

The background of the entire page is a vibrant yellow. Overlaid on this are various black architectural elements: thin lines representing walls or structural members, thicker black lines for primary boundaries, and numerous white rectangular blocks of varying sizes. Some of these white blocks are arranged in horizontal rows, while others are more irregular. A prominent diagonal line runs from the top right towards the bottom left. The overall composition is abstract and geometric, evoking a sense of architectural planning or a conceptual site plan.

**Architectural
Essay Writing
Competition
Series
(2021-2023)**

**A Journey Through
Evolving Urban Landscapes and
Cognitive Spaces**

**Curated and Edited by
Pappal Suneja**

Architectural Essay Writing
Competition Series (2021-2023):

A Journey Through Evolving Urban Landscapes and Cognitive Spaces



Curated and Edited by
Pappal Suneja

The publication is financed by OA funds by Universitätsbibliothek,
Bauhaus-Universität Weimar

**Bauhaus-Universität
Weimar**



Visit our website: www.ajc-plus.com

© **Architectural Journalism & Criticism Organisation**, 2025

ISBN 978-81-955288-4-4

This work is also published as Open Access

<https://www.db-thueringen.de/content/start/bu-weimar.xml>
under CCBy Licence.

Design and Layout: KB Designs, London

Typesetting: Sun Möller-Park, Germany and Dinah Brocke, Ghana

Cover design: Sun Möller-Park, Germany

About the Editor

Pappal Suneja is an architect, design researcher, and journalist whose work bridges architectural history, theory, and practice with a strong transnational lens. He is currently pursuing his Ph.D. at Bauhaus-Universität Weimar, at the Chair for Theory and History of Modern Architecture in the Faculty of Architecture and Urbanism. His doctoral dissertation, *Modern Indian Architecture and the Emergence of a Post-Independence Discourse: The Case of Design Magazine (1957–1988)*, examines the role of the Indian journal *Design* in shaping postcolonial debates on modernism, offering new insights into the entanglements of media, identity, and architectural production in South Asia.

Suneja has cultivated a distinctive research profile at the intersection of architectural historiography, global modernisms, and cross-cultural knowledge exchanges. At Bauhaus-Universität Weimar, he led the Forschungswerkstatt project “Gropius Protégés: Stimulating Architectural Modernism in India” (2024) and “Bauhaus & Beyond: A Global Postcolonial Perspective” (2022–2023). In 2025, he joined the Forschungswerkstatt project *From Process to Aesthetic: Recontextualizing Modernism in South Asia through Cinema, Print, and Object-Oriented Ontology* with Sneha Singh, extending his Bauhaus-India research into the realms of film and media studies.

His academic mobility reflects his commitment to fostering intercultural dialogue. In 2024, he was invited to deliver seminars and talks at MIT, Harvard GSD, Boston University, and Wellesley College, where he presented on themes such as *Charles Fabri: An Art Critic, Building Bridges between India and Europe* and *Art & Identity of Postcolonial India: The Case of Design (1957–1988)*. He is also connected with the German Historical Institute London, the Canadian Centre for Architecture, and multiple Indian universities, engaging in collaborative research, teaching, and workshop initiatives.

Beyond academia, Suneja is the founder and curator of the Architectural Journalism & Criticism Organization (AJC+), which promotes writing, criticism, and interdisciplinary exchange in architecture through

awards, competitions, and residencies. He is also principal architect at Pappal Suneja & Associates, a freelance practice established in 2016 that focuses on cost-effective habitats, speculative design, and conceptual competition entries. His portfolio includes projects featured on WorldArchitecture.org and initiatives linking design thinking with pedagogy.

An active community builder at Bauhaus-Universität Weimar, he has organized International PhD Network events, Spring School and Summer School courses (on design thinking, design as Information etc.) His broader mission is to situate architectural knowledge within global conversations while staying attentive to local contexts and voices from South Asia.

Through his research, teaching, and practice, Pappal Suneja exemplifies a new generation of architectural scholars working to build bridges between modernism and postcolonial perspectives, between India and Europe, and between historical analysis and contemporary design culture.

Foreword

The art of essay writing in Architecture is an expressive sojourn, where words conceptualise thought process, thread narratives, weave through theories, rummage through debates and interpretations, embellish with anecdotes and recreate memory through visuals, an experience in space and time.

“A Journey Through Evolving Urban Landscapes and Cognitive Spaces” is an astute compilation of essays from the AJC+ Essay competition series organised by Architectural Journalism & Criticism (AJC) from 2021–2023 in 5 cycles, the ingenious conceptualisation of Architect Pappal Suneja, design researcher, architect, journalist and Ph.D. Scholar at Bauhaus-Universität. The curation of distinctive themes by Pappal Suneja, evokes a deep sense of connect in grounded theory, the moorings and transformative process, perspectives, positioning of praxis in Architecture, Nature and History.

As an architect, planner and urban designer, architectural writing has intrigued me over the last 25 years of professional and academic career in its potential to express, communicate, catalyse and coalesce limitless ideas, interpretations and deep research. Being actively involved in teaching, research architectural education, and consultancy, I had the privilege to pore over the literary work that brings to fore a palimpsest of architectural critique, profound dialogues between user and built fabric, sensorial essence, interludes with intangibles and unfiltered arguments in architectural education that completes an intellectual, philosophical and emotional read.

‘Reimagining Architecture as a Cognitive Space-From product to process’, the theme curated in the first series touches the chord on being trapped in homogeneity, questioning spaces for the people, a rendezvous on modernity and positioning process and purpose of engagement with spaces. The essays navigate through the lens on biophilia, everyday sociality, corporeal architecture and constructs of space invoking stimuli with rich referencing from retinal and warped perception of Pallasma, multiple intelligence of Howard Gardner to neurological entity of

Richard Neutra. From poignant narratives and inspired storytelling and endearing imagery to cross disciplinary approach, reading through the eyes of a child, echoes spatial architecture as stimuli to holistic growth and development. Architecture as the process of creating spaces that nurture, inspire, relate, connect and unfold human experience resonate in its unique connotations in each essay. The different genre in threading neurosciences in architecture, grounded theories of perception and the take on architectural education embraces a wider spectrum to the reading experience.

The second series on Architectural Precedents resonates the context, concept and constituent embodiment of moorings against the standardised templates.

Interesting illustrative examples, narrative essays, classic works decoded, further the debate on precedents as an innovative base to raising the query as the universal solution offers a plethora to the avid reader. Inspirational writing that celebrates architectural precedents through ideology, concept, style and its spatial manifestation exuding timeless rendition reflects the central theme. The journey through historical chronology, classical, revivalist to novel architecture has questioned precedents as prototypes or promise for iterations, has been beautifully explored in its myriad dimensions in these essays.

The trajectory in the curation of themes transcends to skilful nuances of travel and photography in Architecture in the 3rd series, adding depth to the act of seeing, capturing and reminiscence through the built. The architectural tapestry in its vivid images, renditions, styles and presentation has evolved as a multilingual experience, interpreted, manifested and experienced as a mutating canvas. Travel and photography capture the moment in its contextual expression and translates to becoming the architectural eye. The memoirs through sketches, journalling, chronicling, poetry and writing adds hue and colour to the larger architectural masterpiece that has been captured through these essays on an unexplored territory.

Where history meets expression, illustration and analytical reasoning forms the undercurrent in theme 4 on Orating History – Saga of your

Choice. Pen it down! With noteworthy essays that explored the colonial vestiges, timeless tales, trails and Christian architectural reminiscences, history as a record in time, as an interpreted reality or an eventful documented myth outlines an opportunity to ruminate, research and resurrect.

The constructs in the essays on water and the evolution of cities, the 5th series brings in the innate idea of the muse, beyond the hydrological profile of cities, emergent and resilient architecture, the celebrated traditional systems and the evolution and transformation of ecologies. The essays delve deeper into the realms of water as a resource, commodity and the harbinger of sustenance, through concepts, projects and case studies in architecture.

‘Beauty lies in the eyes of the curator’ and in this compilation, the orchestration of themes, setting the stage for the narratives to unfold, scripting the constructs and collaborating with an eminent panel of jurors deserves commendation. The jurors need special mention for judicious selection of essays that bring to the reader writings that transcend the boundaries of architecture, essays that have showcased the multiple layers, connotations and myriad versions of thought, ideas and conviction. Being the 11th book in the AJC + publication catalogue, I wish Pappal Suneja, AJC+ team, Digital Bibliothek Thuringia in collaboration with Bauhaus-Universität Weimar, great success in publishing this book that would encourage creative writing acknowledged and appreciated by the Design and Architecture fraternity.

Dr. Priya Sasidharan
MEASI Academy of Architecture,
Affiliated to Anna University, India
July 2025, Chennai

Preface

When we inaugurated the Architectural Journalism & Criticism (AJC+) Essay Writing Competition in 2021, the aim was simple yet earnest: to create a platform for emerging writers—students, professionals, and thinkers—to articulate ideas that too often remain unheard in studio spaces or overlooked in design practice. What unfolded across five cycles transcended expectations. It became a collective act of reflection, a richly textured tapestry of voices woven across geographies and generations, probing the interstices of architecture, cognition, memory, and urban life.

This book, *A Journey Through Evolving Urban Landscapes and Cognitive Spaces*, gathers a curated selection of essays from those cycles. Each piece is a testament to its author's insight and imagination, yet collectively they resonate with the core themes developed in our competitions: architecture as cognitive space, the power of precedents, travel through lens and pen, the rhetoric of history, and the symbiotic relationship between water and city. In assembling these texts, I hoped to cultivate a space where architectural writing could function as both rigorous inquiry and heartfelt expression.

Crucial to this journey were our esteemed jurors, whose discerning eyes and academic rigor elevated the process. I am particularly indebted to my fellow PhD candidates from Bauhaus-Universität Weimar, whose scholarly curiosity and deep engagement with the topics helped shape juror feedback into generative critique. Their academic grounding and fresh research perspectives grounded each cycle in university-level discourse while maintaining clarity for broader audiences. Beyond them, our panels included celebrated design educators, researchers, and practitioners—from heritage consultants to interdisciplinary theorists—whose varied viewpoints encouraged participants to move beyond familiar disciplinary boundaries.

The first cycle, “Reimagining Architecture as a Cognitive Space,” called for essays that rethought architecture not as static product but as dynamic process—interlaying perception, memory, and design. The

submissions revealed architecture experienced through sensation and subconscious memory rather than mere form. Juror feedback from my fellow PhD peers often emphasized theoretical rigor and clarity of argument, pushing writers to balance poetic insight with analytical structure.

In the second cycle, “Architectural Precedents,” contributors located history not just within grand edifices but in neighborhoods, everyday rituals, and vernacular traditions. Our jurors’ commentary encouraged writers to situate their references carefully and articulate the process of reinterpretation rather than reproduction.

By the third cycle, “Travel & Photography,” essays assumed almost travelogue-like qualities—recording observation as internal transformation. Jurors pointed to the importance of framing these narratives in design language: contextualizing experience with architectural theory and cultural interpretation.

The fourth series, “Orating History,” invited deeper reflection on how architecture carries contested legacies. Here again, students from Weimar brought nuanced feedback around historiography and postcolonial readings, prompting essays to navigate complexity without sacrificing clarity.

Finally, “Water and the Evolution of Cities” grounded our discourse in ecological urgency. Contributors navigated sustainability, symbolism, and infrastructural narratives. Jurors’ interdisciplinary lenses—combining environmental sensibility and architectural ethics—helped authors balance urgency with architectural poetics.

As I reflect, I remain profoundly grateful for the participants’ enthusiasm, the jurors’ generosity (especially those Peers from Bauhaus-Universität Weimar), and the mentorship of peers, critics, and institutions that supported the series. Architectural writing is not an ornament—it is essential. It names ideas, invites debate, and ensures our discipline retains its human voice amid increasing instrumental pressures.

This book is both archive and invitation. An archive of a remarkable generation of voices between 2021 and 2023—and an open call to future

readers and writers to keep questioning, reimagining, and narrating architecture with nuance and humanity. If even a few essays inspire you to pause, reflect, and truly see architecture anew, then this endeavour will have quietly fulfilled its purpose.

Pappal Suneja
August 2025, Weimar

Themes of the Competition Series

Series 1.0 : “Reimagining Architecture as a Cognitive Space” –

from Product to Process : We are shaped by what we experience.

This is an often-heard refrain. But what does it really mean? How does the experience of modern architecture shape us in the way we think? Or does it? How does brain architecture get shaped by architecture in general? What do children imbibe when they encounter modern spaces and artifacts? Do children get to encounter any process? What is the message architecture gives children? More important, what does it hide from children? How does the so-called child-friendliness impact children? Is there any process-oriented architecture? Life is a process, so is the child, but in order to awaken the inherent sense of process, the child needs to engage with the processes around. But the child, in the context of modernity, only encounters products and processes trapped within products – the same way intuition is trapped within reason, spontaneity is trapped within planning and how unknown is trapped within the known. How do senses work within the confines of the mind? Modernity in general has taken out what it takes to be nature-centric human beings. Anthropocentrism is the default being-ness of modern humans, as it has taken away some crucial aspects that we need to experience when our brains get formed. The child, in their first twelve years, gets rooted in its context and imbibes the characteristics and shapes its cognitive foundation. The window to see the world, the frame of reference to make sense of the world around. Its ethical foundation is set here and if it happens according to the demands of life is about sustaining life. This means sustainability is part of our biological wiring. Let us not forget the homogenization of human cultures, one of the reasoning being modern architecture. Could we reimagine architecture as a cognitive condition/ space/source that makes us nature-centric by default? What lessons can one learn from indigenous architecture where it means to achieve bio-centrism as default?

Series 2.0 : “Architectural Precedents” : Looking back at the past, formulating the present in anticipation of the future, one is in search of precedents. The question still is; is Precedent always an answer? It may, of course, be a complete answer that one can emulate. Whilst it can also

be an intangible form of the answer that is laying the path, but not building the destination.

While in search of a worthy precedent; History may be a route to take, but there are many others too. Precedent may precede one by time, order, class and or importance. So a Precedent may be as close as yesterday and as far as prehistoric. Search for a precedent should open doors, not wearing blinkers. One may look within their house for a precedent, but to open doors one should look around too; a precedent can surely be interdisciplinary. So will an Architectural Precedent always be Architecture?

There are always exemplary 'Precedents' in the society and History that one can look at; if everyone looks at the same precedent, won't we end up with similar answers? If not, then are Precedents subjective? An exploration into this realm of Architectural Precedents; is the call of the essay. Open doors and look for Precedents, open eyes identify them, open analysis to interpret them. Document and record a narrative of your experience while you engage and interact with these precedents.

Series 3.0 : “Travel & Photography” : To travel is to make a journey; but what would a journey be, if the traveler doesn't grow through it? Wouldn't that equal just moving from one place to the other, without really gathering a thing? It certainly would. And when we are talking about traveling to explore architecture, it becomes imperative that designers must learn that traveling becomes analogous to growing in their world. In the following call, we ask entrants to discuss more about why it is necessary to travel if you are an architectural enthusiast and how to make your travel count in the simplest of ways.

We know that every architectural masterpiece has an innate essence and an aura, that a person can feel while standing among its chambers or while absorbing the magnificence in person. For aspiring designers, it is necessary that they understand what it is to observe the intricacies of a work, which might easily get overlooked if we try to explore the same through a video or some photographs. Traveling, for them, is much more than just an experience; it is more like understanding the transition of spaces: how one space segues into the other. In the jargon, traveling

corresponds to understanding the outlook of the building, be it any façade treatment that has been done, because of the orientation that has been taken for the particular building.

Series 4.0 : “Orating History” : We believe that history is a collection of factual data. Does one wonder if it's open to interpretation? When a historian writes history, isn't it his/her take on the events of history? As learners of Architectural history, we should ponder over the recorded events and their impacts on architecture or vice versa. It is possible that one may realize and or conclude scenarios that have not been discussed as yet. History is not stagnant if one is constantly questioning and re-looking it. This essay competition expects you to dive into Architectural History and bring back fruits of wisdom that may add to the discussion in the discipline. One could opine based on various versions of the history of a particular time period/place. One could also cross compare histories of various geographic locations. To further the relevance of history, one can discuss past events and architecture in the context of today. These are just a few ways one can delve into history and come out with nourishing thoughts. We invite the entrants to contemplate, comment and concretize; the questions, thoughts, and opinions that cross your mind while you dig into the caverns of history.

Series 5.0 : “Water and the Evolution of Cities” : Water, the lifeblood of civilizations, has been an integral part of communities throughout history, shaping the very fabric of urban life. In this contest, we want you to explore two fascinating macro ideas that revolve around water's role in urban development. Picture this — ‘Cities’ thriving with the abundance of water, but also facing the challenges of water scarcity and climate change. How do we ensure water conservation and sustainability amidst rapid urban growth? Can architectural ingenuity and urban planning play a role in preserving this precious resource while creating vibrant, eco-friendly living spaces? Delve into the historical tapestry of cities and their water-related heritage. From ancient civilizations to modern-day metropolises, water bodies like rivers, lakes, and reservoirs have left their mark on the development of urban centers. It is time to discover how cities are bridging the gap between preserving their water-related heritage and embracing progress.

That's not all! Water has been more than just a life-giving resource; it's been a catalyst for trade, commerce, and cultural exchange among cities. Rivers, canals, and ports have connected communities, fostering economic prosperity and enriching the tapestry of urban life. Let your imagination flow as a meandering river as you explore the transformative power of water in cities. Dive deep into research, share insightful analysis, and propose creative solutions. Show us how water has shaped the built environment and contributed to the dynamic growth and sustainability of cities.

Jurors List

Jinan KB, Design Educator & Researcher, India

Masood Khan, Architect & Heritage Consultant,
United States of America

Pappal Suneja, Ph.D. Scholar, Bauhaus-Universität Weimar, Germany

Miguel Castaño, Product Designer & Researcher, Colombia & Germany

J. Subramanian, Architect & Design Educator, Middle East & India

Fatema Kabir, Architect & Researcher, Pune, India

Lola Kleindouwel, Architectural Designer, the Netherlands

Kanika Bansal, Architect & Researcher, Chandigarh, India.

Sarah Emminger, Poetry Slammer and Journalist, Vienna, Austria.

Reem Saad Sardina, Architect & Researcher, Egypt & Germany

Puneet Dua, Architect, Urban Planner & Founder, Studio Saarth, Jaipur

Gurmeet Kaur, Designer & Founder, Madhy-antar, India.

