study, observations of behavioral patterns of the users and survey. The area chosen for the case study is a small pocket of Sadar Bazaar in Cantonment area, Pune, Maharashtra. It explores the relation of few more aspects like accessibility, pedestrian movement, climatic comfort, human scale, proportions and street furniture with the active use of public areas, which makes them vibrant and in turn strengthens community bonding.

Keywords: Public spaces; Morphology; Social interaction; Cohesiveness

1. Introduction

In today's Indian urban scenario the development of cities is governed by development control rules of that area. Most of the times it is calculated based and not human-centric resulting in vertical development. The spaces created as public areas sometimes do not respect human scale and proportions. As a result, these spaces cannot effectively work as social interaction spaces. The social fabric is made up of different threads of society like people from different castes, religions, cultures, economic backgrounds, professions, and origins. But to form a cohesive social fabric, there has to be some binding element which will hold all these threads together. Few examples can be identified in the compact grain of old urban settlements.

2. Research Methods

The methods used for research are descriptive and analytical methods. To find out the relation between the morphology of public spaces and their contribution towards social interaction it was necessary to study the physical structure of the area, the quality of social life and bonding between different communities staying in the area.

3. Tools and Techniques employed

To get the necessary data, a case study was used as a tool. Criteria for selection of area was it should be having a blend of different trades, religions, cultures, and people there be staying together for more than fifty years.

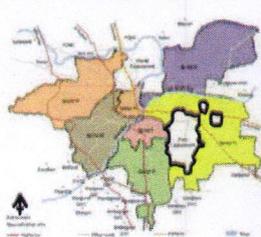


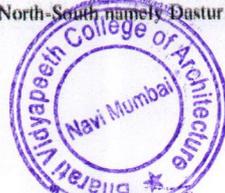
Fig 1. Map showing sectors in Pune city (old limit) Source: Pune Municipal Corporation, 2013b (Pune cantonment area boundary highlighted by author)

Fig. 2 Google map showing area under study and selected pockets for detail study (Source-Google maps (Study areas highlighted by author)

Data collection was done by on-site mapping, photo documentation, behavioral observations, and interviews. For a detailed study of public spaces, three different pockets chosen were dynamic in nature and actively used by the residents or visitors throughout the day as well as used as celebration areas throughout the year.

4. Introduction to study area

The whole cantonment area was divided into 3 zones namely the Bungalow area, Civil Lines, and Sadar Bazaar. The selected case study is Sadar Bazaar which was the market area. There were shops on the ground floor and houses on the upper floor. There are four major streets running North-South, namely Dastur Meher Street, Taboot



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2. Traditional Architecture of Sikkim by Ar. Kamakshi Vaidya

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Traditional Architecture of Sikkim

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Abstract: The cultural background of Sikkim is expressed beautifully by a homogeneous mixture of religious practices and innovative traditions of the people. Sikkim's tradition, culture, ecology and its territory are an important and inter-connected asset of the state. Since, Sikkim's boundary is attached to three more countries, the Indian Army has fought and defended our borders. There is a need to acknowledge the patriotism and bravery of the Indian Army.

This research reflects a brief knowledge about Sikkim's lifestyle, dwellings, their traditional and sustainable construction practices. Structures constructed of wood/ bamboo in traditional methods performed quite well during earthquake, as Sikkim falls under earthquake prone regions in India.

This research studies construction techniques of the traditional Sikkim housing typologies

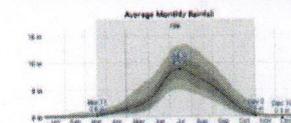
Key words – Traditional construction material, Earthquake resistant structure, Sustainable, Housing styles

INTRODUCTION Climatic condition of Sikkim



Summers temperature- Maximum Average of 22° in summer from March to June

Winter temperature – Minimum average between 4°C (39°F) and 7°C (45°F). Snowfall is quite rare and freezing is also rare



The annual rainfall is 2638mm Considering the climatic condition the construction techniques are involved.