Ian Banerjee, Lecturer and Researcher at TU Vienna, Germany

Ritu Mohanty-Padora, Architect, Urban Designer & Planner,
AICP, LEED AP, Mumbai, India

Twinkle Kataria, Architect & Artist, Mumbai, India

Arti Daga, Architect & Academician, IGBC AP,
GRIHA Evaluator & GEM CP, Mumbai, India

Minaz Ansari, Architect, Academician & Urban Researcher,
Mumbai, India

Contents

Guest Articles

- 24 **Challenging Migrations and Not Directly Appropriated Legacies of Second Bauhaus Director Hannes Meyer**
By Aliaksandr Shuba, Maria Gvozdeva, Bauhaus-Universität Weimar
- 38 **Robert Fellowes Chisholm: Architect of Indo-Saracenic Madras**
By Jinisha Jain, Jamia Millia Islamia, New Delhi

Essay Writing Cycles (2021-2023)

1.0 Reimagining Architecture as a Cognitive Space

- 44 **1.1 Rediscovering Architecture's Natural Rhythm**
By Akancsha Sood
- 49 **1.2 Perceptible World Behind Design**
By Zeynep Çolak
- 54 **1.3 Cognitive Processes & Architecture**
By Wijdane Esseffah
- 57 **1.4 Shaping Human Experience**
By Srabasti Lahiri
- 60 **1.5 An Architecture of Process**
By Nishanti Srinivasan
- 63 **1.6 The Blue Tarp: A narrative of intrinsic curiosity of an impressionable mind**
By Radhika Jhamaria
- 67 **1.7 Process Perception and Papillon**
By Parvathi
- 70 **1.8 Reshaping the Built: How Does it affect us Psychologically**
By Pranjali Karnik

- 73 **1.9 Architecture beyond Form and Function**
By *Fatema Elzahraa Rabie*
- 77 **1.10 From Intention to Communication**
By *Guru Prasath R G*
- 79 **1.11 Could we re-imagine architecture as a cognitive condition/
space/source that makes us nature-centric by default?**
By *Subrata Sarkar*
- 82 **1.12 Experience: Process, Trajectory, and Expression – Traversing
through memories in/of spaces and the message architecture gives
children**
By *Haripriya Panakkal*
- 85 **1.13 Architecture as a Biological Continuum**
By *Devaki Kesh*
- 87 **1.14 The experience of Modern Architecture shaping our thoughts**
By *Parul Shelar*

2.0 Architectural Precedents

- 90 **2.1 Looking Beyond Architecture**
By *Aishwarya Mahadevan*
- 93 **2.2 Memories of my Village**
By *Khurram Ashraf and Zeba Nisar*
- 96 **2.3 To Evolve, Is The Only Precedence**
By *Asmita Patwardhan*
- 100 **2.4 Sri Harmandir Sahib – An Architectural Precedent for
Gurudwaras Across the World**
By *Sanbeer Singh Ranhotra*
- 104 **2.5 Precedence in Architecture**
By *Sasha Rana*
- 107 **2.6 Precedent (and Palimpsest)**
By *Namrata Dewanjee*
- 111 **2.7 ‘Architectural Precedents’ – are they the only answers to
architectural design today?**
By *Ileshika Singh*

- 114 **2.8 Unfolding Patterns through Space and Time**
By Saakshar Makhija
- 117 **2.9 Precedents – A Base to Innovate**
By Rhythm Dua
- 120 **2.10 Inspiration Through the Eyes of the Beholder**
By Alfiya Shaheen
- 124 **2.11 The who, what, why, when and how of Architectural Precedents**
By Siong Vui Choong

3.0 Travel & Photography

- 130 **3.1 Role of Traveling in Architectural Education and Learning Process**
By Mohammad Arif Kamal
- 134 **3.2 Can't unravel 'til you feel the gravel**
By B R Mohan Shiva
- 137 **3.3 A Travel that teaches!**
By Prithvi Mahadevan
- 140 **3.4 Travelling with Vitruvius**
By Georgina Chappel
- 143 **3.5 The Passion**
By Yashika Murali
- 145 **3.6 Travel: The Gateway for a Global Architect**
By Saisha Monga
- 148 **3.7 Photographs are something we take, and something we leave behind on our travels**
By Alannah Ferry
- 151 **3.8 A Street Walk to Agatsya Lake**
By Poonam Solanki
- 154 **3.9 Majuli – The mighty Brahmaputra & the symbiotic relationship of human with nature**
By Shreeya R Kanade

- 157 **3.10 Architectural Expeditions & Expressions**
By Mahima Jagadeesh
- 160 **3.11 Growing through a Journey**
By Louis Chan
- 163 **3.12 My travel experience of Bishnupur Temples**
By Aradhana Jindal

4.0 Orating History

- 166 **4.1 Architecture and Christianity – A Symbiosis**
By Pranaya Reddy
- 168 **4.2 Architecture of Nagpur under Bhoslas**
By Reewena John
- 172 **4.3 Footprints on the Sands of Time**
By Priya Sasidharan
- 175 **4.4 Tales and Times**
By Abhigna B
- 177 **4.5 Narrating stories through architecture**
By Khushi Tandon

5.0 Water and Evolution of the Cities

- 180 **5.1 Socio-cultural importance of Water Sensitive Urban Design (WSUD) in the context of Indian urban landscape**
By Urvashi Purohit
- 183 **5.2 Water and the Making of Cities**
By Rudy Kundu
- 185 **5.3 Water and the City: A Force of Life and Challenge**
By Shailesh Kunwar
- 188 **5.4 Water and Survival in Ancient and Modern Times**
By Mysha Kejriwal
- 192 **5.5 From Civilizations to SDGs: Water and Urban Futures**
By Ankita Shukla

- 195 **5.6 Water: The Architectural Muse to Urban Cities**
By Sofia Zara
- 198 **5.7 Water and the Evolution of the Cities: A Comprehensive Perspective**
By Vidya Kamath
- 201 **5.8 The Urban Landscape Shaped by Water: Udaipur**
By Nandini Ganesh
- 204 **5.9 The Common Platform: Water and Urban Evolution**
By Aniruddha Lokhande
- 206 **5.10 Cities and Water: From Ancient Civilizations to Floating Futures**
By Shifa Hussain
- 209 **5.11 Coastal Code Clash: Mumbai's fast paced battle for identity**
By Mihir Kabani
- 211 **Epilogue**
By Sneha Singh, Faculty of Media, Bauhaus-Universität Weimar

Guest Articles

Challenging Migrations and Not Directly Appropriated Legacies of Second Bauhaus Director Hannes Meyer¹

By Aliaksandr Shuba, Maria Gvozdeva, Bauhaus-Universität Weimar

Introduction

Hans Emil Meyer (1889–1954), known as Hannes Meyer, was a Swiss-German Modernist architect and urbanist, who is often associated with the interwar Bauhaus in Dessau, in which the functionalistic and social aspects in arts and architecture were promoted and emphasised, where he held a directorship position between 1928 and 1930 after Walter Gropius. After Switzerland and Germany, he moved due to the professional and political reasons numerous times to live and practice abroad. He firstly emigrated after his dismissal from the Bauhaus, which was largely driven by his pro-Marxist and pro-Communist views, to the USSR. With a few colleagues and students, he arrived there to contribute for the Soviet plans on modernising and building a socialist society under the leadership of the Communist Party that started an intensive industrialisation and planned a militarisation of the economy. After this period, he spent time in Switzerland and Mexico, before returning to his home country in the end of his life. H. Meyer's experiences in the USSR and Mexico sought hardly be described as peaceful and impactful during his periods of immigration. Even though the result of his works in the USSR and Mexico appears productive, these are barely described as fully successful due to the local contexts and his challenges in the USSR and Mexico during his time there.

H. Meyer's experience of the two exiles and displacements impacted his professional evolution, leading to a mediation between his early European Modernist background and principles and the experienced realities of Soviet and national capitalist professional settings in the USSR and

1 This text is the result of a continuing reflection on the multifaceted dimensions of Hannes Meyer's migrations, and the postwar appropriations of his professional legacies. The initial ideas and research findings were partly presented by the authors at the international conference "Architects in Exile: Stories of New Spatial Experiences," held at the Politecnico di Milano (May 29-30, 2023).

Mexico. These hypothetically impacted on his dismissions and not direct appropriations of his professional profile and legacies in postwar Europe.

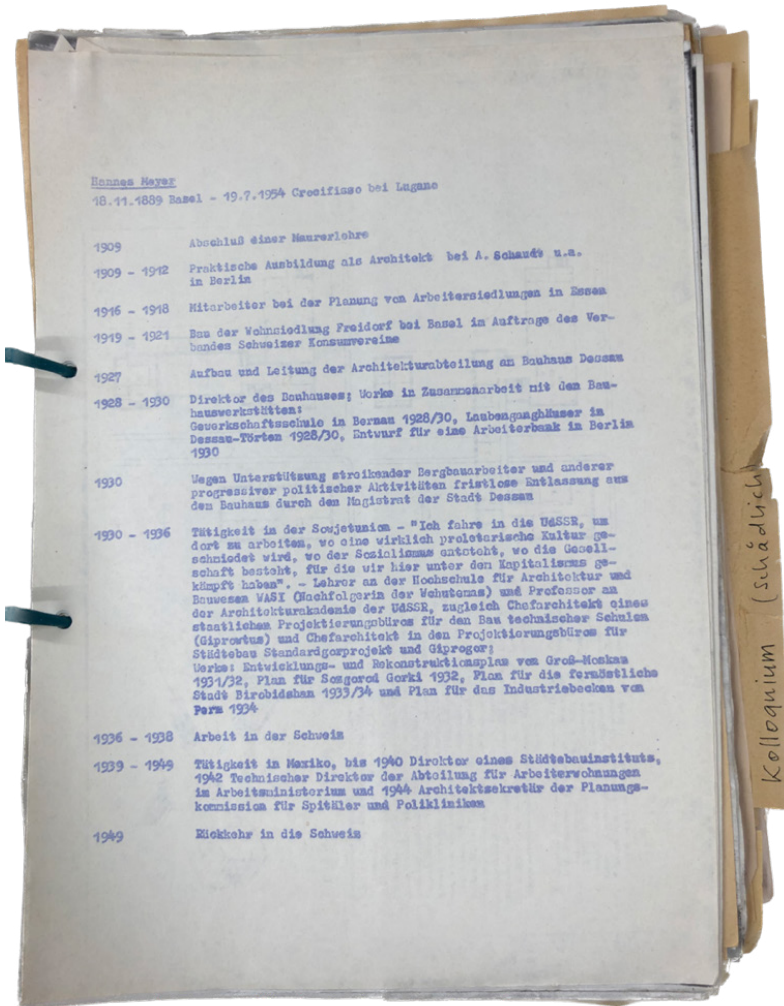
It remains compelling to reflect on both the institutional and personal dimensions of H. Meyer's migratory history, and to trace how his legacies were contested and reevaluated in different geopolitical contexts.

One of the key research questions of the following text is how was H. Meyer's legacies perceived and appropriated in postwar divided Germany, and what role did the cultural activities play in reshaping his image?

The outcomes of his two periods of living abroad did not make him the most iconic Modernist personality from the Bauhaus unlike W. Gropius and Ludwig Mies van der Rohe. The perceptions of the professional profile of H. Meyer are usually more controversial than theirs. This is due to H. Meyer's political views and beliefs, as well as the personal life and shifts in his professional trajectories deeply incorporated into the turbulences and ideological controversies of the first half of the 20th century. The researchers interested in H. Meyer's professional profile reflected on the backdrop of early Modernist turbulent ideological battles of its historical moment. These ranged from his early successes and dismissal from the Bauhaus directorship, to his subsequent move to the Soviet Union – where he witnessed a crucial retrospective shift in the fields of Soviet arts, architecture, and urban planning, and his later challenges and struggles on another continent before returning to his home country. His professional trajectories deeply intertwined by his personal stances and shifting fortunes of modernist thoughts and discourses².

2 Ibid.

Working abroad in the USSR and Mexico



The first page of H. Meyer's CV. Bauhaus-Universität Weimar, Universitätsarchiv Weimar.

H. Meyer's personal and professional journeys that forced him to immigrate numerous times included personal challenges that resulted into certain professional and artistic searches, and unplanned outcomes. One of the passionate socialists and Marxists who reflected on recent and emerging socialist architecture was H. Meyer. Drawing an allure with Soviet socialist principles, he sought to contribute to the USSR's building of socialism and its rapid industrialisation. By examining his texts, it is

possible to trace the extent to which his architectural philosophy adapted to the shifting socio-political landscapes he encountered³.

In the end, he was unable to settle in the USSR. After a brief return to his home country, Switzerland, and the travel for the Congress in Mexico, he continued searching for a new relevant place to contribute with his professional practices, when the subsequent pressure for the left-wing early Modernist artists and architects emerged in Europe before the start of the Second World War. In 1939, H. Meyer and his family relocated to Mexico⁴. At the beginning of the time there, he became a head of the Institute of Urban Planning there. "The Institute only opened in 1940, then closed a year later, facing pronounced pressure from within the Polytechnic Institute and beyond⁵." Shortly after beginning his work at the Institute, he noted that a right-wing campaign was waged against him⁶. Consequently, he experienced financial and professional insecurities, which required him to seek employment to finance his and his family's life. After losing his second directorship position, he was forced to move from one temporary employment to another⁷. Despite the complications, he remained engaged in numerous public-sector projects, which had been within his long-standing professional preferences and interests⁸. However, his engagements and contributions often placed him in the second row, if they were acknowledged at all⁹. With the passion for architecture and urbanism, he came with hope and purpose to remain active with his own architectural and urbanistic expertise, professional views, and theories in Mexico, where he worked alongside prominent Mexican

3 Hannes Meyer, Lena Meyer-Bergner, and Karl-Joachim Winkler, *Bauen und Gesellschaft: Schriften, Briefe, Projekte* (Dresden: Verlag der Kunst, 1980), 121–128.

4 Georg Leidenberger, *Architect Hannes Meyer and Radical Modernism* (Peter Lang GmbH, Internationaler Verlag Der Wissenschaften, 2023), 21.

5 Rachel Franklin, "Planning for 'The New World': Hannes Meyer in the Soviet Union and Mexico," in *Taking a Stand? Debating the Bauhaus and Modernism*, ed. Anja Bärnreuther (Heidelberg: arthistoricum.net, 2021), 163.

6 Winfried Kleinerüschkamp, "Exilarchitektur: Hannes Meyer in Mexico," in *Hannes Meyer: 1889–1954. Architekt, Urbanist, Lehrer*, ed. Magdalena Droste and Winfried Kleinerüschkamp (Berlin: Bauhaus-Archiv and Deutsches Architekturmuseum, Wilhelm Ernst & Sohn, 1989), 321.

7 Ibid., 179–187.

8 Ibid., 201.

9 Kleinerüschkamp, "Exilarchitektur," in Droste and Kleinerüschkamp, *Hannes Meyer: 1889–1954. Architekt, Urbanist, Lehrer*, 325.

architects. H. Meyer's architectural contributions in Mexico exemplify his personal challenges and complexities in a foreign land. Despite active intellectual exchange and professional involvements, his contributions often remained under-recognised [amid the prominence] of established local figures¹⁰.

One of his most distinguished artistic works was the Taller de Gráfica Popular (TGP). He and his wife, Lena Berger-Meyer, became involved in the TGP, a workshop that brought together Mexican and foreign artists to promote political and social art. As part of the workshop's 12-year commemoration, they worked on the layout and typography of its publication and contributed with graphical elements. To whom he wrote: "The graphic representation considers the many illiterate people in the country and the Indian minorities, most of whom do not speak Spanish. For this reason, a deliberately primitive, folkloristic expression of the illustrations was aimed for¹¹" in the aforementioned Mexican catalogue.

In Mexico, his proposals and engagements, though not always realised and often left unbuilt or uncredited, provide valuable insights into his personal challenges as well as modernist transnational architectural and artistic exchange, ideological contestations, and the evolving nature of early modern discourses in Mexico and beyond. His life and work in Mexico was not a direct departure from his past experiences. It blended his previous Functionalist rigor with the Soviet experiences and Regionalist contexts that sensitivity mediated his artistic design with his and local needs and values. Despite the emergences of certain extend of adaptivity and development of design principles he often remained in the second row¹².

10 Leidenberger, *Architect Hannes Meyer and Radical Modernism*, 202–211.

11 Karl-Joachim Winkler, *Der Architekt Hannes Meyer: Anschauungen und Werk* (Berlin: VEB Verlag für Bauwesen, 1989), 213–214.

12 Kleinerüschkamp, "Exilarchitektur," in Droste and Kleinerüschkamp, *Hannes Meyer: 1889–1954. Architekt, Urbanist, Lehrer*, 325.

Believing in Socialism and the Soviets

A critical examination of his correspondence reveals the prevailing external professional and ideological pressures and tensions he faced. These exemplify the broader systemic challenges and escalating constraints of the time faced amid by left-leaning architects in the volatile shifting political and economic landscapes of Europe¹³. His engagements with architectural, urban planning, and folk art in the USSR and Mexico sought to be understood as an attempt to reconcile his personal as well as ideological commitments within new professional and cultural realities. The Mexican cultural and natural context left a positive impact on their work, while he remembered his Modernistic involvements. In the letter to his friends and Swiss artists – Ernst and Sasha Morgenthaller, on 1 May 1949, he also mentioned the early stage of his professional career before the USSR. He referred to his article *The New World* as having a sufficient analysis for its time of revealing and its stage of life, and he simultaneously stated that assessing the abstract forms was more an experiment rather than their propaganda enterprise¹⁴.

Despite experienced contradictions and concerns within Soviet society, his commitment towards communism and socialism remained in Mexico. It was after a familiarity with the rationalist and constructivist experiments and witnessing the political switch in arts and architecture of the USSR. His rhetoric maintained a critical stance towards Capitalist practices. In addition to the professional artistic, architectural and urbanistic involvements, his reflections on the Soviet architecture and preserved materials from the USSR aligned with his continuous advocacy for their relevance, underscoring both their theoretical and practical significance. Through selected writings and public engagements, he actively promoted and interpreted Soviet architectural practices in Mexico. His allegiance(s), likely rooted in his prior ideological and professional affiliations, played a crucial role in shaping his works and writings¹⁵.

13 Meyer, Meyer-Bergner, and Winkler, *Bauen und Gesellschaft: Schriften, Briefe, Projekte*.

14 Deutsches Architekturmuseum Frankfurt am Main, Nachlass H. Meyer, Letter to E. Morgenthaller (10 April 1948); Letter to E. and S. Morgenthaller (1 May 1949), Sign. 164-102-011.

15 Bauhaus-Universität Weimar, AdM, Sign.: BU/03/20.34.

In his Mexican interpretation of the Soviet recent past, his text underscored Soviet accomplishments with a focus on architectural, industrial, and academic successes. The text was one of H. Meyer's foreign interpretations of the Soviet cause, which was almost pure praise of the Soviet regime with its architectural and urbanistic works. His texts give the impression that he was proud to be one of the foreigners who had an opportunity to live through these experiences, when the massive Soviet reconstruction and industrialisation emerged. Moreover, in his opening speech at the Mexican exhibition of Soviet architecture, his interpretation had new dimensions. His interpretation of Soviet past with its political, architectural, and urban planning experiments narrates itself as a filtered perspective(s). His familiarity with Stalinist-era professional discourses shaped his formulated written vision as an aftermath of his Communist and Soviet filters.

Limited Employment Opportunities and Questioned Contested Legacies in the East and West

H. Meyer's professional journey, from the architectural projects and directorship at the Bauhaus to the Soviet and Mexican exiles with diverse socio-political contexts, brought him back to his homeland in 1949. Securing employment in his country of origin remained a challenging endeavour for H. Meyer. The following excerpt encapsulates his reflections upon returning to Switzerland from Mexico, "You know very well that in Switzerland, in my case, one cannot participate in urban construction if one wants to critically represent the social content in it, and not simply engage in a game of forms¹⁶." His attempts to secure employment in the East, particularly in the German Democratic Republic (GDR), also proved unsuccessful.

The exacerbated political climate during the so-called "Cold War", coupled with the persisting unfavourable perception of Bauhaus and Modernism as bourgeois art after the second wave of fights with "Formalism", impeded his prospects in the GDR. At the beginning, in the West, he was accused of the commitments to Communism, while in the East, he was too radical left that did not fit. H. Meyer's legacies and

16 Winkler, *Der Architekt Hannes Meyer*, 220.

practices were not directly appropriated in both East and West Germany. Unlike his interwar Bauhaus contemporaries and notably his students, H. Meyer's legacies took several decades to gain recognitions in both Eastern and Western Europe¹⁷. The perceptions of the professional profile of H. Meyer were and remain usually more controversial than theirs because of the political post-Second World War turbulences and ideological controversies of the second half of the 20th century.

After the Bauhaus past moved to the level of almost a taboo and was not welcomed in the GDR, the professional practices of H. Meyer also faced the complication due to the ideologisation of their interpretation during the second wave of Soviet fights with the "Formalism", when his Functionalist architecture was almost demonised in the text by the high level GDR architect – Hermann Henselmann¹⁸.

The initial suppression with the brutal criticism during the Stalinist era in the GDR reads as triggered not direct, following selective, reappropriation in the beginning in the 1960s and onwards during the 1970s within the professional circles of the GDR. In the early 1960s, the Bauhaus with H. Meyer started to be reconsidered in the GDR. A positive shift in his and Bauhaus' perception was evident and marked by reflections on H. Meyer and his works from the early 1960s, shortly after the Building Academy meeting on the Bauhaus from 21 December 1963, following the reconstruction of the Bauhaus building in Dessau and the emergence of the first GDR Bauhaus Colloquium in 1976¹⁹.

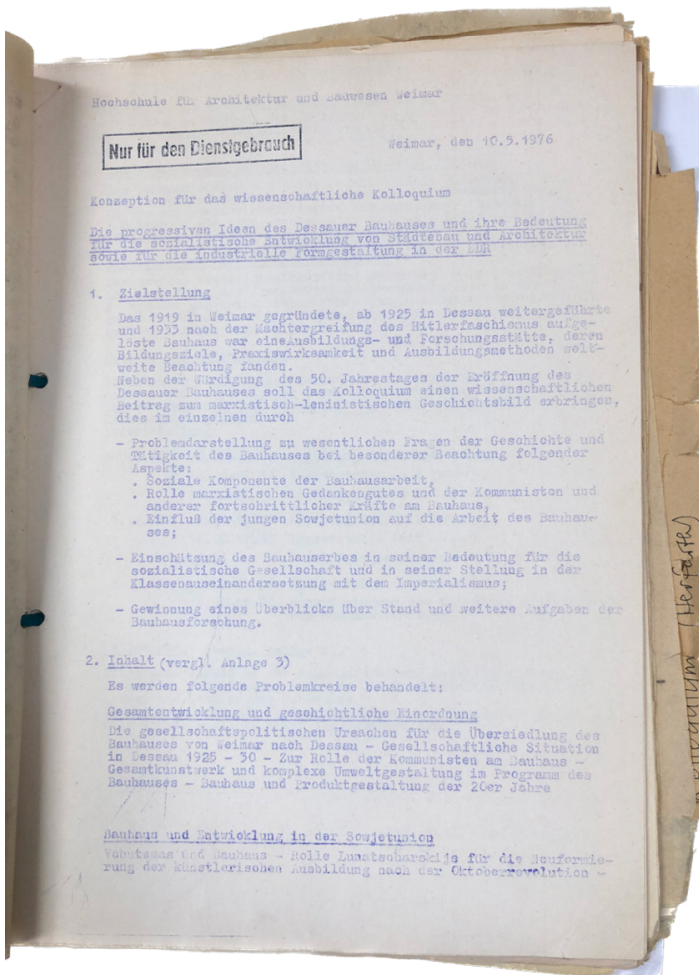
The Bauhaus Colloquia, held between 1976 and 1989 in the GDR, are interpretable as a consolidated institutional framework of the HAB that shaped the late state socialist engagements with Bauhaus legacies and offered a possibility of the positively appropriate and rediscover the professional journey and contribution of H. Meyer, while the rhetorical

17 Meyer, H. (2018), *Hannes Meyer und das Bauhaus: im Streit der Deutungen*. Spector Books.

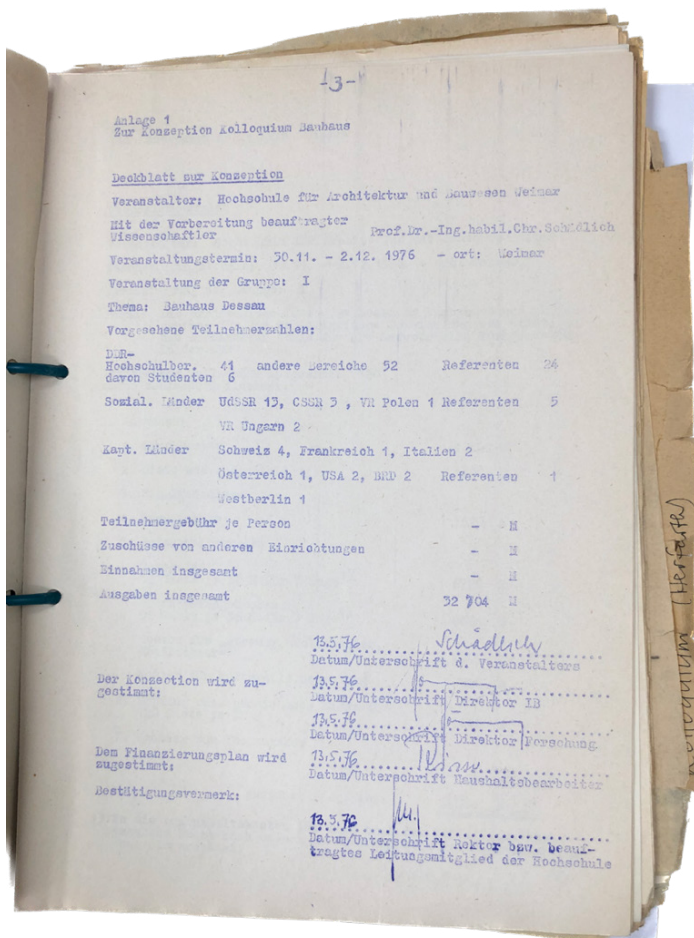
18 Norbert Korrek, "Bauen und Gesellschaft: Schriften in der DDR," p. 551, in *Hannes Meyer und das Bauhaus. Im Streit der Deutungen*, ed. Thomas Flierl and Philipp Oswalt (Leipzig: Spector Books, 2019), 549–566.

19 Norbert Korrek and Christiane Wolf, *Das internationale Bauhaus-Kolloquium in Weimar 1976 bis 2016: Ein Beitrag zur Bauhaus-Rezeption: Dokumentation, Ausstellungsteil, Prolog* (Weimar: Bauhaus-Universität Weimar, 2016).

attempts to ideologically secure and ensure the counter criticism related to the problematic past. The Bauhaus and its leading figures were interpreted as carriers of partly revolutionary or reformist positions with emphases for the phenomena's social relevance²⁰.



The first page of a concept for the planned Bauhaus colloquium in Weimar from 1976, Bauhaus-Universität Weimar, Universitätsarchiv Weimar.



The third last page of the Bauhaus colloquium concept, signed by C. Schädlich and others on 13.5.1976, Bauhaus-Universität Weimar, Universitätsarchiv Weimar.

Bauhaus and H. Meyer in Western Germany

In post-Second World War West and East Germanies, the reassessment and re-evaluations of H. Meyer's professional profile, standing and contributions commenced in both West and East posthumously. In western architectural circles in the first half of the 1960s, W. Gropius, who had been involved in the dismissal of H. Meyer, had undisputed authority on all matters related to Bauhaus. As "Among the most bitter conflicts was between H. Meyer and W. Gropius, who in light of the school's

growing politicization felt betrayed by the one who succeeded him at its helm in 1928²¹." W. Gropius' attitude combined with a general negative attitude towards H. Meyer as a Communist, influenced perceptions of his contribution to Bauhaus. W. Gropius' attitude combined with a general negative attitude towards H. Meyer as a communist, influenced perceptions of his contribution to Bauhaus. This was reflected in the first Bauhaus monograph, which appeared mostly due to W. Gropius' efforts. After the Second World War, W. Gropius and Hans M. Wingler politically sanitised understanding of the Bauhaus, when the scapegoat role for the perceptions of the interwar school as a 'communist Bauhaus' or 'socialist one' was given to H. Meyer²².

At the same time, the Ulm School of Design, which positioned itself as the heir to Bauhaus, was being asked to develop the school in the "Meyerian" direction. In the form of a controversy between Tomás Maldonado and W. Gropius the contradiction poured into the pages of the university journal in Ulm. T. Maldonado, at that time an associate professor in Ulm, published in the journal a critique of H. Meyer's period presentation in the first Bauhaus monograph. After that, an argument about H. Meyer ensued between T. Maldonado and W. Gropius. In 1965, T. Maldonado as a rector in Ulm supported the publication of the first postwar Western monograph on the professional profile and projects of H. Meyer. Its monograph appeared in a form of bilingual (German and English) edition published in West Germany that initiated H. Meyer's reassessment there. As a conclusion the publisher realised the monograph with a critical letter on H. Meyer by W. Gropius that triggered H. Meyer's reassessment in West Germany. Despite the publisher not daring to realise the monograph without giving a voice to W. Gropius, H. Meyer's professional development emerged from the shadows in the West. The contested perception of the cultural and professional profile of H. Meyer often remained in Western Germany until the collapse of Communist state socialist regime in Eastern

21 Joaquín Medina Warmburg, "Re-reading Bauhaus Histories: Appropriations and Global Perspectives," *Architectural Theory Review* 35, no. 3 (September 2022): 304.

22 Martin Bober, *Von der Idee zum Mythos. Die Rezeption des Bauhaus in beiden Teilen Deutschlands in Zeiten des Neuanfangs (1945 und 1989)* (München: GRIN Verlag, 2010), 160.

Germany. As Martin Bober, contemporary researcher, formulated: “The explosive nature of Meyer’s persona, which was based on his alleged communist party affiliation as director, dominated West German research for a long time²³.” Shortly after the fall of the Berlin Wall, nine days after it, the 100th anniversary celebrations of the birth of H. Meyer emerged.



The illustration prepared for the research events dedicated to life and work of H. Meyer in Zürich from 1990, Bauhaus-Universität Weimar, Universitätsarchiv Weimar.

23 Bober, *Von der Idee zum Mythos*, 160.

Hannes Meyer Urbanist Architekt Lehrer

Museum für Gestaltung Zürich

21.3. – 20.5.1990

Anlass: 100. Geburtstag von Hannes Meyer

Eröffnung: Sonntag 12. April 19:30 Uhr, Freitag 14. April 19:30 Uhr, Samstag 15. April 19:30 Uhr, Sonntag 16. April 19:30 Uhr, Donnerstag 18. April 19:30 Uhr, Freitag 19. April 19:30 Uhr, Samstag 20. April 19:30 Uhr, Sonntag 21. April 19:30 Uhr

Anlass: 100. Geburtstag von Hannes Meyer

Eröffnung: Sonntag 12. April 19:30 Uhr, Freitag 14. April 19:30 Uhr, Samstag 15. April 19:30 Uhr, Sonntag 16. April 19:30 Uhr, Donnerstag 18. April 19:30 Uhr, Freitag 19. April 19:30 Uhr, Samstag 20. April 19:30 Uhr, Sonntag 21. April 19:30 Uhr

Program

3.-6. Mai 1990

Hannes-Meyer-Tage

veranstaltet von Institut für Geschichte und Theorie der Architektur (IuT) ETHZ
in Zusammenarbeit mit der Hörsen Schule für Gestaltung Zürich

Donnerstag, 3. Mai 1990

17:00 Vortrag von Werner Kienast: **Abend im Kienast-Architekturbüro?**
Hannes Meyer Werk
Einleitung: Werner Kienast, Vorstand des Instituts gta

Samstag, 5. Mai 1990

10:00 Führung von Klaus Jürgen Winkler durch die Ausstellung
11:30 Führung von Magdalena Drese durch die Ausstellung
13:00 Führung von Martin Krenn durch die Ausstellung
14:00 Regelmässige Handlung: **Hannes Meyer und die Schweiz**
mit Hans R. Magliola (Zürich), Christoph F. Schmid, Philipp Salner, Klaus Jürgen Winkler
Gespätholzer: Claude Schmitt
16:00 Führung von Werner Kienast: **Hannes Meyer in der USSR**
mit Martin Krenn, Barbara Krenn, Philipp Salner, Klaus Jürgen Winkler
Gespätholzer: André Carls
20:00 Regelmässige Handlung: **Hannes Meyer in Mexiko**
mit Hans R. Magliola (Zürich), Christoph F. Schmid, Philipp Salner, Klaus Jürgen Winkler
Gespätholzer: Werner Kienast

Sonntag, 6. Mai 1990

10:00 Besichtigung der Siedlung Friedhof unter Führung von Peter Degen und Jean-Pierre Mathis,
Präsident der Siedlungsgemeinschaft Friedhof, Gespräch mit den Bewohnern
14:30 Regelmässige Handlung: **Hannes Meyer und die Schweiz**
mit Hans R. Magliola (Zürich), Christoph F. Schmid, Philipp Salner, Klaus Jürgen Winkler
Gespätholzer: Claude Schmitt
Zum Frühstück
• im Restaurant Borel 100, 1. oder 2. bis Ausstellungsraum, umgeben von 14
• im Café Kienast im Zürich-Bau, Aufwache 12 Richtung Dählmann, Auswache 10, 11
Parteiliste vor dem Coup-Center Hofburg, 11. Oktober 1933
Felix Kienast zu überlappenden Veranstaltungen

The programme of Hannes-Meyer Tage in Zürich, Bauhaus-Universität Weimar, Universitätsarchiv Weimar.

Instead of Conclusion

The tensions that pierced of H. Meyer's time during the relocations to the USSR and Mexico marked critical phases in his career and professional development. The political and architectural changes and upheavals unfold in his biography, marked by repeated migrations and exiles due to mostly professional reasons. His personal commitments towards Marxist and socialist ideas before migration to the USSR and after his experiences there within Building Communism left a lasting impact on his works and legacies. His professional endeavours, writings, and personal correspondence demonstrate the complexity of his intellectual and professional journeys.

In a contrast with the legacies of some other protagonists of the Bauhaus and Modernist movement, who relatively gained the positions of leading pioneering figures in the post-Second World War historiography of architecture and urban planning. Contrasting with two other directors of the interwar Bauhaus, H. Meyer's legacies took a few postwar decades

to be appropriately acknowledged. The delay of the appropriations of his ideas and contributions in Europe suggests the possibility of another third form of his exile—an exile of his legacy. This legacy is intertwined with lesser-examined dimension of the 20th century that warrants a further thoughtful reflection and deeper critical analysis. The appropriations incorporated and reflected the politicised and selectively ideological agendas rather than pure objective reassessments of his professional life and contributions. It is evident with the available published sources in numerous languages as well as the German archival materials.

In postwar West and East Germany, the perceptions and presences of H. Meyer's cultural profile with his works gained a new dimension after his death. Although in capitalist and state socialist countries the receptions to him and his legacies varied, the presence of criticism towards him was strengthened often after the Second World War. The so-called "Cold War" division hindered the drafting of a comprehensive understanding and study of his professional profile and legacy for a significant amount of time. However, further examination of his private and published materials offers a possibility to reflect not only his life and challenging migrations, but also on the interplay between various political and social-cultural contexts. The recent reappraisal and recognition of his professional profile and contribution correlated with his and Bauhaus appropriations. Meanwhile, the diversity of privately preserved materials provided reminders not only of his artistic evolution(s) in tangible and intangible forms, but also the transmissions of his professional and cultural legacies.

Robert Fellowes Chisholm: Architect of Indo-Saracenic Madras

By Jinisha Jain, Jamia Millia Islamia, New Delhi

Introduction

Robert Fellowes Chisholm (1840–1915) remains one of the most transformative figures in the history of architecture in British India. His inventive genius was central to the development and flourishing of the Indo-Saracenic style, particularly in Madras (now Chennai), where his vision not only transformed the city's public buildings but also left a lasting imprint on the architectural legacy of India as a whole. Chisholm's work is emblematic of the complex negotiations and hybridizations of identity that characterized late colonial India, setting him apart as both a product and agent of imperial modernity¹.

Early Life, Artistic Beginnings, and Arrival in India

Chisholm was born in London, a city then brimming with revivalist fervour in the arts and architecture. Trained as a landscape painter, he developed an early appreciation for the interplay of scale, climate responsiveness and spatial harmony—an artistic sensibility that influenced his architecture profoundly². Migrating to Calcutta in the 1860s to find opportunities in the expanding British Raj, he soon relocated to Madras. In 1865, Chisholm was appointed as headmaster of the School of Industrial Art, a crucial position that brought him into direct contact with the region's burgeoning pool of artists, craftsmen, and local architectural traditions³.

The Dominance of European Styles in Early Colonial Madras

Before Chisholm's intervention, Madras's colonial identity was visually defined by neoclassical and Gothic-Revival buildings. British architects imposed forms rooted in Renaissance, Palladian, and Victorian traditions, reflecting values of rationality, symmetry, and restraint. Notable early structures—such as the Government House and St. George's Cathedral—adhered slavishly to European idioms, symbolizing British authority but remaining culturally and climatically out of sync with Indian

realities. Chisholm initially participated in this tradition. His earliest works—including the Nilgiri Library (Ootacamund, 1869) and presidency college buildings—displayed Romanesque elements: pitched roofs, and tall campaniles. These showcased his formal mastery but not yet his signature originality⁴.

From Admiration to Transformation: Chisholm and Indian Architectural Heritage

Chisholm's design philosophy began evolving in the early 1870s, shaped by direct exposure to indigenous Indian architecture. A pivotal moment in his career was the restoration of the Tirumalai Nayak Mahal in Madurai, undertaken on commission from Governor Lord Napier. This work instilled in him a profound admiration for India's historic built environment—its domes, minarets, bracketed eaves, and polychrome ornamentation. He began to envision an architectural style that would blend the grandeur and rationality of European forms with the expressiveness, colour, and regionality of Indian traditions⁵.

The Political and Cultural Context: Why Indo-Saracenic Emerged

The years following the 1857 Uprising constituted a turning point for colonial policy in India. The British crown sought to legitimize imperial rule and express a willingness to accommodate indigenous traditions, at least symbolically. Neoclassical buildings, with their foreign associations, increasingly appeared remote and abstract to Indian subjects, even as they declared imperial power. Patrons such as Lord Napier, Governor of Madras from 1866–1872, played an essential role. Napier, deeply interested in Orientalism, encouraged Chisholm and others to create public buildings that visually communicated respect for India's architectural heritage and geopolitical continuity with earlier Indian empires⁶.

Chisholm's Major Works: Defining Indo-Saracenic in Madras

Senate House, University of Madras

The iconic Senate House (constructed 1874–79), set on the beachfront, is celebrated as one of the earliest and finest Indo-Saracenic masterpieces. Chisholm combined Byzantine structure

(the grand dome), Indo-Islamic arches, intricate tile work, jali-style perforated screens, and elements reminiscent of southern temple architecture⁷.

Chepauk Palace Complex

Chisholm's intervention here began with renovations to the Revenue Board building (1871). He departed from the usual European forms, experimenting with domes, minarets, and chhatris, evolving what would soon coalesce as the Indo-Saracenic idiom⁸.

Napier Museum, Trivandrum

In Kerala, Chisholm achieved a synthesis of climate-responsiveness, stylistic exuberance, and engineering. The Napier Museum, with steep Kerala-style tile roofs, pointed Gothic arches, Mughal domes, and Islamic arabesques, is a complex palimpsest that attests to his genius in blending architectural vocabularies.

Laxmi Vilas Palace, Baroda (Vadodara)

Commissioned by Maharaja Sayajirao Gaekwad III, this palace is perhaps Chisholm's grandest secular project. The structure amalgamates Islamic domes, Hindu chhatris, European turrets, and Mughal arches—showcasing the stylistic pluralism Chisholm promoted⁹.

Chisholm's Philosophy and Working Method

Chisholm saw architecture less as a matter of transplanting decorative motifs and more as a creative, context-driven synthesis. He was distinguished by his willingness to collaborate with Indian craftsmen and draw upon regional techniques. For instance, the hand-painted tiles in the Senate House were made locally, deploying both Persian and Deccani traditions of glaze¹⁰.

Reception and Influence

Madras became the epicentre of Indo-Saracenic architecture, and Chisholm's innovations rapidly influenced other colonial architects, including Henry Irwin, George Wittet, and William Emerson. The style spread to railway stations, courts, colleges, and palaces—remaining a defining feature well into the early twentieth century¹¹.

Later Life and Continuing Legacy

After an illustrious Indian career, Chisholm returned to England in 1902. He remained productive, designing structures such as Cadogan Hall in London, which bore traces of his earlier Indian experiments¹².

Endnotes

- 1 S. Muthiah, *Madras Miscellany* (Chennai: Westland and Tranquebar Press, 2011).
- 2 Sriram V., "Robert Chisholm: The Indo-Saracenic Man," Sriram V. Blog, March 9, 2012, <https://sriramv.com/2012/03/09/robert-chisholm-the-indo-saracenic-man/>.
- 3 "Great Minds – Nilgiri Discovery Centre," Nilgiri Discovery Centre, accessed August 28, 2025, <https://www.nilgirisdiscoverycentre.org/>.
- 4 "Architecture of Old Madras," The Postbox Blog, accessed August 28, 2025, <https://www.thepostbox.in/blogs/postbox/architecture-of-old-madras/>.
- 5 "Indo-Saracenic Architecture in Chennai," Chennai Metropolitan Development Authority (CMDA), accessed August 28, 2025, <http://www.cmdachennai.gov.in/>.
- 6 "Senate House, Madras, by Robert Fellowes Chisholm," Victorian Web, accessed August 28, 2025, <https://victorianweb.org/art/architecture/chisholm/5.html/>.
- 7 "Senate House, Chennai (History & Architecture)," University of Madras Archives, accessed August 28, 2025, <https://www.unom.ac.in/index.php?route=university/senatehouse/>.
- 8 Gujarat Tourism, "Laxmi Vilas Palace, Vadodara," accessed August 28, 2025, <https://www.gujarattourism.com/vadodara/places-to-visit/laxmi-vilas-palace.html/>.

- 9 "Lukshmi Vilas Palace | History of Vadodara," Vadodara Municipal Corporation Archives, accessed August 28, 2025, <https://vmc.gov.in/lvp.aspx/>.
- 10 "Robert Fellowes Chisholm (1840–1915)," Victorian Web Index, accessed August 28, 2025, <https://victorianweb.org/art/architecture/chisholm/index.html/>.
- 11 Ibid.
- 12 "Our History," Cadogan Hall, accessed August 28, 2025, <https://cadoganhall.com/about-us/cadogan-hall-history/>.

Selected Bibliography

Chisholm, Robert Fellowes. *Great Minds – Nilgiri Discovery Centre*. Accessed August 20, 2025. <https://www.nilgirisdiscoverycentre.org/>.

"Indo-Saracenic Architecture in Chennai." Chennai Metropolitan Development Authority (CMDA). Accessed August 22, 2025. <http://www.cmdachennai.gov.in/>.

"Senate House, Madras, by Robert Fellowes Chisholm." *Victorian Web*. Accessed August 25, 2025. <https://victorianweb.org/art/architecture/chisholm/5.html/>.

"Robert Fellowes Chisholm (1840–1915)." *Victorian Web Index*. Accessed August 26, 2025. <https://victorianweb.org/art/architecture/chisholm/index.html/>.

Muthiah, S. *Madras Miscellany*. Chennai: Westland and Tranquebar Press, 2011.

Sriram V. "Robert Chisholm: The Indo-Saracenic Man." *Sriram V. Blog*. March 9, 2012. <https://sriramv.com/2012/03/09/robert-chisholm-the-indo-saracenic-man/>.

Essay Writing Cycles (2021-2023)

1.0 Reimagining Architecture as a Cognitive Space

1.1 Rediscovering Architecture's Natural Rhythm

By Akancsha Sood

Have I learnt my lesson? If so, is it too late? Do I sit on top of that mountain of debris, complaining, seeking that glimmer of hope?

Is someone coming to help me now?

Architecture can trigger emotions, transport us to faraway places that may exist only in our imagination or maybe just in that of the architect. But there is a commonality to all architecture that stimulates, inspires and resonates: it is in harmony with nature, the surroundings and the environment.

India's traditional relationship with nature

Living in harmony with nature is integral to Indian tradition and cultural ethos. In fact, many ancient cultures around the world have had a tradition of reverence for the elements that form our ecosystems, drawing their sustenance from natural resources while protecting the environment that sustains them. Buildings too reflected this philosophy of reverence and conservation, celebrating the cultural and environmental spirit of different regions.

Traditionally in India, starting as early as 3500 B.C. with the Indus Valley Civilization, people used indigenous materials and techniques to build. The architectural process emanated from a region's climate, geography and culture, thus leading to different regional styles of architecture. These distinct styles were also influenced by the flora and fauna endemic to the region which inspired their motifs and patterns. One can still observe this diversity albeit in much smaller proportion in remote parts of the country. For example, even today a traditional house in Karnataka would have

a central courtyard, verandah, mud and bamboo walls and a terracotta sloping roof, owing to the hot and humid climate; while in Rajasthan, one would find a circular mud house with a thatch roof and small windows and doors, to address its hot and dry climate.

Living in a box, you only see boxes, I needed to break free, but...

Modern Architecture and the shift in the architectural process

Several different styles of Modern Architecture developed in the end of nineteenth century. New technologies and new miracle materials; the ever so moldable concrete, steel and glass were the predominant materials that redefined the architecture paradigm. Buildings could soar higher, span longer and take magnificent unimaginable forms. They stood in stark contrast to nature, with their glazed skins filling the gap between the inside and outside.

The architectural process shifted towards a philosophy wherein a building was dependent on its own strength and mechanics and independent of the dynamics and melody of the environment. The building no more adapted to its surroundings, in fact isolated from it and its relationship with nature grew weaker. In the current urban context, modern architecture has engulfed numerous cities of the world so much so that a structure in Tokyo or Toronto looks and behaves similar to one in Mumbai!