CONSTRUCTION TECHNIQUES IN SIKKIM

It was a common practice in Sikkim to build residential buildings using wood/bamboo, until tourism industry got a boost in early nineties

- Such traditional constructions performed quite well during all the ground shaking during the earthquake, as Sikkim is spread over the seismic region of the Great Himalayas. Thus, Sikkim falls into earthquake prone regions in India.
- Most major old buildings in Sikkim are made of stone masonry with mud mortar. Generally stone masonry buildings suffered substantial damages during the earth shaking
- Presently, RC frame buildings with masonry infill are mostly used in private as well as government constructions
- There is no formal design practice in Sikkim even for RC frame buildings.
- Except for a very few RC buildings involving major projects, analysis and design are generally not carried out. The structural drawings are designed based on previous experiences of engineers using a few thumb rules.

Most of the new RC buildings in Gangtok suffered varying degree of damages during this earthquake; including the existing secretariat building, however no complete collapses were seen.

TRADITIONAL CONSTRUCTIONS

- Traditional construction in Sikkim consists mostly of typical bamboo houses, known locally as Ikra same as what is otherwise known as Assam type housing
- Typically, Ikra houses are single story structures consisting of brick or stone masonry walls up to about 1 m above the plinth
- This masonry supports the walls consisting of bamboo woven together with wooden frame and plastered with



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3. Thermal Analysis of Concrete Arch Dam due to variation in seasonal temperatures by Dr.
Deepak Patil

AMITY UNIVERSITY MUMBAI

AMITY SCHOOL OF ENGINEERING & TECHNOLOGY

International Conference on Recent Advances in Computational Techniques (e-IC-RACT 2020)
26th and 27th June, 2020

CERTIFICATE

This is to certify that

Deepak Patil

has presented a paper entitled

Thermal Analysis of DC Arch Dams Due to Variation in Seasonal Temperatures

in the e-IC-RACT 2020 organized Amity School of Engineering and Technology, Amity University Mumbai.

Mr. Kiran Kale Conference Co-Chair
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Thermal Analysis of DC Arch Dams Due to Variation in Seasonal Temperatures

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Abstract—three dimensional finite element analyses is carried out to study the thermal stresses and displacements in double curvature concrete arch dams. By defining boundary conditions directly on the dam, this leads to a stiffer behavior. Hence two models one with rigid boundaries and other with lumped springs was developed subjected to thermal loads. An arbitrary spring stiffness of $1.0E+07$ KN/m² to $1.0E+11$ KN/m² is adopted for lumped springs. For the parameters adopted an arch dam is subjected to thermal loads for summer and winter temperatures. The temperature of 21.7°C and 11.10°C is adopted for summer and winter respectively. Under water temperatures in the reservoir are estimated. The performance of dam model with spring stiffness of $1.0E+11$ KN/m is almost identical with rigid model. The stresses and displacements in dam in summer season are more compared to winter season. Maximum stresses are observed on downstream surfaces of dams hence much care should be taken while designing the downstream section of dam

Keywords— Double curvature concrete shells, stress factor, aspect ratio, Rigid model, lumped model

I. INTRODUCTION

Arch dams carry major part of hydrostatic loads by arch action. Whereas gravity and buttress types of dams depends on its self weight to resist the imposed loads. Arch dams have small contact area with foundation hence to assure structural integrity material properties of rock are important factors to be considered. The foundation conditions below and along the abutments of the dam should be strong enough to resist the bearing pressures. The angle made by the abutment with the vertical should be less than 30° to reduce the concentration of shear stresses. The dam section may be designed with single or double curvature. In double curvature dams are curved both in plan and in elevation. This allows the dam to be thinner and accommodate more hydrostatic pressures [USACE]. Thermal stresses arise because of restriction in motion when the material expands or contracts due to variation in temperatures. Arch dams having thinner sections are more sensitive to variation in seasonal temperatures. The formation of cracks in dam due to temperature variation is a cyclic process and cracks grow successively over life of dam [Tarbox G. S et al. (2014)].

Arch dam cracking due to thermal stresses during hydration and followed by subsequent cooling has been studied deeply studied for dams and structures, but cracking in dam due to seasonal variation is less studied.

Maken et al. (2014) studied Quebec multiple arch dam and presented a study on how cracking occurs due to seasonal variation. Further Malm and Ansell (2011) presented a study on cracking of Swedish buttress dam due to seasonal temperature variation. Leger and Seydoui (2009) developed a FEA model of Quebec dam in Canada and produce the crest displacements. Crest displacements due to seasonal variation in temperature were thoroughly studied by Anderson and Seppala (2015). Increased knowledge about cracking of arch dam and its maintenance will be useful in design. In most cases FE models are used to predict the displacements in dams. A 3D FE model of Karaj arch dam in Iran was developed by Sheibany and Ghaemian (2006) to study the temperature variation throughout the year and thermal stresses in dam and concluded that temperature stresses are the main cause for cracking of dams on downstream surfaces. Volynchikov et al. (2011) analyzed a concrete gravity dam in Russia subjected to severe climate conditions and suggested for structural reinforcement on downstream surface to avoid cracking. Thermal distribution varies from upstream to downstream faces of dam. In design these temperatures are assumed uniform which may result in underestimation of tensile stresses on exposed surfaces. Some cracks were observed on right downstream face of dam in China while no cracks on left faces. The main factor was due to non uniform distribution of temperatures on downstream surfaces. Agullo L et al. (1996) presented an analytical model for simulation of thermal behavior of dams that are subjected to environmental thermal action during operation. In this paper we present the idealization of arbitrary physical model of arch dam in to mathematical model having rigid and lumped spring boundary conditions following the FE guidelines, subjected to thermal loads. The objective here is to study the maximum stresses and displacement behavior of double curvature arch dam for seasonal variation in temperatures (summer and winter).

II. SCOPE OF PRESENT STUDY

In many fields of civil and structural engineering, such as houses, bridges, nuclear industry, it is common to disregard the underlying rock foundation and to consider it as a fixed boundary condition. By defining boundary conditions directly on the dam, this leads to a stiffer behavior. This could be a conservative approach when for instance calculating stresses in the dam. However, these stresses will be unrealistic and may be too conservative in





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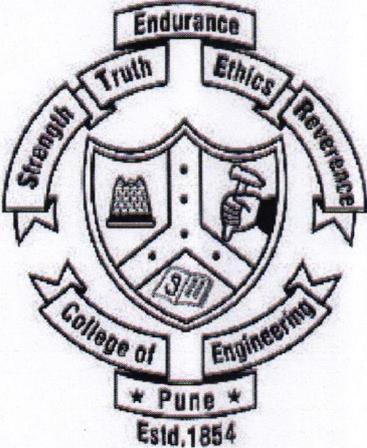
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4. Identification of Industrial Heritage of Central India by Ar. Ajinkya Vekhande

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Identification of Industrial Heritage of Central India

Ajinkya Vekhande

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ABSTRACT :

India boasts of a rich industrial past in spite of not witnessing an industrial revolution comparable to that of Europe. The factories, with their new ways of production, not only gave jobs to millions of people, but also had far-reaching effects on the social life of the people. Central India witnessed the arrival of large-scale modern factories at the end of nineteenth century.

Though the recognition of industry as heritage is new as compared to other types of cultural heritage in India, many notable efforts have been made in Europe and United States to reclaim lost values of industrial sites. There are many legislations and institutions in these countries working in favour of protection of industrial heritage sites. Owing to lack of awareness that remains of industrial past could be physical symbols of our social, cultural and economic heritage, we are rapidly losing many sites that have played a crucial role in shaping our industrial landscape. Many of these industrial sites are either abandoned today or have gone through tremendous changes over the years. It is imperative that their heritage values should be identified and save them from further destruction. But, before that could be done, it is necessary to first start the mighty task of identifying and inventorying such sites because of absolute dearth of availability of information in public domain.

Keywords: Industrial Heritage, Central India, Preservation, Industrial Archaeology, Heritage

Introduction

1. TRADITIONAL industries central india

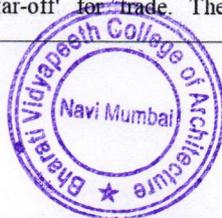
1.1 Geographical disadvantage of Central India

When the Europeans established trade with India in fifteenth-sixteenth centuries, their natural choice for establishing trading posts were coastal ports. Central India, which consists the states of Madhya Pradesh, Chhattisgarh and Vidarbha region of Maharashtra, was considered as 'far-off' for trade. The