Architecture's discord with nature, culture and community has influenced society's recognition and addressal of the grave climate crises at hand.

Yet another foggy day, but when the mist clears, I bow down and touch the earth and it whispers back...

Biophilia and its significance

Biophilia is the innate and genetically determined affinity of human beings with the natural world. The urban jungles of today and its buildings are devoid of open spaces, trees, birds and butterflies: or simply a connect with nature. Ample research has made it evident that these are imperfect spaces to develop cognitive abilities, stimulate our senses or to maintain our psychological and physiological well-being.

For a child raised in such an environment, an apple comes from the same factory, a chocolate comes from, and online gaming is far more entertaining than a walk in the forest. A biophilic design can rekindle a child's relationship with nature, through a tree on her 40th floor home, the use of a materials that smell of the rain or a form that is reminiscent of the waves in the sea.

Biophilic architecture can direct us towards sustainability but the tools are already available in our rich tradition and history of eco-sensitive practices and use of indigenous materials.

It whispers back, "All answers lie in nature; all you have to do is feel and listen in."

Adopting indigenous materials and technologies

The construction industry is responsible for a staggering 38% of the global carbon emissions and accounts for 40% of the world's consumed resources. Cement, steel and glass have extremely high embodied energy – cement production alone accounts for 7–9% of global CO₂ emissions.

Architects in India and around the world are revisiting and adopting the diverse palate of natural materials like lime, bamboo, stone, wood and green concrete that were used traditionally. Structures made with these natural materials have a much lower carbon footprint. For instance, lime-based plaster is 40% more energy efficient than conventional cement plaster and CO₂ emissions of an earthen structure (made of compressed stabilized earth blocks) about 4 times lower than a concrete building.

Lean Construction

Lean construction focusses on optimization in all aspects of built and natural environment. Through intensive coordination between the architect, client, structural and services consultants, energy expert, contractors and product manufactures at the design stage itself, problems can be envisaged and ironed out even before construction begins. Principles of lean construction when intertwined with ecofriendly practices can yield immense gains for all stakeholders and the environment!

Architectural Education and the sustainability movement

Architectural institutions can play a pivotal role in disseminating practical knowledge of sustainable design and construction. When ingrained in each aspect of the education process, sustainability will become fundamental to design for young architects and not an afterthought.

Architecture holds the key to our connections with the ecosystems that sustain us! It is time to retrieve those connections before we lose those and much more...

After 17 years of working at a leading architectural firm in Gurgaon, I'm currently working with natural materials and indigenous techniques in my hometown Chandigarh.

"It's never too late to return, never too late to unlearn, to come back to nature's lap."



Illustration by the author

References

"Construction Industry Accounts for 38% of CO₂ Emissions." *Environment Journal*, September 23, 2020. <https://environmentjournal.online/articles/construction-industry-accounts-for-38-of-co2-emissions/>.

World Economic Forum. "Could CO₂ Help Reduce the Construction Sector's CO₂ Emissions?" *World Economic Forum*, December 14, 2021. <https://www.weforum.org/agenda/2021/12/co2-reduce-construction-sector-emissions/>.

Singh, R., and A. Sharma. "Estimation of Embedded Energy and CO₂ Emission of an Institutional Building." *International Journal of Scientific and Engineering Research* 4, no. 2 (2013): 1–6. <https://www.ijser.org/researchpaper/Estimation-of-Embedded-Energy-and-CO2-Emission-of-an-Institutional-Building.pdf/>.

1.2 Perceptible World Behind Design

By Zeynep Çolak

For me, architecture is the journey of the process and evolution of human existence in all dimensions; it is a challenge that man in the evolution process fights for his true existence. During this great challenge, man gained the ability to think about existence and the courage to use his mind; he developed his feelings and thoughts within aesthetic values and made architecture immortal and permanent. Man was being of his mind, thought, knowledge and consciousness in the ancient Greek era. Then the Renaissance artists created three dimensional works and discovered the secrets of nature, space and architecture. After that the Bauhaus school transferred the basic form to a three-dimensional world, architecture, with a new logic of seeing, thinking and feeling. In all of these eras man produced works in the act of creating by following the new logic of cognitive, in other words 'conscious intellectual activity such as thinking, reasoning or remembering' (Meriam Webster). Moreover on the hunt to find its reason for existence man discovered the potentials of the nature and science because nature heightens the human experience by awakening senses and since the senses are linked to emotions they affect us. Another thing that is essential for the experience is the atmosphere; as architects we actually design an atmosphere, the feeling and experience of it that invites visitors to discover is the essence of architecture. As a result all of these have an impact on the experience and in my opinion this is the *raison d'être* of design; when intellectual activity, atmosphere and the process comes together they create a perceptible world behind our designs that is able to show us the journey of human existence in other words they create a cognitive space that responds with experience and nature centric designs strengthens it.

"Every time designers engage themselves in a design project, they somehow recreate the world" (Findeli, 2001). I love the power of design; whether it is an object or a space or a building, design in general have a power; their textures, functions, colors demands, encourages, mediates, delegates and allows for different experiences therefore they affect and shape our behavior, senses and emotions and I believe matching these

activities with design is the way to 'reimagine architecture as a cognitive space'. If we look at this way it becomes easy to understand why we designers are recreating the world and the term 'social' because when we imagine any design in a cognitive way we focus on the experience and therefore we focus on how we affect humans. Albena Yaneva says "It is impossible to understand how a society works without appreciating how design shapes, conditions, facilitates and makes possible everyday sociality" (Yaneva). With this in mind I started to rethink my 3rd year urban housing project in a cognitive way. I believe every space has its own distinctive sound of intimacy, rejection or invitation, hospitality or hostility moreover spaces can promote our social, cognitive and emotional development and this is why the pure existences of the spaces in all figures are a way of affording a reassembly of the 'social'.



That is to say they offer a social contentment in pleasure to all visitors without regarding gender, age and profession, moreover they become places where the people can collectively enjoy using the space. They mediate conversation through a specific way in which it delegates and facilitates activities like walking, sitting, resting and reading. Since these basic actions are repeating and they are enjoyed by different users, this repetition stimulates the enrichment of social life. Moreover as the visitors walk through levels the curves affect their emotions instantly with their playful impulses also the benches are inviting them with the curvilinear forms because it makes them seem more approachable compared to rectilinear ones.



Images by author

In the image 1.3 we can question the materials, for instance the glass tells visitors to stay off but, allows them to observe, while wooden railings politely requests to stay off but the wooden encounters allows to touch and feel the texture. On the other hand in all images a nature centric design can be seen; trees and plants changes the atmosphere by creating a tranquil zone they direct the attention away from the physical room and towards the individual and their place in the world. In other words visitors' actions and thoughts are mediated by the objects and spaces; they emphasize a new social dimension.

Overall all these terms are related to the experience, the main reason for that is the fact of design being related to experience. Whether it is a product and architectural space or an object, the experience of them makes the differences and affects us. I love the quote “Architecture is the art of reconciliation between ourselves and the world, and this mediation takes place through the senses” (Pallasmaa, 1996). So the atmosphere we design communicates with the senses, memory and logic and creates the cognitive world through perception and this an experience worth the journey to discover it.

Notes From the Author

- 1 The term “script,” comes from the sociology of technology, it refers to both the object’s perception of the world and the program of activity it is expected to carry out.
- 2 Taking an ecological approach, I use the term “affordance” to refer to the object, to the environment and to the observer at the same time. Affordances define the variety of possible activities but they must be visible and hence perceived by the users.
- 3 The term “mediator” refers to the idea that objects are participants in an action that is overtaken by other agencies, which is a key of ANT (Latour 2005).
- 4 Engineers and designers “delegate” action to nonhumans by substituting design objects, settings, and equipment for human action and making them permanent occupants of the position of humans, allowing them to control human activity by dispersing competences and prescribing obligations.

References

Findeli, Alain. "Rethinking Design Education for the 21st Century: Theoretical, Methodological, and Ethical Discussion." *Design Issues* 17, no. 1 (2001): 5–17.

"Merriam-Webster.com Dictionary." Accessed August 28, 2025.
<https://www.merriam-webster.com/dictionary/cognitive/>.

Pallasmaa, Juhani. *The Eyes of the Skin: Architecture and the Senses*. London: Academy Editions, 1996.

Yaneva, Albena. "Making the Social Hold: Towards an Actor-Network Theory of Design." *Design and Culture* 1, no. 3 (2009): 273–288.

Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press, 2005.

1.3 Cognitive Processes & Architecture

By Wijdane Esseffah

Cognitive processes refer to an array of operations that aim to create, translate and wield mental representations of information. These processes comprise a myriad of functions ranging from attention, perception and learning to memory storage and retrieval, as well as problem solving and decision making. Cognition, though a complex mechanism, is based mainly on transforming and manipulating various sensory inputs into intelligible and pragmatic responses for a better apprehension of one's environment. Cognition originates mainly from phylogenetic factors, dictated by basic hereditary attributions, however, it is also heavily influenced by ontogenetic aspects relating to the human's lifelong existence and affluent experience, within which is inscribed the subsequent interaction with architecture and the built environment as a whole.

Architecture or the built environment can be qualified as an allegorical humanoid, both technically, based on the complex constructive logic and the interrelated systems, and theoretically, as an entity that contributes actively in sheltering lives, creating memories and shaping identities as a whole. It can even be argued, as phrased by Aaron Hendershott, that architecture is corporeal, a prosthetic extension of the body in which this latter practices its cognition. This idea of extension paves the way towards a more established theory known as embodied cognition, which studies the relational pairing between the body / mind dyad and the components of the built environment, scilicet, this embodiment determines our architectural experiences.

The aforementioned causal inferences of architecture and built environment on the human behavior and perception are the subject of interdisciplinary interests, namely architectural phenomenology, the primary objective of which is to explore the metaphysical realm embodied in the built architectural form, and more recently so, neuroscience that investigates empirically the neural effect of the built environment on the cognitive repertoire so to set conjunction levels between brain

architecture and architecture. Studies have shown that long-term memories are processed in the same brain region responsible for spatial navigation and wayfinding functions, which means that it is virtually impossible to disjoint the act of summoning a given memory from the spatial framework in which it has been inscribed. Moreover, the quality of the space in question along its subsidiary elements constitute variables that can affect cognitive processes differently; a child growing in a secluded suburban area will develop distinct cognitive skills from the ones another child living in a densely populated city might have, similarly, the slightest shift in any spatial variable will have a neurological impact on the cerebral sensors, thus presenting circumstantial cognitive cues for the subject to imbibe.

The human behavior within the built environment has been a prone subject for scientific ardor, since Kevin Lynch's study on cognitive maps and imageability within the urban space to the more recent constant neuroscientific studies exploring cognition and perception all aiming to optimize the notions of quality and comfort in architecture. The introduction of neuroscience as an aspect of the apprehension of the built environment accentuated the tremendous contribution of architecture in the development of human cognitive skills especially in the rows of children. Richard Neutra emphasizes the importance of letting the human "neurological entity" flourish and blossom through conceptual quality conceived by the architect who should be, according to him "a gardener of nervous growth", all whilst being fully conscious of the leverage architecture has upon its inhabitants.

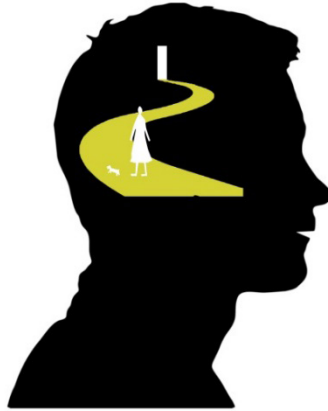
As opposed to the general directives that Neutra and other architectural theoreticians have set for their preferred cognitive-friendly design processes, modern architecture seems to have ripped itself from the embodied experience towards a more disembodied, merely retinal and warped perception of the built environment as Juhani Pallasmaa would phrase it. Modern architecture is centered on pre-established and anthropometric measurements aimed towards an impersonal homogenized society of like-minded individuals. It is a mechanized, codified and commercialized environment practically devoid of circumstantial cognitive stimuli, ready to imbibe its users in general and children in particular with commonplace cues, not in the height to

generate revolting cognitive processes. Predictable, matter-of-course spatial configurations can only bring about matter-of-course cognitive repertoires especially for children in their formative phases. On the other hand, vernacular architecture offers the possibility of transcending the body schema to the space schema, creating a cognitive force triangle exclusive to each space, the unpredictability, the elements of hazard, and purely incidental architectural appurtenances belonging to the human or natural craftsmanship alike create a unique proprioceptive experience.

The interdisciplinary efforts between architecture and neuroscience, as well as the recent use of computerized assistance can confer an unprecedented upheaval to contemporary design practices, within which cognitive development is ubiquitous. The new technological paradigms can help to optimize the user experience within built environment and to empirically examine causal inferences. Architectural design is, by definition, not an analytic discipline that systematically investigates all the possible spatial combinations and their effects on users, however, virtual reality and digitally assisted design can explore all these configurations and promote a general reassessment of walkability, usability, visibility, intelligibility and wayfinding in every building regardless of its programmatic complexity. These immersive virtual reality simulations are an effective tool for a neuroscientific study of the architectural experience and an efficient antidote for the modern standardized “artifacts” or mere “products”, towards a neo-neuro-sustainable embodied experience, finally now, we can say that the once quixotic aspiration of creating bespoke spatial configurations catering to the needs and specificities of their users is looming in the horizon, and the fruits of Neutra neurological garden might ripen just in time.

1.4 Shaping Human Experience

By Srabasti Lahiri



“We shape our buildings and thereafter they shape us”, said a devastated Winston Churchill, on the night of the bombing at the House of Commons Chamber. This, considering the given scenario, was a rather emotional statement, but is extremely logical and prevalent, now, more than ever. A building can never be simply a structure, housing different functions and people, within its walls, that stands the depth of time. A building is a storyteller that has witnessed the constant growth of its users, growth of the city it has been a part of, and yet, provide a space made up of utmost trust, love and emotions, over the years.

Now that a global pandemic has restricted the whole world within their own homes, the need for architecture and design to be responsive to human experiences, senses, evaluation and reasoning, shall be the need of the hour. Architecture shall enhance the lifestyles and working conditions of people to yield intellectual behaviour and productivity by processing existing knowledge regarding human perception and judgement to create new designs and environments that are more people-friendly. No matter how dull it may sound, we, as people, on most generalized situations, lead routine lives with the same mundane daily

chores, which require us to spend large parts of our lives at the same places, within the same buildings, and even in the same neighbourhoods. Even if major changes take part every ten years, it means that each and every phase of our lives are carved out by the spaces around us, the spaces we inhabit or work in, the cities we settle in and the societies we become a part of. Consciously or subconsciously, the spaces around us are constantly helping us to build our personalities, the choices we make, the people we meet and the kind of work we engage in. In such a growing urbanization demographic, it is henceforth implied that modern architecture and urban design calls for a profound insight into the basic rules, stirring the structure of urban developments around the world, taking into account, the potential cognitive effects of the creations on the inhabitants or users. This shall not only focus on transforming the quality of the built environment for barely its users and the functionalities of the space, but shall rather instill a deep sense of community, that people will like or find stimulating to be a part of.

‘The secret of the language of architecture does not lie in the being of space itself, but in the way in which we connect to it.’ Architecture or built space is designed to satisfy the different representational, functional, aesthetic and emotional needs of the users. In order to facilitate better user-space interaction, emphasis should be laid specifically on the functional aspect of it – improved ecological design, creation of superior workplaces, better climatic controls, and lighting factors, enhancement of social gathering spaces, etc. Similarly, the mobility of users within a built environment is one of the key functional elements of a space, allowing the ease of access and wayfinding. Although architecture and spatial configuration creates a wayfinding problem that people have to solve, it also has to be a support system in enabling the users to solve the problem. This can be linked to less complex floor plan layouts of buildings that can be easily navigable from a user’s point of view, instead of creating physically intricate and confusing designs that merely serve the purpose of being visually aesthetic. Navigation is a routine, regular activity that draws upon various cognitive functions such as perception, imagination, memory, reasoning and decision-making. This also requires our sensory-motor systems to interact with our immediate environment, make sense of the spatial arrangements and memorize landmarks. Thus, a designer’s

understanding of the mechanisms and information sources, attributing to decision-making while wayfinding, needs to consider social aspects to become comprehensive and ultimately deliver a full-proof model of built space that will eventually assist users to perceive a space better and find their way through built environments. That being said, architecture is also highly capable of flirting with the visual perceptions by enabling viewers to be mere puppets of what needs to be perceived out of a built space and how the designer wants the users to use or access it.

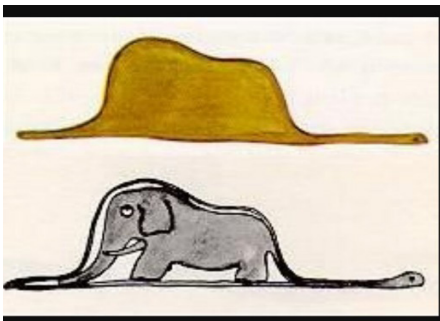
Cognitive spaces aid, as well as, inform underlying principles of architectural design, including privacy zones, spaces of memory and visual thought. This can bring about a convergence in the physical and cognitive spaces in architecture and can extensively fund mapping of environments, model, and plan out projects. Like any other physical environment, architecture influences human cognition, experience, and behaviour by facilitating, allowing or preventing various perceptions, thoughts, emotions or actions. This can be done physically, as to when walls block movements, views or sound; mentally, as of when visual patterns stimulate aesthetic responses or invite exploration, and even, socio-culturally, through implied rules and principles. Designs, that take into consideration the functionalities of the human mind, can help enhance the sensory access – what can be seen or heard; memorability – what is remembered about a building; attention – what is looked at, admired, and listened to; knowledge – how one reasons, thinks, and makes decisions; behavioural techniques – where one walks, sits, etc; emotional aspect – how one feels within the space, their comfort levels, fear, and aesthetics and socially – how one interacts with the rest of the users, their pedestrian flow, social distancing and so on.

Architecture can thus be rightfully summed up as a 'social art', that is in contrary to popular belief, more a necessity in today's world than a luxury. It feeds and generates the basic needs of people and communities by enhancing their daily lives – spiritually, emotionally, mentally and physically. Designs that take into consideration cognitive research and cultivates it into reality, results in the creation of optimism and order in an otherwise disoriented world, just like a streak of sunshine on a rather dull and gloomy day.

1.5 An Architecture of Process

By Nishanti Srinivasan

One of my favourite parts of Roald Dahl's 'Mathilda' features our protagonist, a young genius and avid reader, describing how she is able to explore the world and go on adventures, all while reading in the corner of her room. Her family attempts to deprive her of the books she travels the world through, her school forces her to study material she would have absorbed with ease at age three, and therefore this extra, unused mental energy is translated into extraordinary powers. If we look closely, however, is this not what is currently the case for millions of children worldwide? In depriving our children of spaces that will nurture and cater to cognitive development, do we not force them to develop the power, to see and create worlds where there are none? The mind of a child is more than capable of taking what is given to it and making it into something extraordinary. Where it is handed a hat, it could receive a boa constrictor digesting an elephant; but is it still fair to hand it simply a dull old hat in the first place?



The Little Prince, Antoine de Saint-Exupéry, 1943

On introspection about the ways in which architecture shapes the cognitive development of a child, I began to recall the spaces and landscapes of my childhood: my school with the sprawling grounds, the library with all the best books on shelves I needed a chair to reach, the forbidden corridor leading to the 'haunted' laboratories I longed to grow up to study in. Or perhaps the housing society I grew up in, with the large rain trees we would climb to read books in on cloudy afternoons,

the secret passage that connected my building to my best friend's. The funny thing is, none of these spaces ever existed anywhere outside my imagination; at least, not the way I recall and describe them. They came to be as an amalgamation of various existing spaces, and the collected works of Enid Blyton, J. K. Rowling, J.R.R. Tolkien, and various other authors who had captured my imagination. In reality, the grounds were barely large enough to play a decent game of football. The laboratories weren't haunted, they just had a model of a human skeleton that frightened us. The rain trees had far too many insects in them to so much as climb. The "secret" passage was just the alternate route that passed from behind the buildings.

Architecture, like art, is subjective, but unlike art, has very specific needs it must cater to, that vary with age. My appreciation for modern architecture and today's concrete boxes has developed over my past few years of studying the nuances of various styles of architecture, but having been a child that grew up exposed largely only to such spaces, I can attest to how impossibly dull it all seems to a child. So what, then, would an architecture that satisfies the desires of a growing child look like? What would an architecture of process need to be, when designed for a person in process? Can such a space even exist?

The spaces we occupy as children that are designed specifically for cognitive development, such as schools and colleges (and those dreadful, windowless tuition classes) seem to act only as something that enables us to read and write and listen; the spaces themselves are largely non-entities, if they aren't outright obstructing the education. The spaces that actually foster growth are those that allow the children to make them their own, through the act of play, something that has been proven to be crucial in cognitive development¹; but this act of playing is something that happens organically, something children intuitively do. What would spaces designed for this purpose look like? In order to answer this question, we look at spaces that do foster growth and development. Common consensus is that natural spaces and landscapes, amongst their various health benefits, are also known to aid in cognitive development². (What a failure it is that the only spaces that perform this function are those that have developed independent of us!)

We grow up in cities designed based on function, and are taught to have ‘function’ be a key aspect of our design development, where any freedom for play becomes merely incidental. This is all well and good for the productive lives we lead as adults, but for growing children that require spaces to simply make their own, it can impede this growth. We are taught to navigate the world on the basis of functions, hence this idea of a “functionless” space made simply for growth and development and play seems farfetched. It helps to look at why natural green spaces, the fantastical worlds of books, and imaginary worlds created by us are so freeing: they exist not to serve any purpose of function, but simply for the joy of existing. Spaces that encourage growth and development, then, are any spaces that retain this joy.

The way a child navigates and understands the spaces they occupy makes use of this idea, with every nook and cranny holding the potential to be a whole world. The room is not cluttered, it is filled with potential props to act as building blocks for a more interesting world of the child’s creation. To see the world the way a child does is to see the innate potential in every single thing, and transcend both form and function to create the impossible, fantastical, and wonderful.

References

- 1 Tamis-LeMonda CS, Shannon JD, Cabrera NJ, Lamb ME. Fathers and mothers at play with their 2- and 3-year-olds: contributions to language and cognitive development. *Child Dev.* 2004;75 :1806–1820
- 2 Green spaces and cognitive development in children – Payam Dadvand, MarkJ. Nieuwenhuijsen, Mikel Esnaola, Joan Forns, Xavier Basagaña, Mar AlvarezPedrerol, Ioar Rivas, Mónica López-Vicente, Montserrat De Castro Pascual, Jason Su, Michael Jerrett, Xavier Querol, Jordi Sunyer. *Proceedings of the National Academy of Sciences* Jun 2015, 112 (26) 7937-7942; DOI: 10.1073/pnas.1503402112

1.6 The Blue Tarp: A narrative of intrinsic curiosity of an impressionable mind

By Radhika Jhamaria

Seven-year-old Shikha hails from Pandrasali village of Jharkhand, India. Her father is a day-wager in the construction industry, and her mother has just started a pushcart selling multi-colored bangles. The supplemented income is meager, yet both parents try to provide a better life for their daughter. The mud-walled structure that Shikha calls her home is supported with a roof that dwindled during the last month's heavy rain causing much distress to its inhabitants. Shikha's father fashioned a makeshift solution, and the roof is now patched with a tarpaulin sheet. On a rainy morning, amidst the cacophony of chickens clucking and water trickling through the open drainage canals that envelope the bricked path outside the hut, Shikha packs her bag to leave for school.

Today's activity at school unearths the "psychic state" of our protagonist. With paper and pencil in hand, the group of pre-teenagers is asked to spontaneously draw their dream shelters. Shikha puts her hands and mind at work simultaneously and uses various hues in her drawing, knit-picked from her memory of her mother's multi-colored bangle box. Her drawing reveals the exterior elevation of a mud-house with a carved door, a threshold, and a roof drawn in perspective, indicating a house that is "lived-in" and not just a mute façade. The striking point of the drawing is the exact replica of the hanging blue tarpaulin on the patch of the mud roof. Here we affirm psychologist Françoise Minkowska's view that even as Shikha draws her home from the outside, she reveals its details of intimacy. The tarpaulin's function takes precedence over everything else in her drawing. We can weigh in on this point and say that her dream shelter is one where the roof doesn't leak.

This feeble incident highlights the interplay of architectural agency on a child's psychology. The fixed nature of a house is contradicted with the ephemeral roof over the child's head. This mere discovery incites her curiosity. She further discovers the differences in the characteristics of both the materials (thatch and tarpaulin). She makes observations in

architectural details around her and learns to think critically. However, such participation in the regenerative process of building her home is uniquely rural, or we can say that such methods are alien to privileged factions of the society. In urban areas, where parents want to protect their children and limit their learning hours to schools, the discussion of architectural problems and their subsequent solutions are done out of bounds of inquisitive minds. Modern architecture in urban scenarios, thus, masks the social struggles that can shape the young generation.

A common misconception among the social elite is to build designated spaces for their child's learning. This strategy is foolish simply because cognitive development in children is a continuous process and cannot be limited to specific spaces or certain hours. As Maria Montessori rightly points out, the leading cause for delays in children's learning is the unavailability of appropriate stimuli for their development in their surroundings. The day's architecture requires a theatrical manipulation of all spaces closest to the child to stimulate their senses and harbor their curiosity, emotional intelligence, and creativity. There is a need to design such that not only schools but residential environments and street settings present opportunities for children to interact and play. Architecture should focus on these little feet and drive them to become independent. Once independent, it will be easier for them to ask questions and derive answers from their surroundings.

After her regular school ends, Shikha whoops her belongings and skips across the street cracks (a game she forged with her friends) to her favorite place in the village. The place she proudly calls her second home. Aayub school is truly home to several of the tribal kids who come here to learn from Pradhan Birua, an environment conservationist that opened his home as a creative panacea for young impressionable minds. The school nurtures esteem for the environment by familiarizing the children with concepts through play. Designed to allow interaction, Aayub school's backyard brims with opportunities for learning and instills a sense of inclusion among the kids who are part of the process of its making. As Shikha tends to one of the palas saplings that she had helped sow in this backyard, she also learns about mathematical fractions by counting the petals of the blooming flowers. Palas is Jharkhand's state flower, and by planting this particular species, the children's perceptions focus on the

grounds where they live. The school thus breeds an environmentally conscious pool of citizens.

Genetically, we are wired as biophilic beings without fear, curious to experiment and learn from the environment around us. With the spiking issues of criminal activities, global warming, and recently, the toll of the virus, children have been imprisoned inside their homes. Thus, from inciting wonder in kids through natural spaces, we are reduced to introducing superficial nature to existing spaces. However, the act of agency (to explore and learn from nature) in kids remains autonomous. To ameliorate the effects of the new lifestyle, bringing the outside inside will ensure tacit learning that will groom children into compassionate individuals.

In the web of multi-disciplinary discourses of children's cognitive development, modern architecture needs to engage nature-based development policies and target multi-sensory design implications. And these solutions must be ingrained through a participatory relationship between all stakeholders: the child, the conscious adult, and the prepared environment (Montessori, 1898), such that architecture reveals the process behind every niche.

In the evening, Shikha gets home to find her father bent down, working to fix the clogged gutter as the downpour outside continues. She rushes to her side, carefully eyeing his every move and happy to become part of the process when requested to pass his toolbox. She is bubbling with questions, but she'll have to wait until tomorrow to ask Mister Birua. She wonders if the blue tarpaulin can solve this problem, too?

References

Bachelard, Gaston. *The Poetics of Space*. Translated by Maria Jolas. Boston: Beacon Press, 1969.

Moore, Robin C. "The Need for Nature: A Childhood Right." *Social Justice* 24, no. 3 (69) (1997): 203–220. Accessed August 28, 2025. <https://www.jstor.org/stable/29767032/>.

Niyogi, Deepanwita. "Tribal Children in a Jharkhand Village Learn the Joy of Science." *Mongabay-India*, January 8, 2020. <https://india.mongabay.com/2020/01/tribal-children-in-a-jharkhand-village-learn-the-joy-of-science/>.

Migliani, Audrey. "How to Stimulate Children's Autonomy Through Architecture and the Montessori Method." *ArchDaily*, January 18, 2021. <https://www.archdaily.com/930510/how-to-stimulate-childrens-autonomy-through-architecture-and-the-montessori-method/>.

1.7 Process Perception and Papillon

By Parvathi

Evolution and restructuring are two sides of the same coin without which there is no progress. But are they the process drivers of progress? This essentially has been churning in the minds of many designers and social scientists.

Process is principally a thought out or planned, methodical way to an objective, many a time inorganic, spontaneous and sporadic move towards attaining an end. Process is the most charming, engaging and gratifying part of an achievement. Later on, reflections on a process can unravel different perspectives of the same product/objective achieved.

Architecture and Design can be considered the most engaging of art forms. With the end user and many more being involved throughout the existence of the product. The designer needs to be as selfless, benevolent and all pervasive as one can be to attain a reasonably good art of architecture. The knowledge of this power one can enforce upon the end users give a demi god status to the designer of space, which has been beautifully portrayed and dissected in An Ryand's Fountainhead almost a century back, and still it holds relevant.

The questions put forth in the competition brief has been soul stirring to me as a designer and a mother, both being torchbearers of hope of tomorrow. The compelling and grueling nature of the questions gives sleepless nights of turmoil. Human brain is a great wonder in itself as how it manifests the known and unknown of what surrounds the senses. Even greater is the wonder of the child's brain which can take us by a surprise. The complications, incongruity and negative emotions which usurp in an adult brain are yet to take form. Hence there is unending learning in a child's cognitive understanding. Process, progress and the human perception is what I am looking at expressing in my viewpoint through this penning.

Papillon (butterfly) of our society, that is how I would like to address children. They absorb and assimilate directly and indirectly from their

surroundings. The variety offered by architecture and design in our varied cultural contexts go a long way on the image of society that child creates in its mind. The ideal example is of the drawing of a house that most children first draw.



Source: Vector stock, royalty free images

More than ninety percent of children draw the image of home with a pitched (sloping roof) and green surroundings or nature as a backdrop. However, how many times would any adult have wondered why so when almost all of them would hardly have lived in such a house. I have wondered and explored this and found that as parents we have driven in aspirational, ambitious dreams in children which rarely fit in these drawings of theirs. At the most, a summer retreat or a grandparents nest is the most, that they relate to this drawing. Modern architecture with the glazed, sparkling shining facades, towering superhuman buildings and dashing forms are symbols of power and happiness. Similarly heritage buildings or ornamentation of a cornice have attached them to a buried past which can never be part of tomorrow. Modern architecture has been thoughtful of their social economic sustainability and end user requirements; architecture has never been kind to the participants outside the frame of its canvas. Eclectic planes and curves, disjointed dark sharp edges, get more than an exclamation. Some give it a thought for a chat along with friends over a cuppa, some a mere glance, some a photograph maybe. But with children they hold images for an aspiring future or unattainable status symbol. The process debate becomes attached to the progress debate unknowingly in the child's mind and

thereby architecture feeds into young mind. Critical thoughts on form, massing or colours hold little or no place in such a context.

The present education system has tried its level best to upgrade the awareness level of children in school itself and thrusts practical awareness of surroundings. This calls for architecture as a profession to be more responsible towards not just economy, environment and society at large, particularly the younger generation as the end product of design is all that they are aware of. Discussions on a few things on construction technology, materials and its impact on the environment is comprehensible to them as they are on the apocalypse edge of the climate change. Aesthetic implications that reflect society or the mind of the designer is bleak and bland to the young mind, unless we are sensitive and sensitizing. It indeed is a shame on the profession, when a child is able to understand complex machine, coding and robotic engineering, however cant comprehend simple space logic and building construction fundamentals.

The marvel of human mind as told by Victor Henkel is probably poring at Marvel comics unaware and unbated by its habitat, unless as architects we have a space design engaging with them and inviting the new ideologies meant to stand the test of time. Emotions that are enhanced by the space surrounding the brain. Gestalt psychologists have tried to work hard over the decades and architects have faintly thought of incorporating the results is select typologies of buildings like paraplegic centres, Child interactive spaces etc. The negative and positive impact os spaces within buildings and outside them are instrumental in creating the emotions within the mind and reflecting in behavior. “Manasa” (through the mind) “Vacha” (through words) and “Karmana” (through actions) perception also enters the mind which can be considered as in reverse order as well in perception of spaces.

As designers, we are entrusted a larger responsibility of not just creating, but also shaping the minds that experience or observe the design. For years that succeded a small image is all that it takes to nurture a wide range of ideologies, character and ambitions.

1.8 Reshaping the Built: How Does it affect us Psychologically

By Pranjali Karnik

In today's digital era, we often get enticed by the scenes of architecture and design on social media platforms every day. Based on our preferences, we either say 'wow' or express displeasure after seeing them. These photographs or graphics transport us to the place mentally, allowing us to imagine and feel the spaces, the colours, the atmosphere, and the experiences we might have. Imagine such a space or a structure you have admired on a social media site that carried you away in your imagination. But right here, I would like to stifle your imagination and pull you out of that fantasy realm.

Because, the visual sense is deceptive. What might be visually appealing to the eyes might not be acceptable to the body.

Our body possesses five senses, i.e., the sense of smell, touch, hearing, taste and vision, but we seldom forget that all the senses work hand in hand to give us an experience. Though we may believe that a visually appealing environment is all that is required, our other senses equally trap the space in their respective memories, and we, as a human body, feel the space and recollect these memories when we come in contact with a similar space.

Let's consider spaces or structures in terms of typology. What distinguishes a space as a specific typology and give it a distinct character? Why do all offices appear to be the same? Or the hospitals look alike? Or schools look the same? Why is it that we restrict ourselves from going to hospitals but feel a sense of warmth and enthusiasm glimpsing a house, resort or spa? Is it due to its functional character, or is it the architecture that dictates the typology? Based on standard design guidelines, architects design an office, school, hospital, or resort in a particular way that fits into the respective typology. It is here that our minds react to the specific typology and starts to imagine the space that has been fitted in our minds. Our sensory memory triggers the previous experiences that we encountered in that typology. We begin to think

of spaces as – glass and air-conditioned offices, odorous and noisy hospitals, school campuses with courtyards and large grounds, cozy houses, and calm and serene meditation centers.

We, humans, have had a long history of living amid nature; hence, we are tuned with nature and its cycles. We feel tranquil and peaceful in built areas that are in harmony with nature. Nature has the ability to heal our minds and our bodies. Architecture that incorporates it generously and synchronizes with its cycles activates all our senses, and we feel the space. Nature can be integrated through materials, biophilia or biomimicry, natural hues, elements like plants and water bodies, etc. In terms of senses, we can, for example, smell and taste the raw earth or wood walls, touch the sunlight and air, hear the breeze, and so on. Such spaces elevate our mood, induce joy, creativity and tranquility, and we tend to visit that place again and again. Novel places develop excitement, imagination, and interaction with the space. For a space to be experienced, our body necessitates constant interaction with it through all the senses that integrate and send signals to the brain. The brain responds either positively or negatively to the space based on signals received from each sensory stimuli by apprehending the volume, thermal comfort, haptics, sounds, etc.

In the age of modernization, where we define a space by four walls, use synthetic materials excessively, rely on active techniques, and impose guidelines and standards, the interaction between us and the building is lost. The communication with materials, joyous encounter with the sunrays, staring at the mysterious play of light and shadow has been lost. Modernization of spaces, materials, technologies, mass production, etc., though have provided solutions that assist in quick designs and eased construction work, has also led to buildings seeming monotonous, giving the same visual appearances and experiences. Since such buildings or spaces do not create the necessary interaction with our body and mind, we tend to feel detached from the space, and the creativity, joy, and excitement to explore are lost. Such places, therefore, causes stress or anxiety in us.

Consider structures from the perspective of children – when they touch the walls of the schools or hear the raindrops splatter on the roof of their

house or measure a large hall. Children communicate with the spaces from an early age which provokes excitement within them to explore. Every spatial experience creates a place deep down in their memory which is recollected when they come in contact with a similar space. Modern monotonous structures or designs, materials and hues limit this interaction, confining the ability for creativity and sensory exploration. Depending on their spatial experiences, they might feel joyous, fearful, etc., of going to particular buildings. It could be dangerous if they respond to a building or space negatively and feel claustrophobic about it for years. Thus, it becomes indispensable to create architecture that instils a sense of security and comfort among the children and other users. Buildings can thus impact the perception of the space and invoke emotions such as a sense of security, danger, calmness, comfort, frustration, fear, anxiety, depression, creativity, conspiracy, and so on within the users. Architecture, therefore, influences our thinking, actions, performance, moods and behaviour, as well as our health. Yet, in the age of modernism, aesthetics and competitions, we seldom give attention to designing for humans and their psychology.

1.9 Architecture beyond Form and Function

By Fatema Elzahraa Rabie

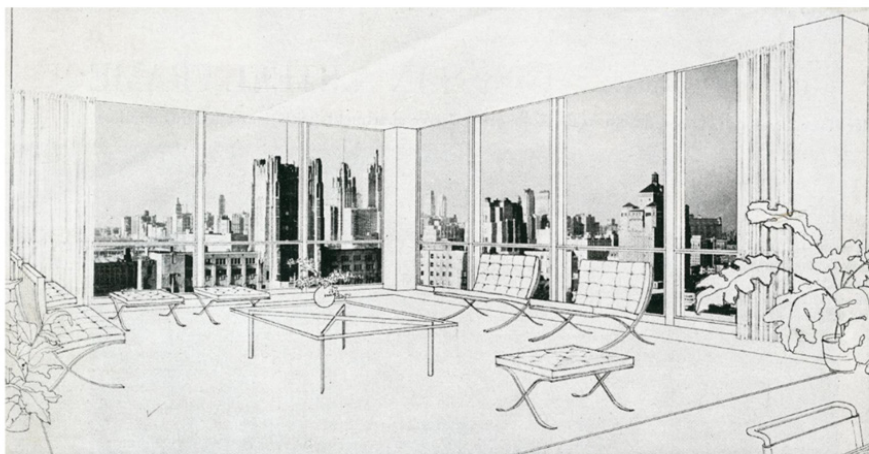


Figure 1 Mies van der Rohe. Architectural Forum Jan 1950, 76

Fig: Mies van der Rohe, Architectural Forum, Jan 1950, 76

“The design of places and spaces that provide a context for human experiences architecture has a long and often distinguished history. The conscious, frontal lobe processes of shaping this context are only partially understood by architects and have yet to surface on the roiling waters of neuroscience studies. Even less well understood is the role of architecture in shaping human experiences.” (Eberhard, 2009) The satisfaction of human beings has no limit to reach to the best condition which is call in economic science happiness that means needs is the mother of inventions. The human minds has different complex typologies with different needs and demands that to know what the human minds want.

Architecture is considered as a product has the age of demand and different typologies that followed. The project management of any product have many typologies that affect the production of a product depend on aspects like political concerns, responses of people and the trend of industrial. According to Mies van der Rohe theory 1923 “Open the indoor of horizontal plan. Material buildings is cement, steel and

glass. Just use only curtain walls and reinforced concrete no bearing walls.” This theory is considered one of the establishment theories of modern architecture. Therefore modern architecture could be considered as including the philosophical principles associated with cultural changes in Western societies in the late nineteenth and early twentieth centuries. It expresses new social visions and the development of a developed society. Modernism focuses on modern building techniques and methods, especially the use of reinforced concrete and glass. It highlights the idea of shape following the function and rejecting the decoration and encouraging simplicity, as it spread after the Second World War when it was gradually replaced as a basic style of institutional and institutional buildings with postmodern art” (Curtis, 1987). The Scientists ask how the brain causes human beings to perceive, think, behave, reproduce, eat, drink, and all the rest. Enormous advances have been made toward this goal, and today, the excitement in the field is palpable (Gazzaniga, 2008).

Perception is what makes us human and is certainly responsible for how we perceive facilities. Hence the importance of the role of neurophysiology in answering at least some of the issues mentioned. So far, architects and scholars interested in architecture have focused on the formal tradition of nature, sometimes explicitly and often implicitly by inspiring the biological forms of human origins, and yet I believe that understanding the biological roots of nature and urbanization requires another element independent of the construction tradition, which is the most important aspect. A difficulty of the problem, which is concerned from the start with how we communicate and perceive shapes. This way has more to do with our own internal structure as a human than with biological structures the public. The answers can be found in perceptual processes, perception, and physiology nerve. By taking architecture from a completely new perspective through organized coherence (which Christopher Alexander calls “wholeness”) unites many. The traditional divides between decoration and function, buildings and ecology, are blurred from the phenomena beauty and functional facilities. We will then be able to search for “life” in artifacts and structures, which will change our life experience. There is a problem with saying that we “like” something, which is irrelevant. As far as we are aware of the degree of life in it, because in spite of all that there are still monstrous buildings.

No humanity is sufficiently loved by its builders and by its client who delegated it, and we are also knowing that there is a trillion-dollar media presence based on manipulating our opinion of what we like. The awareness of 'life' in things comes by creating a deep connection between the observer or used with the thing, that realization comes from the interrelation of physiology with instinct, which we can choose to ignore it, but we probably can't change it.

Alexander's test called "self the mirror" asks: which of the two things he tested would owe more clearly to his self? Here we have to visualize all our personality, our strengths and weaknesses, our humanity, our feelings, our potential and our life experiences as they are. Alexander discovered that more than 80% of people chose the thing that represented a degree is higher than life, which was previously calculated by other objective measures. Therefore, we can dispense with these arithmetic operations and simply ask this question about reflection of ourselves. This test succeeds in pulling us away from the opinions and preferences we learned from the outside, that which does not correspond to what emanates deeply from within our being.

The lessons could we learn from modern architecture that to connect us in the centrism that the design of building depend on evidence-based design which allows architects to assess design in its various forms, to know whether it will contribute to human well-being, and this will make his choices well thought out It is more likely to push and direct the design towards its most adaptive final form. We know the outcome will be more adaptable as long as we check every intermediate stage for advanced design. The other aspect of evidence-based design is making use of criticism feedback. In practice, adaptive design is the result of iterations. Each step is examined by increasing or decreasing human welfare as a guide. This is a process that does not use a mathematical formula and does not conform to any abstract rules or images. And here the design adapts through repetition, checked by physiological indicators for each step of the process.

In conclusion, the effect of modernism which has no base that the simplified forms ignore the humanity of humans, even though they are still loved by people before the architects who evaluate them on artistic

grounds, but formal purity and simplicity do not mean something for its users, and ordinary people did not fall into the games of intellectual architects, we still see a degree of complexity organized when humans build themselves as they are slum housing, which may be less than optimally organized than is the opposite formal design.

References

Eberhard, John P. *Brain Landscape: The Coexistence of Neuroscience and Architecture*. New York: Oxford University Press, 2009.

Gazzaniga, Michael S. "Arts, Brains, and Cognition." *Neuron* 60, no. 3 (2008): 412–415. <https://doi.org/10.1016/j.neuron.2008.10.019/>.