Figure 1 The selected region for study Source

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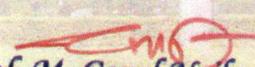
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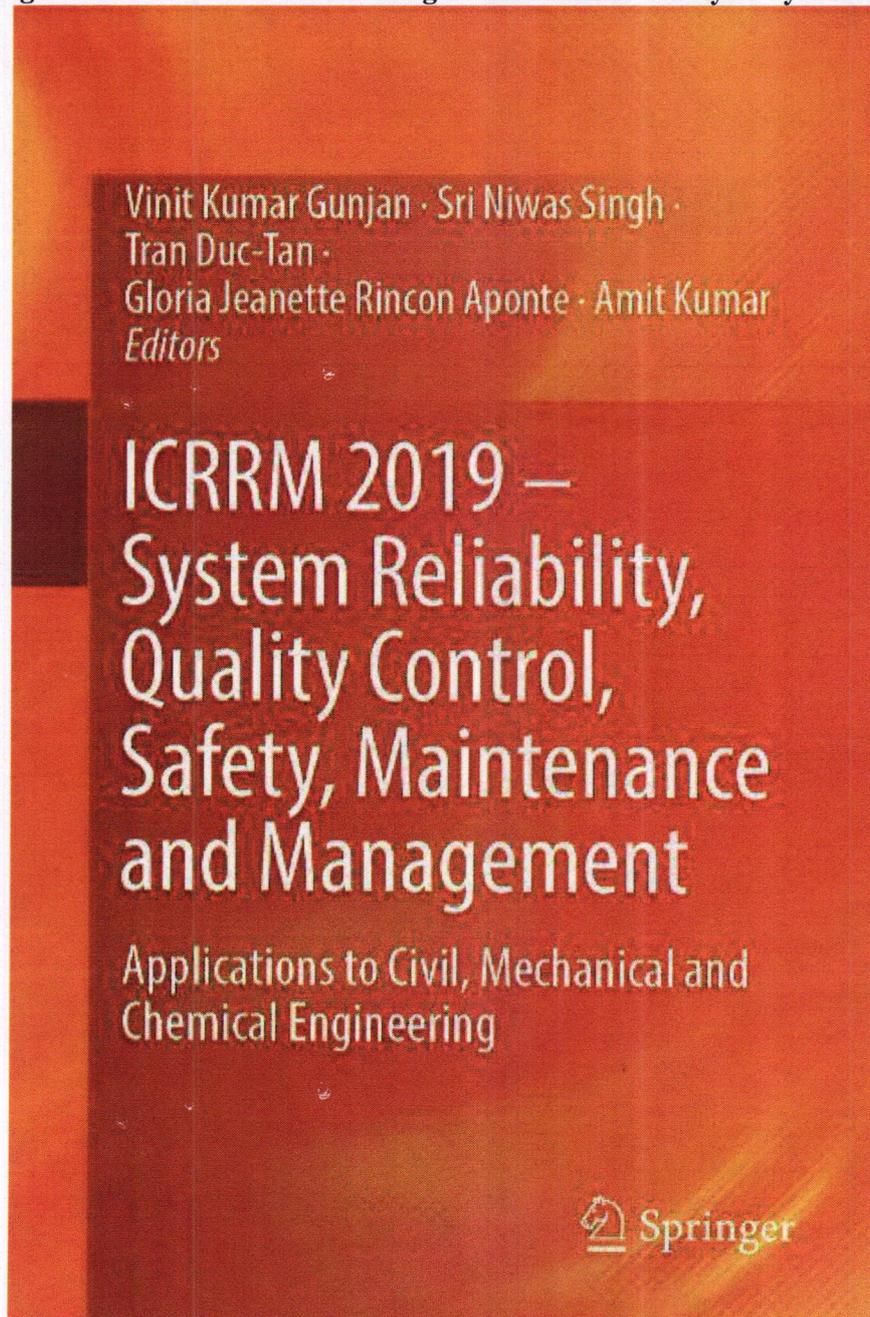
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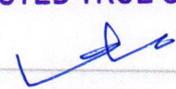
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The arch dam is a massive water retaining structure made up of concrete. The buckling of arch dam belongs to theory of buckling of shells. This paper deals with finite element analysis of constant angle concrete arch dam with full reservoir conditions. Keeping the central angle 120° and valley profile constant at an angle of 30° with the vertical; dam is analyzed for maximum deflections and maximum principal moments for varying thickness across the dam profile. Von Mises stress theory is applied to find maximum stress factors in membrane and flexure. The parametric investigation of constant angle arch dam reveals that the maximum stresses and displacements are minimized with increasing base thickness and vice versa with aspect ratio.

Keywords

[Finite element method](#) [Constant angle](#) [Deflections](#) [Stress factors](#)
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SMART SOLUTIONS TO INCORPORATE DYNAMIC GREEN SPACES IN URBAN AREA

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ABSTRACT

Urbanization in India has made cities extremely congested. In order to house maximum population and supporting services in a fixed piece of land, the life of the cities has overall deteriorated and is still degrading day by day. Humans and nature are so coherently interrelated that any imbalance in either of the one disrupts the other. But, in order to reap short term benefits, humans have transformed the surroundings as per their needs and this in long term has worsened the quality of life of both, humans and nature. Out of the many human changes which have resulted in disruption of the environment, the present paper elaborates on one major change that is the lack of open and green spaces in and around habitats and its impact on the environment.

Natural green spaces are valuable assets of cities and they need to be preserved as well as nurtured. These green spaces secure not only social and economic benefits but also ecological benefits. Socially, these spaces enhance the quality of life as they act as recreational spaces, community interaction spots and relaxing spaces for the busy life of people and thus maintain their physical and mental health. Economically, their presence increases the values of the neighbouring properties as these are the only large scale breathing spaces which the today's metropolitan Indian cities offer. But most importantly, these green spaces are the major contributors to maintain the ecological balance of nature. They play a major role in micro-climate as they regulate temperature and rainfall. They conserve biodiversity and help in improving air, water and soil quality. Creating and maintaining green environment in urban areas will improve and increase the life span of urban people. Every small piece of green land within a concreted jungle will contribute for betterment of environment. The research paper elaborates on this one major change that is the lack of green spaces in and around habitats and its impact on the environment.

9 ABSTRACTS

In case of India, every state has their different set of policies and guidelines to conserve and increase green spaces within urban areas. In current scenario, while making Development Plan (DP), a certain portion of land is reserved for green space depending upon the regulations of that particular city. Though the government has formulated policies to regulate the greens within the cities, with changing times and priorities, implementation of it often changes or gets modified due to which the reserved area of greens within the city is either reduced or erased completely. Hence in most cases the application of proper urban planning and development regulations is not being effectuated. Both old and new developing areas often have left over or unplanned spaces which can be harnessed as green areas for the cities. For this exploratory research study, a metropolitan city of Gujarat namely Ahmedabad city is taken. The research attempts to identify the various ways to increase and manage green spaces within cities. It suggests different ways in which urban local bodies can increase biodiversity in urban areas. It critically introduces and analyses the concept of dynamic green spaces within the city and suggests various policy changes and regulations required to implement it. The paper strategizes on how to conserve and maintain green cover as well as identifies the different unused places that can be transformed to green areas. The dynamic greens can definitely be a solution for most of metropolitan cities in India which will revolutionize the course of development in a positive manner and help in achieving sustainable development.

Keywords: Urbanization, ecology, metropolis, micro-climate, environment, biodiversity, urban areas, open spaces, green spaces, dynamic green spaces, sustainable development.



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4. Challenging Privatization: Old and New Urban Commons - A Case of Faridabad by Ar. Nikhil Shah

CHALLENGING PRIVATIZATION: OLD AND NEW URBAN COMMONS
a case of Faridabad

Ar. Nikhil Shah

Assistant professor,
BVCOA,
Navi Mumbai.

Published work: *Minutiae: An Empathetic Narrative*, in 40thLandscape Foundation Journal



ABSTRACT

Human settlements observe shared resources as a pivotal part of habitation which may have connotations ranging from cultural, allegorical, community centric, symbolic and ritualistic allusions to basic necessities like a well, maidan for festivity, common gathering nodes to streets which can be discerned as inevitably structuring the urban form. Faridabad is exemplary of the way in which these commons have been shaped by ideologies, perceptions, policies over time and by people themselves, first hand. The notion of a resource has transformed drastically over time where the course of development observes the shifting perception of public spaces, streets and the commons that are being edged further demarcating boundaries, delineating territoriality and fragmenting the settlement, eventually disrupting the continuum or the course in which a place evolves, thereby threatening the public life. The shifting identities of commons on all scales happens to be an indicator of the degrees of privatization which can be observed from the essential leisure entities like parks the nature and vitality of streets as a place for human enterprise and the way new dwelling typology that has emerged in the past decade looks at the nature of recreational or common space. There are contradictory ways in which this emergence of the 'idyllic private life, form of habitat' moulds the aspirations of the communities which have already inhabited since centuries. The forces shaping the commons in the contemporary times need to be probed, if they are looked upon as a significant part of public life, communities and society at large or have just remained as residual shades of greens demarcated by an authoritarian vision.