Al-Zrigat, Zaid M. "The Impact of Globalization on Neoliberal Architecture: How Modern Architecture Has Become a Tool for Control and Compliance." *Journal of Civil and Environmental Engineering* 10 (2020): 350. <https://doi.org/10.37421/jcce.2020.10.350/>.

Curtis, William J. R. *Modern Architecture Since 1900*. 3rd ed. London: Phaidon Press, 1987.

Fraser, Murray. *A Global History of Architecture for an Age of Globalization*. London: Routledge, 2019.

Salingaros, Nikos A. *A Companion to Christopher Alexander's "The Phenomenon of Life – The Nature of Order, Book 1."* With contributions by Christopher Alexander, Zaheer Allam, Michael Carey, Peter Eisenman, Léon Krier, Kenneth G. Masden, Michael W. Mehaffy, and Edward O. Wilson. San Francisco: Sustasis Press, 2014.

1.10 From Intention to Communication

By Guru Prasath R G

Buildings are intended to be viewed, traversed, and lived in by people, but theoreticians and practitioners of architecture have rarely thought deeply about human nature and why and how it needs to be taken seriously when designing buildings and urban areas. – Gordon H.Orians



While surfing on the internet, I found this interesting interior of the building with words in different languages scripted on all the walls. When I further went into it, it was a pavilion built for the Arizona University, to promote engagement among people from different countries. I was curious to know, why was it done. The answers amazed me. It was the unique words each specific to the language of the specific country, which were encrypted on the walls, that made students from different countries, find the words of their and share the happiness with their community. It changed the place vibrant. That leads me to question architecture.

Architecture often becomes the product of the client's needs – placing the bedrooms and bathrooms and infusion of the architect's creativity – playing with the walls, roofs, and floors. But why does not architecture be a product of 'humans' as their generic client? Most of the architects do talk about nature in architecture, placing a roof garden or the green facade, but do they talk about humans, as evolved mammals, with their perceptual systems, as the product of nature? So, what does architecture

need to know about the human as a generic client?

The findings in neuroscience say, we, humans see the world as an animal does. We share more commonalities with the animals. Animal brains are wired to prioritize processing some objects. These animals have multiple unconscious tendencies and behaviors. As a part of animal habitat, humans also have these 'unconscious' behaviors that govern their responses to their environments. These unconscious behaviors, which come through experiences, forms 'cognition'. So, the sense of aesthetics, which we observe, is at the core of human cognition. For example, it is not the beauty of the door that forms the aesthetics of the building, but how we enter and exit the door forms it. It is not the object that makes the architecture, but the interaction with these objects makes architecture. So the architects need to understand the interactions of humans with the built environment.

There is research that proves, high ceiling evokes the sense of creative thinking and the low ceiling evokes logical thinking in people. There are findings that the color, 'pink' calms down people in rage or anger. Building architecture does have these characteristics to interact with the humans with their form, color, and texture to which the brain architecture can respond. Also, architecture is a tool to communicate with humans. So how should this product of communication be made? What is the process of making such a tool of communication?

Everything grows out of the purpose and experience and it suits the built environment too. The purpose and the experience that space serves to people, should define the space. The purpose and the story, the building carries within it, make profound human connections. The intention of building the space is more important than space itself. The architects should craft the intention of the building which itself crafts the building. Building with intention will intend to serve the intent. The intentional design reinforces the purpose and the experience of the people over the space. For example, the offices in Silicon Valley are made with a low ceiling as they work on more logical works. The pink-colored prisoner cell calms down the prisoner with desperation. So it is the intention of the building which makes the architecture of the building. This intention should shape the building, which is shaped by human cognition.

1.11 Could we re-imagine architecture as a cognitive condition/space/source that makes us nature-centric by default?

By Subrata Sarkar

Yes, architects, artists, engineers, historians, linguists, neuroscientists, philosophers, policy makers or any other disciplinarians can work collaboratively. They can rethink, re-imagine and recreate architecture as a perceptual instrument that can build a hyper-complex hierarchical system, a structural concept of deep ecology. Why shouldn't we dig the upper soil of architectural intelligence and find the internal one, in this artificial intelligence era? Shouldn't we focus, touch and refine the internal structure, the core reason of cognition using our soft-algorithmic-hand?

Adolf Loos: "If we find a mound six feet long and three feet wide in the forests, formed into a pyramid, shaped by a shovel, we become serious and something says, "someone lies buried here"... Now that is architecture."

Why shouldn't imagine "that" logically and put "that" on the table, which is standing on the transparent floor of data visualization and deep neural network. To examine that "that", we have to observe from different perspective and that is why we have to enter from different doors of the room of cognition, which is walled by perceptual senses. While examining, if we want to bring the light and rain of current context on the table, we can keep the roof of imagination open to the sky. We can create the flexible window so that dynamics of challenging issues can flow in the room.

Human being perceives data, imagines, understands, and acquires knowledge then produce intelligence. Why not architectural perception can produce intelligence?

Howard Gardner's theory of multiple intelligence can be the goal of multi-disciplinary approach, to produce human intelligence. If human being simulates others human beings naturally and can learn new behavior why not multi-disciplinarians put significant technique in to the architecture, so that human can decode it. Architecture can produce different types

of knowledge by providing information of various process oriented techniques such as spatial orientation, music composition, kinesthetic behavior, nature's generative behavior, language formation, mathematical and geometrical composition, interactive or participatory technique and socio-cultural-setting creation techniques.

Human brain is semi-independent but flexible. Architectural perception can manufacture infinitive flexibility in thinking as well as imagination to feed hallucination and creativity. How physical architecture could manufacture flexibility?

Architecture speaks. It has a language. People learns language from it. In linguistic approach, architecture can speaks about freedom of speech. Again flexibility in cognitive space. This flexible language or index or sign can be represented as various periods of human civilization. The flexible periodization can be used to reproduce knowledge by gamifying participatory space. Amalgamation of different activity in participatory space or condition creates a experience-learn-create cultural setting. How this type of cultural setting can be a therapy for people who are neurologically disordered? In this perspective, architectural design can be a method for neuroplasticity.

Infinity is also a mathematical expression of language. A visual infinitive perception can speak about infinitive knowledge through architectural design.

Hyper-complex hierarchical system is a module of nature, if multi-disciplinarians try to find a deep network. It can be re-imagined by putting nature in the centre. It can be shaped by architectural design and put nature into work for nature. Deep ecology can be recreated by absorbing enormous data.

Most judgmental thing in architecture is aesthetics which can re-imagined. Aesthetics can be designed for user group or society or a civilization or an epoch. Neuro-aesthetics can be the core logic of all human creation. It can give new experience of a space. If architectural intelligence collides with neuro-aesthetics human being can have experience that can be unimagined before. It can trigger a new way of looking architecture.

Architecture with intelligence can solve neurological kind challenging issues. It can recreate new typology of architectural space or condition or source with receiving the current epoch of art or it can initiate a new art of epoch.

1.12 Experience: Process, Trajectory, and Expression – Traversing through memories in/of spaces and the message architecture gives children

By Haripriya Panakkal

One of my most cherished experiences, when speaking about architectural spaces, was in my ancestral house, where we spent most of our holidays. My grandfather renovated the house once the family started growing and the spaces that were structurally renovated the most were the kitchen, dining hall and the living space. He intentionally did so, just because he wanted to accommodate his whole family and spend his time together with them. I wasn't aware of it back then but those spaces somehow united us and brought us closer as a family.

These initial memories I have of such spaces made me feel something and made me conscious of them. I believe that it was by design and not chance, because of the dialogue between the people and the built environment. The form alone wouldn't have made me feel the same way if I had not been with my family. Without those spaces, I wouldn't have the memories I cherish now and even though home is where your family is, I cannot help but feel indebted to those subtle nuances of architecture which made our family closer.

We feel different in different spaces. Certain spaces make us feel relieved, be it in nature or form, but does that mean that they have a presence even when we don't occupy or perceive it? Is this presence independent of our existence? When I look back at it now, I wonder if I would still have similar memories without those spaces, or conversely, if I did not, would the ingenuity of those spaces get negated?

How brain activity gets shaped by architecture and its impact on children

I was once hospitalised in a government hospital in Kerala for a few weeks when I was a child. I wasn't having any pain or discomfort until I got admitted to the hospital. Days before the surgery, my mother and I started to get mentally disturbed being in those spaces filled with people who

were sick and in pain, and that in turn, started to reflect in our physical health. These hospitals were built not considering the mental health and well being of the people but mostly on efficiency, budget and such factors, which made me question: how can it be efficient when a hospital, intended to heal people, makes them unquestionably uncomfortable? As a child, in these extreme situations, I got time to introspect and realize how immensely architecture can affect brain activity which manifests in our physical health.

On the other hand, my ancestral home shaped my implicit memory, instilling the importance of family, unity and belonging. In those times, we went outdoors a lot, naked feet on the ground feeling the earth, enjoying nature as our playground, which made me realise the importance of the environment and my part in it. It's disheartening to see how the children these days don't have many open spaces to play in the urban areas, being unaware of the joys of nature which may facilitate anthropocentrism.

The issues that we are facing right now, be it social, political or environmental, by focusing on children, by creating spaces that provide exposure which instills skills for them to tackle those issues growing up, we can create a sustainable future by initiating a positive change within children. This is why child responsive design is crucial, not just in the form of products designed by adults for the children, but by involving them in the process. Because the eyes through which they perceive the world are not tampered and are of unlimited possibilities. To not take advantage of such a resource would be nothing short of foolhardiness.

Experience of modern architecture shaping the way we think

If we look at most of the malls, commercial and office buildings in Cochin, for example, it sells us an image of progress and development. The spatial quality provides us comfortable temperatures temporarily in the tropical climate using artificial cooling devices, mimicking the images of developed nations which more or less, deceives people who do not have sufficient knowledge about the environment and the destruction these buildings leave behind. The general public seldom imagines how much it affects the environment and damages, in a very real sense, their own lifeblood. It's deeply concerning how this very ignorance can lead to such destructive spaces being encouraged.

Modern architecture itself comprises different types. What's important is, regardless of time, knowing the consequences of destructive space and to avoid them. When whole generations grow up seeing images of destruction, renovation, and the apparent 'modernisation' they will most likely lose the sense of identity and belonging to their roots and become increasingly unsatisfied without constant change. There is a great deal of responsibility for the planners and designers to stay true to the design, create a sense of community and belonging, and respect the natural environment because it's the only sustainable way to progress. It's through mistakes that we learn and that too is part of the process.

When we work closely with a place, it derives its building from a foundation of respect without compromising long term efficiency. If we design mindfully, the intention will surely manifest itself producing spaces that would shape the thinking of not just its current inhabitants but generations to follow as well. To create spaces that are inclusive of all, across the many facets of the civilisation, embracing the diverse nature of the existence, preserving our cultural heritage while at the same time being open to change, and creating a sense of belonging for all, is definitely a worthy endeavour. Working together with the old and the new, to use the present for a better future, to sustain life on this planet especially when we know that innovation can make this dream a reality is sure to appeal to the general public, which slowly but surely, becoming more and more educated.

1.13 Architecture as a Biological Continuum

By Devaki Kesh

A space – natural or fabricated by man – makes you feel something and makes you think something. While we grow, we interact with a variety of people around us, and in many ways, these interactions mould us into who we become. In the same way, we are constantly interacting with the environment which surrounds us, maybe not verbally, but through our senses of sight, smell, touch, and so on. The snippets of information and experiences that our brain captures will inevitably shape our cognitive reasoning. The question is what does it do to you and what is it supposed to be doing to you?

Nature is a process. Life is a process. A child is a process. Even an adult is inherently a process, though many a time we are forced to behave like a product. Sometimes, modern buildings too behave like a product – as something that you view and see and appreciate for its external beauty, but cannot mingle with or engage with. As architects, we have the power to create buildings and design spaces – shouldn't these spaces also behave like a process that allows the process of life and not be designed as an object? Now the question is how can this be done? How can we make buildings in such a way that children and adults can make friends with the built environment?

Indigenizing Architecture

In our society, we have the so-called 'tribals' who are 'backward', less in number – 'marginalized' sections of the society. But are they? They know how to build their own houses. They know how to make their own food. They worship the forest and they know that their essence of life comes from the forest. They are not madmen consciously or subconsciously destroying the planet and now trying to bandage up the damage caused through words like 'sustainability'. Their houses and community spaces are in peaceful co-existence with the environment. They may not even know the word 'sustainability', and yet they practice it because it is at the core of their being. A child growing up in the forest knows who he really is – a part of the larger fabric. There is no ego or mindless hunger

for power over everything else. Now the question is, can we learn from whom we refer to as 'backward' and implement their forwardness? Can we rewire ourselves to create buildings and spaces that co-exist and not dominate?

The homogenization of human cultures has happened in many ways due to the homogenization of materials used in architecture. Can the same codes and manuals for building construction be applied in every geography? The shift in how modern architecture makes us feel has a lot to do with the shift in the materials that are used for building from local to global. If you consider the example of the bung house they are made of mud and straw. Assamese houses are made of bamboo. A Kerala house is made of timber. For years we have used locally available materials. In the place of all these houses, stamps of concrete-glass boxes will not make any sense – for the climate or for the people. They sit like a manicured product that is complete and separate from nature. Whereas indigenous houses though man-made are more like nature-made-through-man.

Imperfection and Impermanence in architecture, a sense of playing and a sense of carving out unique spaces – a sense of possibilities of addition and subtraction – a sense of something that is incomplete or being moulded. Why, when all of nature can build their own homes – ants, honeybees, birds – only today's human beings cannot. Why does man's architecture cause harm to the surroundings and not nature's architecture? When did man become apart from nature and not a part of nature? Rewiring our anthropocentric brains is poles apart from being nature-centric by default.

Maybe it is okay that our world got scarred. Maybe it is still not too bad that many of us are not inherently bio-centric. Maybe we have done dreadful things as a civilization through our buildings towards our only common mother Nature. But maybe, just maybe, it's not too late. The rewiring itself could be a process instilled in us by our mother. Rewiring our brains and hearts could be the only atonement. So, let's take that first step, and the rest will follow from there.

1.14 The experience of Modern Architecture shaping our thoughts

By Parul Shelar

Since the beginning of evolution, Architecture has played a major role in building people and their lifestyles. From the huts constructed in the stone age to protect humans from the harsh weather and wild to the expanding city edges in the 21st century, the developing spaces have an impact on our psychological well-being and social behaviour. Research in this area has proposed that the built forms can affect our mood and well-being and that specialized cells in the hippocampal region of our brains are attuned to the geometry and arrangement of the spaces we inhabit¹. The advancement of Architecture styles has evolved and is still changing concerning the future needs and preferences of people. Don Ruggles, a prominent architect in Denver, Colorado believes three components make for a “beautiful” building: form, use, and beauty². While the aesthetics can be subjective, but the connection with space would leave a positive impact on the users physiologically.

The buildings provide us a sense of belonging with the help of their architectural elements. A series of patterns and characteristics in the built form helps the human mind to associate with it and identify it subconsciously to adapt to it. The ease and comfort one develops due to the familiarity of a space can also be the reason to trigger thoughts in the brain. People relate emotions and psychological links to modern architecture, and the experience through these spaces affects our chain of thoughts. A dark stuffy room with no appropriate ventilation would give you a feeling of suffocation, but a bright sunny room with good airflow through it would be responsible for your mood and working efficiency.

Much research has taken place to analyze the effect of Modern architecture on user behaviour. Patterns formed in the structural form are responsible to evoke a physiological reaction. Unpredictability and chaos can bring in negative impacts, a pattern recognition deals with the subconscious.

Modern Architecture has brought innovative construction techniques and a variety of material palettes. The creative use of this architectural style has provided infrastructure with a high sense of user experience and inventive forms. The shift in lifestyle has brought in the low maintenance materials in demand. These materials also contribute to the sustainability and good health of the users. The trend in architecture nowadays is promoting people to live minimalistic, clutter-free with innovative façade design to bring in daylight and ventilation and introducing more green spaces indoors as well as on the urban scale. Such fashions allow professionals to explore more ideas to bring in innovative solutions to give design and human health equal priority. A healthy user experience will surely lead to positivity in these spaces. As said that the spaces influence human's mood and thought process because each building typology has its functional aspect and imperative use to assist create an optimal mood, sense of coherence, security, and meaning. The combination of the natural and man-made structure needs understanding how the micro-climate created affects people and impacts one's behaviour.

The built form addresses the social and psychological conduct of its end users which is conveyed to the society in the form of thoughtful designs. Buildings designed with a thoughtful interpretation of it with its surroundings and how that design will impact the bystanders is also something that needs to be investigated. Conventionally, Architecture parallelly reflects culture, senses, and expressions. Modern architecture has also stated the significance of sustainability in the market. More and more people are influenced to be responsible towards the planet through the building as it one of the major sectors in increasing carbon emission. A good design cultivates healthy residents, which in return also promotes good social cohesion, working efficiency, security, and cognition. Concluding, we as architects of the future should be responsible towards the people and environment by bringing in designs and shaping society to become a better place.

References

- 1 Ricci, Natalie. The Psychological Impact of Architectural Design. CMC Senior Theses, 1767. Claremont McKenna College, 2018.
https://scholarship.claremont.edu/cmc_theses/1767/.
- 2 The Centre of Conscious Design. Website. Accessed August 28, 2025. <https://theccd.org/>.

2.0 Architectural Precedents

2.1 Looking Beyond Architecture

By Aishwarya Mahadevan

Taking up precedents in architecture is a widespread practice that is encouraged in both, the academic and professional fields. Precedents become important because they serve as living examples of what works and what doesn't. But one essential aspect that we often turn a blind eye to is the time and the context in which this precedent is set. More often than not, architecture is seen to capitalize on and be highly sensitive to the zeitgeist. It thus becomes crucial to be mindful of what designers' extract from these precedents. To be wooed by a genius precedent and apply it to the age and time in which it doesn't belong can be a grave mistake in the creative field of architecture. The grandeur of the Taj Mahal, the openness of IIM Bangalore, and the material solidity of Therme Vals are fitted in the time of royalty, cooler climate, and abundance of resources.

Moreover, an architectural precedent establishes a certain convention that hardens with time. The consequence of this is the shaping of notions that we associate to spaces, the repetition of which makes it harder to break away from and innovate. It dangerously borderlines an 'ideal quality' or 'the way to be'. We start linking grandness to monumentality, richness to the exclusiveness of the material, and darkness to dingy spaces. It also deepens the sense of an architectural language or type of spatial quality associated with a typology of buildings. A quality of diffused light and openness is associated with museums whereas tall height and dim-lit quality to churches. The argument is not about the validity of the trend that it sets, but of the fact that it does. This challenges the process of creation and innovation because of certain preconceived notions that we draw from architectural precedents.

Using an architectural precedent means identifying a piece of work as an ideal / a guide or a well-suited example that I believe could lead to

idolizing these pieces of work and forming strong attachments. We do so with many architects and their works today and in the process of discussing these precedents, it sets a level of expectation that many try to achieve. This often restricts their thought process and provokes them to, consciously or subconsciously, duplicate some aspects of this much-celebrated work.

So, where do we borrow precedents from?

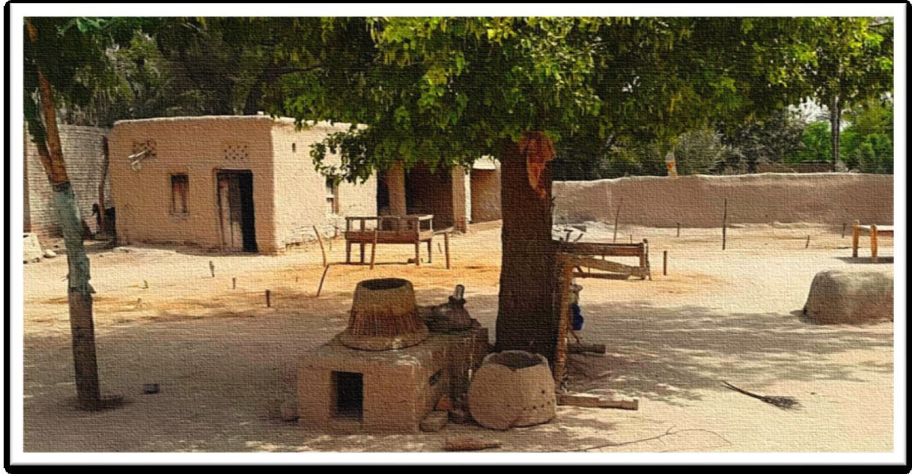
Architecture is an interdisciplinary field that has the potential to tap into aspects of sociology, ecology, biology, art and aesthetics, storytelling, technology, construction, building energy and systems, planning, landscaping, etc. For an architect to be well versed in all these areas of expertise is unrealistic. Taking precedents from these fields not only provides an opportunity to enrich the architectural product but also broadens the scope of innovation. Applying a technological precedent like the power to efficiently analyze data and produce results through artificial intelligence in the process of data-heavy urban planning in architecture can result in the generation of smart cities. Storytelling too can offer an interesting insight into the powerful act of narrating lives in imagined environments. A precedent of weaving lives into fictional worlds provides for a great opportunity to challenge the status quo and fearlessly create an alternate world for the future generation.

Another intangible yet essential aspect of architecture is its spatial quality. The primary challenge that architecture poses is the inability to experience a space before building it. Can we then borrow precedents from our own life? Precedents can surely lie in the way humans behave and inhabit an environment daily. They give us clues on how a user's behavior might change with changes in aspects of form and volume to aspects of materiality and tactility. This is not limited to within a building but must expand to open spaces. If not through personal experiences and observations, one can always see this captured and documented through other media like movies, TV shows, documentaries, and social media. How influencers use urban spaces to create content can give us clues about the way we engage with open spaces in the city. The frames and architectural sets that are used in movies can convey certain relationships of people to spaces.