The paper would look at discerning patterns in which urban commons have been shaped historically, ideologically, notionally and their transformation with regards to multiple forces; external and

emerging commons that aim to shape the public life and being key to the idea of identity, conferring a unique sense of place. This also alludes to examine if the existing commons are being accounted for in the process of development or are endangered as a result of operational forces of the contemporary development trends, that shape an ideal future condition for the age old commons, 'a rule by aesthetics' governing the nature of place making and nature of social interface on the basis of visual hegemonic imposition.

Where the idealized condition transforms and informs the emerging paradigms. There is a great need for conservation of green spaces in the rural environment and also a need to implement the changes in a correct and judicious manner so as to reduce the negative impact on green spaces. This paper explores the conservation of green space in the village Jakkarpalayam, Coimbatore, Tamil Nadu as green space is one of the parameter to determine the quality of human life and to achieve balance in the ecosystem.

Keywords: ecosystem, regulation, pollution, sustainable



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5. Exploring the existence of Abandoned Spaces in Kashmir by Ar. Kamakshi Vaidya

EXPLORING THE EXISTENCE OF ABANDONED SPACES IN KASHMIR

Prof. Kamakshi Vaidya

Professor at Bharati Vidyapeeth College of Architecture, Navi Mumbai

ABSTRACT

The abandoned structures of the Kashmir due to the turmoil in the valley recent in history, since 1989, remain centric to the memories of the people who lived there and now their stories are passed on to generations. These structures acquire a sculptural expression in terms of conveying a deeper sense to the ongoing cycles of time. The static nature of the abandoned spaces reflects the ethos of the bygone era fixed in a point in time. The structures evolve a new dimension in architectural dialect by conveying a certain timelessness awaiting its occupants.

Such a structure continues its existent role in conveying meaning to society and accentuating the culture of a place. This paper intends to take a preview of the cultural Diasporas through the lens of Displaced Kashmiri Pundit homes after the mass exodus in the valley of Kashmir.

Such Architecture in a frozen sense witnesses the

changes and flow in the communities. The deep symbolic stature attempts to convey the past present and future at the same time. It stands to respond to the culture and be a part of it. These structures are worthy of understanding as they share the plethora of political and economic thought within and outside the communities. The communities and the abandoned spaces share a bond and a mutual accord. The snow-clad valley in winter, the fall of the trees, the summer sunshine shine and the first flower of the spring season all participate in the plea of the structures abandoned and lost in the glory of the past. These monuments of disrupted peace make a silent appeal to the histories and geographies of a harmonious world.

The paper would aim at understanding the figurative meaning of such abandoned spaces, their existentialism and the role they play in cultural and community centricity of Kashmir.



Abandoned structures in Kashmir due to the turmoil in 1989
Source: firstpost.com

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6. Humanizing Habitat in Historic Cities by Ar. Pritam Dey

AN APPROACH TO COMMUNITY BASED TOURISM DEVELOPMENT

Ar. Pritam Dey

Professor,
Bharati Vidyapeeth College of Architecture,
Navi Mumbai



A narrative of a spatio-temporally evolved neighborhood in city of Kolkata and predicting its sustenance in the wake of urban transformation.

"The common-sense notion that 'There is a time and place for everything' gets carried into a set of prescriptions which replicate the social order by assigning social meanings to spaces and times." _David Harvey, excerpts from conditions of post modernity.

Indian societies are essentially formed by the physical/static entities and non-physical attributes, i.e the life dominating them and together they form a landscape of plurality, the container and the contained is in a continuous state of dialogue and negotiation intercepted by enactment of everyday processes of life forming a coalesce of a vibrant social scape.