There is so much scope in using lived experiences and lived behaviors as precedents to then apply to a physical medium. The need for architectural precedents is being replaced by software and technology that allows us to test new structural systems and their performance, and produce 3D renders and views to test material composition and aesthetics. Moreover, the main advantage of referring to precedents outside architecture is their open-endedness. They can't directly transform into a physical space but become important learnings / applications in the process of designing and creating. They are fresh and broad in nature that opens up doors to larger, undefined territories rather than defined spatial qualities.

2.2 Memories of my Village

By Khurram Ashraf and Zeba Nisar



For someone who has gone from being a rural to an urban dweller, the recollection of their childhood days is quite important. Days spent in the village as a child bring back memories of those idyllic times when social cohesion and environmental sustainability reigned supreme. The notion of sociality could be seen in the conduct, traditions, and daily lives of the rural people which I had observed in my young age. In those days, the change of seasons in the village was not as harsh as it is today in urban regions where we have mechanized our homes to create comfort. Traditional cottages with strong mud walls and thatched roofs were a joy to stay in at any time of year. The courtyard of the house used to be the center of the abode, where all of the family members spent the majority of their time. Under the canopy of a common big sky, the courtyard of a village house is a testament to the relationships being lived, anxieties being discussed, and happiness being shared. The courtyard normally had a tree to give shade during the day, and the handpump for water delivery was positioned beneath this tree. The hand pump was an essential component of a traditional dwelling since it was also utilized by the village's less fortunate residents to obtain water. The area is analogous to a newspaper spot where the daily news of the village was discussed and opinions were exchanged. This spot is a rudimentary

version of club houses available in the modern contemporary society, the ideal gathering spot for females of that decade. I can still smell the fresh air combined with the aromas of cuisine being prepared in the open kitchens of the houses in the air during old days. The open kitchens in the corner of a courtyard with those mud Chulha's (traditional mud stoves) around which the family used to sit, particularly the women and children, was a topic of fascination. The freedom to visit any house to enjoy the platter and togetherness still fascinates me, which our children are devoid of. The Mohalla, which was a social group of people who stood with one other in times of happiness, prosperity, and pain, was a cluster of dwellings closely interwoven in a hamlet. The functions were held in each other's precincts on mutual agreement, with no money spent on banquet hall reservations. The meal, which was served in earthenware's, was a delight. Since, agriculture was the people's primary occupation, houses used to include annexes, which might be attached to the house or may be away from it was known as 'Ghers,' where animals and farming gears could be stored. Gher used to have perimeter walls, with a single or double room required for asset protection. The open space used to have natural ground with large trees where we as children learned to climb and jump as. The afternoon was spent under these shady trees playing stones, telling stories, cooking meals in miniature pots, organizing doll marriages, and so on. These moments of cooperation unwittingly instilled attributes such as leadership, increased oration, social cohesiveness, sharing, and caring, all of which aided us in our future pursuits. The school was another space where students carried their own mats for sitting, the teachers served as mentors and the only educational guide who had a significant impact on our lives. The teacher then was a real GURU for the students. The school with minimal infrastructure was again a place of social gathering for us where we enjoyed our lessons and sports. We didn't have cameras back then, but the memories of those wonderful days are still vivid in my mind, and I can still sense their true spirit, which makes me nostalgic. One day, I revisited my village, which had changed so much that it was difficult for me to locate the spaces where I had spent my childhood. Mud dwellings and Ghers have been replaced by Pucca houses with moderate infrastructure. The village's open areas are being turned into constructed masses in order to accommodate the rising population density. The old village roadways, which were meant for carts

and pedestrians, are now clogged with carts, tractors, bikes, rikshaws, and vehicles, making it difficult to get around. Commercial spaces that used to be part of houses have now sprouted into little shopping complexes that are a rudimentary type of urban complexes. People who used to congregate in a public location now prefer to relax in their own homes. My heart was contemplating while witnessing all of this as the picture of my village has changed dramatically, which is both wonderful and awful. Family, friends, neighbors, and the surroundings have all changed for the better, but the warmth of those mud cottages, the savory food cooked on mud Chulha, and the social dialogue in the Mohalla have been lost somewhere in the pucca houses.

2.3 To Evolve, Is The Only Precedence

By Asmita Patwardhan



Figures: Mansions of Chettinad as a precedent v/s Use of precedent in modern context. Source: Author

Precedents, in general, are templates from a past event, against which a contemporaneous event is matched, looking for an answer that is closest to being all-encompassing. In the context of law, citing precedents, accrues evidence which supports the premise over time and consolidates it. In science, precedents are dictates that are blindly followed, until proven wrong by concrete substantiation. In architecture, precedents are linked to experiential and cultural interpretation shaped by time and context and several embedded, case specific variables.

If we examine two buildings, that were designed to act as annex buildings to existing historical contexts, then The Jewish Museum, Berlin and Louvre Pyramid, Paris are precedents paving the way for theoretically conjugating the past with the present wherein, the past is unforgotten but the present is powerful in its storytelling and narrative quality. In his own words Libeskind talks about bringing together the seemingly contradictory aspects of the memorial, showcasing a tragic past while creating a dynamic landmark belonging to a city of the future. While I M Pei talks about breaking architectural traditions of the past and becoming a landmark commemorating the work of our time.

On dissecting these two examples, the parallels that can be drawn are in terms of climate responsiveness, materiality and technological advancements. Yet it is distinctly clear that experientially the two are diametrically opposite. While the Pyramid dynamically elevates the experiential quality of the existing traditional setting, in case of the Jewish Museum, it kinetically transposes the visitor from the present to the past actuating intangible emotions like loss and tragedy. Hence one can conclude that precedents are subjective because human perception of history is based on the morality and objectivity of individuals based on their own standpoints, value systems and perceptions.

The second question that comes to mind, in the context of architecture is, can we suggest that isolated intangible elements can become precedents. For example, let's take 'aspiration' as a standalone element, can it be considered as a precedent and will it translate into viable solutions across time? In the case of heritage architecture, monuments and buildings were constructed out of the aspiration of individuals. Yet every aspiration did not result in creating edifices of cultural worth and value is what we know.

Buildings, for example, that came up in the early 1900's, were somebody's 'aspiration'. The typologies were relevant and important to those times, attempts were made consciously to integrate more than one style of architecture which was "modern" and "concurrent" then. There were no limitations in expression and hence digression from vernacular or indigenous style is seen. Those structures today, are considered to have both cultural value and worth hence the need for their preservation is justified. If we fast forward to 2021, starting a new a project today, is still somebody's 'aspiration', attempts are still made to consciously to integrate more than one style of architecture, especially the need to employ "modern" and "concurrent" practices and choices to manage time and investment. Yet we reject most commonplace contemporary buildings and criticize them for not being sustainable and not recognising users' needs and lacking identity.

Buildings that connect with us, follow an aesthetic language, their spaces embrace activities happening within them, workmanship and human ingenuity involved in their creation personalizes the output, their context

is sewn to their presence seamlessly and there is a timeless quality to their existence, which is notably seen in heritage of value all over the world. As against this ubiquitous architecture, that we see all around us today, is also birthed by aspiration, is reared by technological support but is bereft of language proficiency. Spaces are in a disconnect with the activities happening within them, workmanship and human ingenuity is limited by the myopic vision of decision makers and their creation is an exercise of mass-produced replication. Identity is lost, context is forgotten, climate takes a back seat and affordance is assessed only in terms of money. Aspiration alone, cannot be a precedent because the process of converting the aspiration into reality is what adds worth and value to architecture. Further if worth and value become precedents then how do we address issues pertaining to need and choice? Thus, in the realm of architecture isolated elements cannot be precedents and neither can they be templates to plan the future.

Fascinated by Chettiar architecture, of Tamil Nādu (TN), India, I 'aspired' to integrate this style in designing my home several thousand kilometres away in another state in India. Architectural elements like columns, windows and Atthangudi (TN) tiles, extracted from mansions of Karaikudi (TN), and bought from warehouses there, which sell these as piecemeal objects were transported to be fitted in a far-off context. The Chettiar community architectural style, is an eclectic fusion of traditional Chettiar, South East Asian and Art Deco style. The Chettiars have laid a solid precedent of employing material from parts that were far away from their towns and have managed to weave them seamlessly into their own style turning the mansions into highly aesthetic, functional, practicable homes. My humble exercise to do the same did result in creating experientially similar spaces but material behaviour was the area wherein I faltered in spite of using traditional construction practices. Natural materials, like humans, are temperamental and challenging to handle. Precedents sounding simple on paper are practically a huge challenge to accomplish.

In the words of Robert Frost, when you sum up life you learn just one truth; life goes on. Parallely, in architecture if we look at precedents, there is just one that says, 'architecture evolves'. It evolves, with changing human endeavour and time. In conclusion, one can say that when it comes to architecture, precedents cannot always be as simple as an answer,

neither can they lay a path to get to an answer, or have the foresight to decide if one true answer exists.

References

ArchDaily. "AD Classics: Le Grand Louvre / I.M. Pei." *ArchDaily*, November 18, 2010. Accessed August 28, 2025. <https://www.archdaily.com/88705/ad-classics-le-grande-louvre-i-m-pei/>. ArchDaily

Dickinson, Elizabeth Evitts. "Louvre Pyramid: The Folly That Became a Triumph." *Architect*, April 19, 2017. Accessed August 28, 2025. https://www.architectmagazine.com/awards/aia-awards/louvre-pyramid-the-folly-that-became-a-triumph_o/.

2.4 Sri Harmandir Sahib – An Architectural Precedent for Gurudwaras Across the World

By Sanbeer Singh Ranhotra

What do we first think of when we hear the word 'precedent'? An earlier action which serves as an example for the times to come? Perhaps, that is how many individuals look at precedents. However, in architecture, it goes without saying that precedents are a conglomeration of magnificent structures built over a period of time which act as a beacon for the builders and designers of the future. There can be architectural precedents, definitely. But can there be a 'precedent' alone? Something so powerful, magnificent and captivating to the eye that it sets the tone for future structures? Let me shed light on one such architectural marvel.

Sri Harmandir Sahib at Amritsar, which a layman likes to refer to as the 'Golden Temple' is a structure which can elevate human experience to a whole new level. It just needs beholding. Architecture enthusiasts really keep staring when they see the temple in person. However, is the glory of this temple a mere product of its gold gilding alone? I think not.



Photo courtesy: bombayjules.blogspot.in

Let us have a look at some of the fundamental architectural facets of Sri Harmandir Sahib:

- Sri Harmandir Sahib is built on a 67 sq. feet podium which sits at the centre of the Sarovar (holy water tank). The temple itself is only 40.5 sq. feet in terms of carpet area, with a door on all four sides. The temple sits in the centre – because Sikh philosophy preaches the world to be a vast, unforgiving and unassailable ocean. The location of the temple in the middle of the Sarovar symbolizes the origin of Nirgun and Sargun i.e., the spiritual and temporal realms of human existence. Those who cross the ocean are the ones who are exalted. Reaching the temple's sanctum sanctorum is therefore depicted as a successful human journey in its entirety.
- The abode of God, Harmandir Sahib, has four entrances, welcoming people from all lifestyles without any distinction based on caste, color, creed, sex or religion. Each of the entrances leads people down a set of stairs. This is unique to Sri Harmandir Sahib. No place of worship around the world can account for a message of humility to reach the abode of God like Darbar Sahib does. Generally, places of worship are situated at a level above the surroundings. Harmandir Sahib, however, is built below its surroundings. The message given by this architectural design is simple – one must be humble to attain God, and one must shun egotism at God's house.
- Sri Harmandir Sahib has a bridge connecting the marbled parikrama (walkway) to the sanctum sanctorum. At the beginning of this causeway stands the magnificent Darshani Deodi – which is an extravagant gate. Here, devotees take a big step inside to enter the bridge – symbolising a spiritual leap of faith and submission to the Guru.



Photo courtesy: Singh Station

These are not even a fraction of the architectural complexities which one can find at Sri Harmandir Sahib. However, they are crucial to our theme of 'precedents', because today, many Gurudwaras across not just India, but around the world are based on the template provided by the Golden Temple. I am from Shillong, Meghalaya. The Sikh population here is of a few thousands. Yet, our Gurudwara follows one fundamental approach of Sri Harmandir Sahib. And that is of devotees descending down a flight of stairs.

Similarly, every major Gurudwara in the world has a sarovar, which is a holy tank of water. All these Gurudwaras draw their inspiration from Sri Harmandir Sahib. Some Gurudwaras have four entrances. Almost every one of them has a magnificent gate resembling the Darshani Deodi.

So, Sri Harmandir Sahib is not a standalone or isolated work of architecture. It has influenced an entire community of people to build their places of worship keeping in mind at least one aspect of their centre of faith. In that respect, Sri Harmandir Sahib acts as an architectural precedent for Sikhs across the world.

Sri Harmandir Sahib has been the sole template according to which Sikh places of worship across the world have been built. Its influence is unparalleled, much like its beauty and grandeur. For eons to come, the temple will continue guiding the Sikh community on how they should go about pursuing architecture. For Sikhs, there is no precedent greater than that laid by Sri Harmandir Sahib.

The shrine displays influences of different architectural styles, including the Indo-Islamic Mughal architecture and the Hindu Rajput architecture. For India, Harmandir Sahib is a beacon of tolerance, coexistence and respect for all cultures. India is a country like no other. Indian architecture is formidable. But that is true for as long as we hold on to our collective might as a nation. Sri Harmandir Sahib is a structure of faith and spirituality that can awaken our nation's soul. Its message of plurality and rebellion is eternal, provided we have an ear to listen with and a mind to imbibe.

2.5 Precedence in Architecture

By Sasha Rana

There is precedence involved in the analysis, which makes it a reference for development of furnished designs.

Precedence is a previous action taken and is the proof of why a subject or an object is superior as a result of thorough comparisons, controversies and a mixture of qualitative and quantitative analysis. In frequent and generic cases, subjects which undergo extensive study tend to develop positively with due time.

In terms of architecture, the evolution is multi dimensional as well as spatial. In a specific range of time, we've looked at eras with heavy ornamentation and learned to appreciate geometric designs and planarity simultaneously. However, the opinions and perspectives of every individual may vary. Hence coming to the conclusion that precedence is subjective and this is a never ending argument of if precedence in architecture could really exist.

This brings us to the question on whether or not precedence is the answer to architecture. Precedence cannot be the answer.

Architecture is an expansive and broad subject where somehow amalgamations with various streams bring alternative results. This hereby ensures that the one does not start out from the same starting line as all architects do and hence the growth of an architect is across all platforms. That being considered, architects with different talents pursue what their field of expertise is.

Contrary to this, architects with a vision tend to stand out. Their designs, their expressions, thought processes are a few things which help us in the segregation itself.

The similar funda is applied to architecture too. The Hyderabad structure which houses the National Fisheries Development Board by Frank Gehry and the City of Arts and Sciences by Santiago Calatrava can be compared and analysed since the structures try to bring

mimetic architecture and abstract a sea creature, respectively. The representation, the material marriage and the sense of aestheticism is extremely different. However, in the case of the Fish-shaped building, it is a housing of the Board and in the case of the City of Arts and Sciences, we see the topography being near an aquatic body. We tend to give more importance to the City of Arts and Science because of the aesthetic and planning factor of it. Therefore, in this case we have a preceding structure which is observable on an international scale.

We see precedence with time too. In the above comparison, the Hyderabad fish was built in 2012 whereas the City of Arts and Science was built in 2005. In this scenario, the structure built before seems more advanced in terms of construction than the fish. The preceding structure in this case, being the City of Arts and Science again.

Coming to the distinction between classes of both the structures, we can see that the City of Arts and Sciences is superior in the user profile, strata of people, and design development that takes place in this case. Here, we have the same preceding structure again.

In this situation, there has been a comparative study between the two as there is a base that exists to compare.

Another example of this would be vernacular and modern architecture. Vernacular architecture gave birth to critical regionalism which in turn helps us in a thorough analysis of site and material and leads to being user friendly and sustainable. However, modern buildings tend to cater to the increasing population and global warming because of the material palette.

These comparative studies help us understand that with time one can lose the indignity of architecture and deprive one from the simple yet efficient walks of life.

Precedence is not only affiliated with the subject but the people who study it too. A few observations that are noteworthy are the increasing toxicity in the field and the low rates of success in the coming generations. The inherent respect for the profession is being deteriorated by constantly confusing architects with engineers. Precedence also lies with the fact that architects building spaces for the people is a democratic

moment and hereby, the religion of architecture should never be tainted by professions that seem meagre.

The plethora of thoughts that run through an architect's mind should never be undermined. The precedence of architects in the space creation field is something which is in a very small proportion. The tsunami of problems that might arrive soon are, ecological collapse, overpopulation, economical crisis etc. would be hitting the public soon. As architects it is our responsibility to deal with them and bring order to the chaos.

2.6 Precedent (and Palimpsest)

By Namrata Dewanjee

A precedent can be described as an example or rule to authorize or justify a subsequent act of the same or an analogous kind. It can act as a convention or a standard that scaffolds the argument presented. Architecture, like all forms of art, is not devoid of the weight of historicity. The built environment today has been shaped by layers of conscious or unconscious use of precedents.

The choice of precedents is far from neutral. The weight of conformity and history risks the built environment into an endless cycle of self-referentiality or worse, an assembly-line of “starchitecture”. One can never completely peel off the layers of context of time, space, or culture from architecture – thereby making the critical analysis of the precedent a necessity.

Take for example, the Parthenon – a building that has been precedent to countless works of architecture. The Parthenon was a pagan temple built by the Greeks in celebration of their strong cultural emphasis on mathematical rationality. The Lincoln Memorial built in the early 20th century in Greek Revival style imitated the form and geometry of the Athenian temple – the ornamental language of the Parthenon was directly translated into the American monument. The frieze of the Parthenon with carvings depicting the Athenian victories and pagan myths had been mutated into decorative carvings of bald eagles that symbolized the values of the new democracy. The revival style was characterized by the sudden consciousness of history that was brought about by Napoleon’s achievements. He, as a military leader of a France that dominated most of continental Europe, demonstrated that it was possible to inscribe oneself in history in one’s own lifetime. This possibility and access to history, in turn, inspired neoclassical and revivalist architects like Sir John Soane and Karl Friedrich Schinkel. The buildings that were built in said styles, used Classical buildings as merely an ocular-centric precedent and duplicated the ornamental language and organizational syntax without critical analysis.

Le Corbusier, the Modernist architect used Classical architecture as precedent as well. Instead of duplication and transcription of the Classical language, he critically analyzed the elements of the historic buildings. The promenade architecturale, for instance, was inspired by the processional route to the Acropolis. By the time the construction of Villa Savoye reached completion, Corbusier's architectural promenade evoked not just the route to the Athenian city-centre, but also the Labyrinth of Daedalus and "Law of Meander". This layered the understanding of the architectural space with a synthetic vision crafted by critical curation of precedents. Corbusier, in the words of David Rifkin, practised a misinterpretation or misprision of precedents.¹

Harold Bloom, in his 1973 book, *Anxiety of Influence*, described the psychological struggle of aspiring creators to overcome the anxiety posed by the influence of their antecedents. The book described the risk of one's work reading as derivative or too closely resembling the precedent it referred to. Bloom prescribes six "revisionary ratios": Clinamen (poetic misreading), Tessera (completion of the original text), Kenosis (a movement toward discontinuity with the precursor), Daemonization (to generalize the uniqueness of the earlier work), Askesis (separation of the present poet from the precursor) and Apophrades (deliberateness that creates the uncanny effect that the precursor's work seems to be derivative of the present poet)². Although Bloom had theorized these revisions for poets, they can be applied to architecture's relationship to precedents too.

Peter Eisenman's House II is another example of the use of Bloom's revisionary ratios, namely clinamen. There are unmistakable parallels that can be drawn between Casa del Fascio by Terragni and the architectural experiment that is House II. Eisenman appropriated one specific image, out of many published by Quadrante 35 in 1936. The image shows the main façade of Casa del Fascio framing a view of Lake Como with the mountains in the distance. That image, however, was a fabrication. The lake was not visible from this view. Terragni's doctoring of the image allowed the reader to gauge the relationship between Casa del Fascio and its precedent – the Parthenon. Terragni, reportedly, modelled the upper-story loggias on the spaces between the peripheral columns and cella wall of the Athenian temple¹. Peter Eisenman's House II, could also be

read as an example of Bloom's daemonization. The house breaks away from the context, both political and geographic, of Casa del Fascio and looks beyond it and into Terragni's precedent. The location of House II is atop a hill and the rugged landscape of the Vermont site. It immediately places one on the hill of the Acropolis. House II and the Parthenon are both sculptures on hills. The house has two support systems – one of columns, the other of walls. This excessive structural treatment forces new readings (or new parallels to be drawn). The Parthenon was a stone monument crafted in the image of wood – the redundancy of the structure speaks volumes of its relationship with its Etruscan precedent.³ “In this redundancy, an architectural sign is created: each system's function is to signify its lack of function”, Peter Eisenman says of his work. Most of architecture consists of palimpsest of precedents across time and space. The Vitruvian Hut influenced the Etruscan Temple of Jupiter, which in turn served as precedent to Classical temples. Palladio brought the temple to the residence and stripped the precedent of its material and cultural context. This radical act of misprision changed the precedent it referenced as well. Eliot, in his essay *Tradition and The Individual Talent* says “The difference between the present and the past is that the conscious present is an awareness of the past in a way and to an extent that past's awareness of itself cannot show.”⁴ Perception of the past is affected greatly by its use as a precedent for the present.