My tryst with urban design since past one year let me relook at my neighborhood last summer. And it let me understand the processes that happen at everyday level forming the essence of these life sustaining gamut. A city which for visitors and residents alike elicits a plethora of conflicting, often confusing responses, with its antiquity sitting in stark contrast with contemporary urban interventions, technological advances against the city's rapidly disappearing cultural ethos; and yet ordinary streets. Kolkata neighborhoods are not easy to summarize, its history not easy to categorize. Its strategic location on a trading delta at the crossroads of civilizations ensures that it is a melting pot of cultures - Indian, British, French, Danish, Dutch, Armenian, Chinese, and more - where each flavor finds expression in the layered built environment of the city as colonial echoes, traditional mysticism and periods of synthesis leading to a contemporary syntax of tropical modernism. But what sets the city apart from other metropolises is the expansive, densely planned residential built fabric of the city, where middleclass houses outnumber aristocratic mansions and colonial establishments and complete with them to

contribute to the city's architectural character with their raised 'rock' plinths, phased courtyards, long east iron grided balconies, louvered windows and occasional elements of decorative idiosyncrasies creating edges between buildings and the street, a phenomenon that contributes in making neighborhoods more vibrant and conducive to sociable exchange. As this fabric gets further interlaced with the criteria of time, space, economy and globalization, it creates a style that can be labeled neither as renaissance nor neo-classical, neither Indo-saracenic nor art deco, but on that is quintessentially 'Calcuttan' in character- tradition yet eccentric, private but people oriented and hence at a time of mechanized uniformity, worthy of deeper investigation. David Harvey in his essay on " excerpts from the conditions of post modernity" discusses about the changing scenario of society when it transitioned from fordist to post modernist where he says, " The relatively stable aesthetic of Fordist modernism has given way to all the ferment, instability and fleeting qualities of a postmodernist aesthetic that celebrates difference ephemerality, spectacle, fashion and the commodification of cultural forms.

A typical north Kolkata neighborhood which witnessed so many phenomenon, evolution of society collectively, triumphs and falls is slowly tending to be diluted in the wake of the mighty urbanism. The "paras" or the immediate neighborhood are intense zones of interpersonal exchange and cosmos of negotiation between the elite and the subaltern. They are not manifests of a formal planning or architecture but rather evolved spatio temporally... Whose physical and social dimensions are rather amorphous than crystallized. Phenomenon and processes which pervades these environments may seem ephemeral at the first glimpse like oragnizing a puja on the streets, a cricket match, weddings happening on the public streets itself between buildings but at a macro level these are sempiternal in nature... with culture these are never ending processes and these very informal events lend a very transformative and flexible property



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7. An Approach to Community-based Tourism Development by Ar. Dipanvita Chakravarty

AN APPROACH TO COMMUNITY BASED TOURISM DEVELOPMENT

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ABSTRACT

The present paper discusses a case of community based heritage tourism in the pristine village of Garli, Himachal Pradesh. The place has potential to develop as a tourist destination owing to its rich architectural heritage and splendid landscape. Garli does not find its name among the well known tourist destinations of the Himachal region but the place has immense potential and has also been declared as the first heritage village of India. The present paper discusses a community based tourism development plan involving the local community at Garli so as to boost tourism and economic empowerment.

PROLOGUE

Community based tourism development not only empowers the local community but also provides the tourist with choices according to his exploratory needs, experiential journey, cultural ethos, economic choices and also the activities he or she wishes to undertake. Village tourism can have many perspectives depending upon one's cultural background, age group, whether travelling solo, with family or in groups and the experience that the one is looking for- either entertainment, relaxation or adventure.

The present case provides an excellent and pristine ambience for relaxation in a splendid natural surrounding with enthralling built spaces and exceedingly warm hospitality.

Garli is a small Himalayan Hamlet in the Kangra district of Himachal Pradesh. With a population of around five thousand the village showcases a curious amalgam of various architectural styles. Since the early inhabitants migrated from Rajasthan and settled down in Garli as wealthy traders who could hire European architects, there are many Portuguese styled Chateaus in Garli with brick jaalis, decoration at the eaves and Rajasthani chharis.

In the later half of the sixteenth century, traders from Rajasthan migrated to Garli owing to its pristine beauty, natural security rendered by the surrounding hills and central location with respect to Delhi, Kabul and Shimla, where the trade links extended to. Soon a wealthy township came into being with neatly laid roads, state of art infrastructure, chateaus designed by European architects whom the rich inhabitants could afford. Many new architectural styles were explored demonstrating curious amalgamation of Rajasthani chhatris with European column capitals, Islamic arches and Hindu corbels as seen in the Judges court Pragpur.



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