The past, by the virtue of being used as precedent, has been subjected to a Deleuzian multiplicity. This clinical taking apart of the precedent makes one question the fate of architecture – is all act of building a metaphor for the ship of Theseus? “Can the legacy of our cities today be preserved without using them as frames of reference, maintaining their integrity while developing our eagerness for novelty”?⁵ Precedents enable the built environment to exist beyond its immediate context. The critical swerving of the precedent is in itself a continuous narrative that will, in time, distort the perception of chronology and space. The use of precedents, therefore, becomes an act of critically engaging with the built environment, be it for appropriation or adoration.

References

- 1 Rifkind, David. "Misprision of Precedent: Design as Creative Misreading." *Journal of Architectural Education* (1984–)64, no. 2 (2011): 66–75. <http://www.jstor.org/stable/41318779/>.
- 2 Bloom, Harold. *The Anxiety of Influence*. New York: Oxford University Press, 1973.
- 3 Fletcher, Banister, and J. C. Palmes. *Sir Banister Fletcher's A History of Architecture*. London: Athlone Press, 1975.
- 4 Eliot, T. S. "Tradition and the Individual Talent." *The Egoist* 6, no. 4 (1919): 54–55.
- 5 Moneo, Rafael. "Seeking the Significance of Today's Architecture." *Log*, no. 44 (2018): 35–44. <https://www.jstor.org/stable/26588503/>

2.7 'Architectural Precedents' – are they the only answers to architectural design today?

By Ieshika Singh

The architectural design process is one of the most unique creative realms, where precedents are a valuable tool for initiating ideas and concepts. There are innumerable precedents available today, for us to take inspiration and create designs for a new future. But are precedents the only solutions? They are not always the conclusion to our every design problem, one may use them as a learning, as a foundation on which new ideas and principles could be laid. They can also be used as intangible experiences guiding the new emerging forms today or they could simply be looked at as fallacies which should not be repeated.

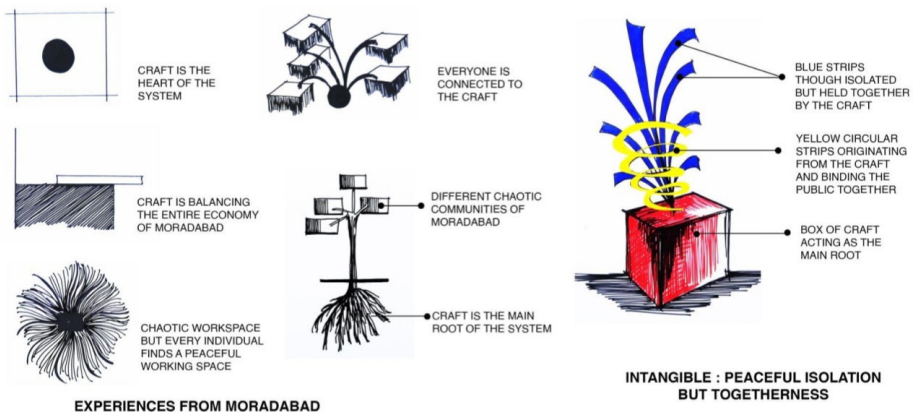
Architectural Precedents are varied across disciplines. It is not necessary that a historic building will always be regarded as a true example of a precedent. Precedents may be an art form, a craft, a lifestyle or just an uncanny experience.

Meera wanted to amaze the world through her intangible approach to design. She had just one desire; to incorporate all the adventures and experiences her heart went through in a single cube. Yes, a cube! That was all she had. This dates back to her educational trip to Moradabad. For the first time, away from the chaos of Delhi traffic, she was exposed to the narrow streets filled with blooming brass craft. Her eyes glowed witnessing the extravagant skill of the craftsmen, creating marvellous pieces of beauty, but simultaneously her heart shrunk when she saw their living and working conditions.

They worked, cooked and slept in the same space. Their lives were the same as the bhatti (used to melt the brass), burning with passion during the day to prepare the best brass piece but cold and dark at night. No exposure to a healthy environment, teaching centres where they could learn and the exhibition centres where the world could witness their startling skills. Meera, was assigned a design project to create a healthy work-live space which could be a solution to all the problems the people in Moradabad faced, but only given a 80m² site to design the same.

She interviewed a dozen of craftsmen, deeply engrossed in their life stories and their living conditions, she was able to find experiences and situations that aided her to come up with an intangible design solution. She used them as precedents for her ideas. Eventually, all the feelings of chaos, togetherness, and craft as the sole root of the people's lives gave form to a tree of cubes. Every cube was meant for a specific function ranging from craft and residential to even teaching / learning centres with spaces for exhibition.

For Meera, the true meaning of architectural precedent was a bit skewed but the most appropriate one. The experiences and learnings are subjective and so is the precedent. There were varied precedents present in the ingenious lanes of Moradabad, for Meera it were her unusual experiences which guided her imagination, for some it was the history of the space while for others it importance of brass craft. Every design was unique in its own way, nothing was a copy of the past. Hence, the design studio emerged to be the most unique one, exhibiting different ways of looking at architectural precedents.



Today, in the last twenty years, architects and even our architectural education has confused precedent study with architectural copying. Imitation and reproduction have become the roots of design. Today, the architecture books and journals have given way to an avalanche of online

material for architectural knowledge. Designers can find plans, sketches, and technical documents accompanied by an incalculable number of renders and photographs. This has opened doors to an unrestrained use of the works of the past and hindered the true potential of architecture.

Today, simulacra are used in architectural representation. Even though one takes inspiration and learnings from the precedents but uses simulacra (which Deleuze defines as “those systems in which different relates to different by means of difference itself. What is essential is that we find in these systems no prior identity, no internal resemblance.”) to represent the spaces which makes it look entirely different from copied spaces. So is it a way to run from the hashtag of architectural copying? Or are people actually incorporating learnings from the precedents and adding to the knowledge of this creative field which has the least regulation on copying. As a student of this field, It is difficult to question the same; whether imitating the works of the past has added to our knowledge or acts as an obstacle, because in our education system we are presented to this through an ironic word which is “architectural inspiration”.

Further Reading

Deleuze, Gilles. “Plato and the Simulacrum.” Translated by Rosalind Krauss. October 27 (Winter 1983): 45–56.
<https://doi.org/10.2307/778495/>.

2.8 Unfolding Patterns through Space and Time

By Saakshar Makhija

“New ideas must use old buildings” – Jane Jacobs

Architecture precedents are not limited to the built form. They encompass a plethora of notions that collectively make for guides in the design process. While in search of precedents, the question arises; is Precedent always an answer? Arguably so. As a designer, it is inherent to comprehend the patterns in society that shape our surroundings. While familiarizing with this language, it is through these existing patterns that a designer unravels the unknown. In such a case, one cannot observe a precedent in quarantine as the only study element. It is about gaining an understanding of the whole context encompassing it.

The search for a worthy precedent can only be in our past. It may range from being back in the day, dating back to a few years or even going to prehistoric times. Yet, it may fluctuate based on the conditions during the period. The advent of new technology and materials transposes this circumstance. Since the study of architectural precedents is an interdisciplinary one, it is not limited to the physical form or the spatial layout of the building. It is a synthesis of both tangible and intangible features. They together function as architecture precedents. How humans inhabit spaces articulates the non-physical characteristics that shape the layout. Furthermore, with both tectonics and technology advancing in architecture, the study of an architectural precedent is constantly evolving. Nonetheless, our focus should be on keeping the roots being the patterns unimpaired.

An intrinsic study using cognitive processes is integral to experience architecture. In my personal experience of moving to a new city of Vadodara, my interaction with spaces has been wholesome. The rather imperial city witnesses a rich heritage. It ranges from a macro-scale of an urban area to a micro-scale of Pol houses. The subjectiveness of how people behave in these spaces also holds value as an architectural precedent. With royalty imprinted in its past, this city embraces an eclectic style of architecture.

Wide streets and monumental buildings greet one at regular intervals. As a consequence, it forms a pattern in the urban realm. The colossal scale in itself is a precedent to what people experience through their lives. It is through the influence of architecture that the community is incorporated into the site context. The sensitivity of human perception enables them to desire what they see around them. In addition, the architecture becomes a medium of expression facilitating the whole process. Accordingly, in the design process of a residence in Vadodara, a client tends to express their inclination to have a grand entrance. They impulsively want to replicate the one they see in their surroundings. It is the formation of a pattern that varies with the requirement of varying levels of privacy.

Thus, an architect holds the responsibility of investigating the deep-rooted history. Besides, it is fundamental to assess evolution simultaneously.

In a similar vein, the landscape is an integral part of the city. The name – Vadodara derives from the Sanskrit word – ‘Vatodara’, meaning ‘in the heart of Banyan tree’. These veteran trees are flanked on both sides of the wide roads. Moreover, the old banyan trees are a metaphor for the embellishments in the city. So, the sensitivity towards nature cannot go unnoticed by the local people. It evokes the feeling of emotion in people. In the larger scheme of things, it performs as a tool for designing walkable streets. In a city so rich with natural heritage, the people tend to associate with the surrounding landscape. However, referring to the example of Copenhagen, the attachment of people to nature manifests as an architectural precedent. It forms a pattern that propagates with the ideology of the people located there.

By citing the examples above, one understands how the environment has plenty of precedents. But, do all architecture precedents need to be from architecture? Instead, we may redefine architecture as a collaborative program. It engages one through its physical or tangible features. On the other hand, innovation lies in the intent behind the same. This overall synthesis of an architectural program comes out as a form of expression. At the same time, the perception towards it is heterogeneous even if everyone looks at the same precedent. Besides, the interaction of one's senses, as well as the cognitive abilities, vary significantly. The

encounter between spaces and their inhabitants is both critical and complimentary. Nonetheless, it is subjective owing to the temporality in nature.

In the present day, with a technocentric approach, we are redefining architectural design strategies. However, there are underlying problems such as life in concrete jungles, climate change, urban heat island effect and more. Architects are in search of harnessing the power of designing spaces to accomplish the essence of architecture. Hence, a thorough analysis of architectural precedents can guide one to a more sustainable solution.

2.9 Precedents – A Base to Innovate

By Rhythm Dua

“Every artist was first an amateur” – Ralph Waldo Emerson

One of many stages, and indeed a very interesting stage, of designing an architectural project is the case study. It is a study of Architectural Precedents. Precedents are something that has already been done, which then serves as an example to justify or authorize or inspire for similar practice. Precedents exist in every phase of our lives, be it moral, design, legal, emotional, etc. Humans work and react according to what they have seen around them. Therefore, every experience acts as a precedent for us at every stage of life. As the above quote says that everyone is amateur at the beginning so examples and precedents help them create a database to help build a vision. They act as do's and don'ts or pros and cons data that gives an idea of what worked for whom in which situation.

In architecture, almost everything around us acts as a precedent. We use ancient and recent history to set guidelines and identify generic solutions to design problems that have been formulated in the past and are successful. The importance of history is far more than just names and dates as it sets a base for any new creation. Historical precedents are a source of enrichment for architects and not strict rules and regulations that have to be followed forever. Designing is a step-by-step process that involves conceptualization, idea formulation, techniques, and technology, practicality, and aesthetics. Precedents help us to understand these steps better but do not necessarily provide the solution for the current project. So, the notion that many believe, that precedents are the answer to all the doubts that arise while designing is not true. For example, the city Chandigarh, designed by Le Corbusier, is a precedent for all the urban planners as the workability of the design has proved to be successful in any and every way for years. But at the same time, the same techniques cannot be literally used for a problem of snow in Shimla or a flooding problem somewhere in Kerala.

Mostly the precedents that people use for their reference are of the eminent architects whose work has added meaning and value to the field of architecture. The amount of information and the kind of effort that is put in to create something meaningful becomes a great source of knowledge to create something new and increases the ability to generate new ideas. Precedents for a designer can be anything around us. Various design styles have evolved since the primitive eras which have been inspired by any and everything. Precedents in architecture don't necessarily have to be just another built structure. It can be anything that gives inspiration or justification for a design. For example, Biomimicry architecture is a style of design that is not just inspired by nature for aesthetics and sustainability, but also deeply analyses and uses the concepts in nature for construction strategies and innovation. Buildings like the Dancing House in Prague, by Frank Gehry and Vlado Milunic, or the Harp Nieuw Venne Bridge in the Netherlands, by Santiago Calatrava, are both inspired by dance and music respectively. The Sound of Chapel in Japan, by Ryuichi Ashizawa Architects, is not just a structure but a musical instrument itself. Situated near a lake, the wind travels into the building and flows over stainless steel wires that create beautiful harp-like sounds that change tone according to the wind. It is a beautiful example of how creatively the spaces are designed using precedents that is non-architectural, like the instrument Harp in the bridge in the Netherlands and the Sound of Chapel in Japan.

The similarity of ideas is a very common thing in creative fields. There is a thin line between copying ideas and getting inspired. If everyone in the architectural fraternity uses precedents as it is and starts to replicate ideas without innovation and originality, definitely there would be a time that everything would look similar. But thankfully, the designers, the clients, and the users are always looking for novelty. Humans tend to explore something new and that is why we humans as a race have evolved so much. Replicating an existing precedent can never be the perfect solution as every site is different and has its challenges. So even if something like this happens it is against the morality of the occupation. If every high-rise building in Mumbai starts to use each other's design as a precedent, the skyline of Mumbai will not be as beautiful and interesting as it is now. It would simply be a box with partitions instead of a varying hierarchy which is a statement of the global ambitions of the millions of people in the city.

Precedents provide us with stories, struggles, inspirations, and so many unsaid efforts and emotions that have been put behind creating something. Architectural precedents are like time travel machines that give people a chance to feel and understand a different era, be it the old monuments or our ancestral homes. They allow the future designers to widen their perspectives, challenge us to innovate and explore outside the limited vision and exposure that each one of us is confined in.

2.10 Inspiration Through the Eyes of the Beholder

By Alfiya Shaheen

Will architectural precedents always be architectural?

Architectural precedents have inspired and justified ideas for many designers and architects. Design knowledge is accumulated by an individual through their own experiences or by a precedent study of existing and often exemplary works of design. This knowledge, though originating from the same source, is often interpreted by each person differently. Interpretation can be often influenced by one's taste and an internalized set of values, principles, and ethics. Spaces and structures are in a way an extension of the designer. Inspiration comes in many forms and types and hence need not always be derived from a similar context to the end product.

Seeking out precedents

Nature for example has been a source of inspiration for many innovative human activities. From the design of Velcro to iconic structures like the Qatar National Museum that was inspired by the desert rose, a local flora, biological organisms have behaved as an important precedent to design. Biomimicry in architecture takes inspiration from the world around us and emulates them in terms of forms, systems, processes, material inspiration, and design. One may assume that this type of architecture may encourage designers to reproduce biological forms without extensive thought, rhyme, or reason, but in actuality, it is less about the form and more about scientifically studying the systems that govern the form of these biological organisms. A few examples of biomimetic architecture is the Beijing National Stadium in China which closely resembles an upturned nest, where the “twigs” are the outer steel frame that increases the amount of light entering the stadium with ETFE that provides both thermal and acoustic insulation. The Eiffel tower takes inspiration from the femur. The similar features between the structure and thigh bone help resist shear winds and provide structural stability.

Inspired from ancient shelters created by man, we see Tent structures.

These structures have evolved through the course of history as black tents which were created from camel skin by nomads to the present-day German pavilion at Expo '67 to the Millenium dome and various other pavilions and stadiums roofs. From using wooden or steel pegs to more evolved ways of strengthening the structure, like cables in tension or suspension, to make beautiful and embracing structures. Cables are the soul of these tensile structures, they come in different types, for instance, ridge-line cables, valley cables, stabilizing cables, and peripheral cables. Each of these functions to strengthen the tensile behavior of the material and although it may seem like even a single missing cable can cause structural instability, it remains strong and unlike an umbrella that has lost its rib, where just a gust of wind could make one question its existence.

Creativity has no bounds and so does innovation and inspiration. The concept of pneumatic structures had its origin from humble hot air balloons. These membrane structures are stabilized by pressure from compressed air. This air is kept at a pressure above normal atmospheric pressure to facilitate the carrying of loads within building elements. These structures are usually supported by a network of cables that provides a medium of support to the thin membrane. The Syracuse carrier dome is a sports stadium and is constructed from Teflon-coated fiberglass. The fabric is reinforced with cables and is bordered by a wide ring beam that encompasses the roof membrane.

Brainstorming

What if Kelps are upside-down, floating into the water and not underwater? Kelps and their roots called Holdfast, protect other aquatic species from any extreme conditions or even predators. They make up the underwater forests and create a microcosm of their own. Since they grow deep in the oceans and most of the time reach the surface of the water body, they are dense. This coastal organism makes an effort to keep climate change in control as well as maintain the ecological balance. They reduce the force of the tides and surges driven by storms and help in preventing erosion near shore.

The many features of this algae can be extracted to solve numerous water-related issues faced above land by humans. Climate change, rising

sea levels, floods, and tsunamis are a few examples of said issues. Can the idea of kelp solve these issues? Well, maybe not, but of course it is not impossible.

The inherent property of Kelp to stay upright is attributed to the combination of systems which includes each kelp leaf blade having a gas-filled pod and a holdfast that behaves like an anchor to the rootless algae.

We believe that systems similar to that of kelps can be added to the water surface and be allowed to float and grow into the water like an upside-down kelp. And amongst these kelp-like structures will be underwater pods that can function as a resilience shelter for those experiencing any harsh circumstances as mentioned earlier. Strong currents or aftershocks due to an earthquake could be cut off by these kelp-like elements to an extent and protect human lives. This way, we are not just alive but surviving through those unfortunate circumstances, in a more efficient and sustainable shelter. When ocean levels rise, the loss of land will push humans to encroach on the ocean. This could endanger the lives of aquatic flora and fauna. To live in harmony, we need to seek solutions from nature, as nature is the best teacher.

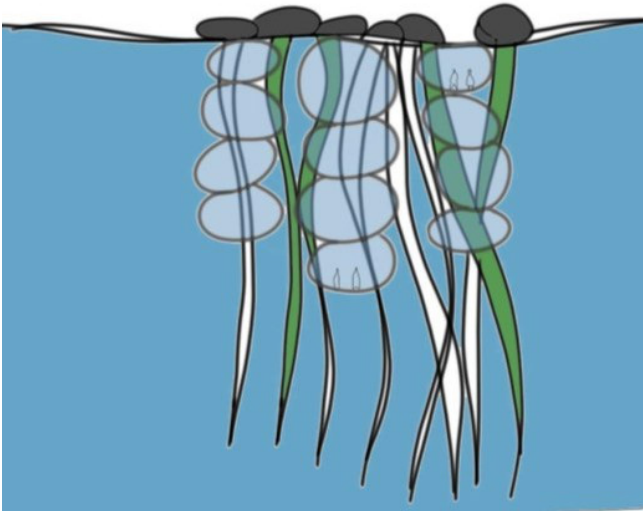


Figure 1: conceptual sketch

Conclusion

Imitation may be the sincerest form of flattery but architecture is a multidisciplinary field where inspiration can be found in the most mundane of objects. From the examples of different types of structures mentioned above, it is clear that architectural precedents need not be architecture. Original thinking and creativity are skills that are required for further sustainable innovation. Architectural precedents can thus be inspired from everyday objects and organisms that by the intent of nature constantly evolve and are some of the most efficient systems to exist in this world.

2.11 The who, what, why, when and how of Architectural Precedents

By Siong Vui Choong

Introduction

Studying Architectural Precedents have long been part of the education in many universities around the world. Some universities included Precedent studies in their Architectural Design courses, while those that do not, encourage students to take a completely liberal approach to design. There also seems to be a concern that studying architecture precedents will lead to limitations in design creativity. The purpose of this essay is to address these concerns and provide the reason that Architectural Precedents should be included in Architectural Education. Professional Architects should also include the studies of Architectural Precedents as part of their design process. For design inspirations, precedents do not always have to be architectural at all.

The first part of this essay will focus on what we can gain from the study of Architectural Precedents. The second part will discuss when to include Architectural Precedents in our design process. The third part provides an example of using past experiences of a historical events as precedents, which formed the basis of a great architecture project.

What can we learn from Architecture precedents?

Architectural Precedents should serve as a basis to improve our design skills. It was particularly useful for young architects to understand how other great architects design and how we can approach different types of space and building typologies. Young Architects will also benefit by observing architectural drawings and analysis of spaces from past work of architects they studied. For Professional Architects, it is also particularly useful if they move from one building typology to another or from one scale to another and etc. Studying what has been done by other architects, will enable us to understand the current best practice or exemplar in architecture and provide us with the basis to challenge existing boundaries. As Pablo Picasso famously quoted “Learn the rules like a pro, so you can break them like an artist.”

Generally speaking, when choosing architectural precedents, the following criteria should be taken into account:

- Program or brief
- Scale and Size
- Location and climate
- Client (who are they for)
- Architectural style or language
- Architect or Designer

Analysis of architectural precedents should include but not be limited to the following aspects:

- Context and siting
- Planning and Circulation
- Interior space and spatial experience
- Structure design and innovation and earthquake control
- Spatial Composition
- Form and Function
- Tectonic and Materiality
- Urban Design and neighborhood characteristics
- Daylighting and light control
- Climate control and innovative solutions
- Ecologically Sustainable Design

The following is an example of precedent studies clearly laid out on an A3 sheet. A precedent analysis is best represented by images, text, hand sketches, key plans, sections and elevations. Each of us will generate analysis that may vary from one person to another due to differences in the level of understanding or area of focus and personal interpretation, which will ultimately lead to different design solutions. Therefore, the concerns that it will lead to similarity in design is unfounded.

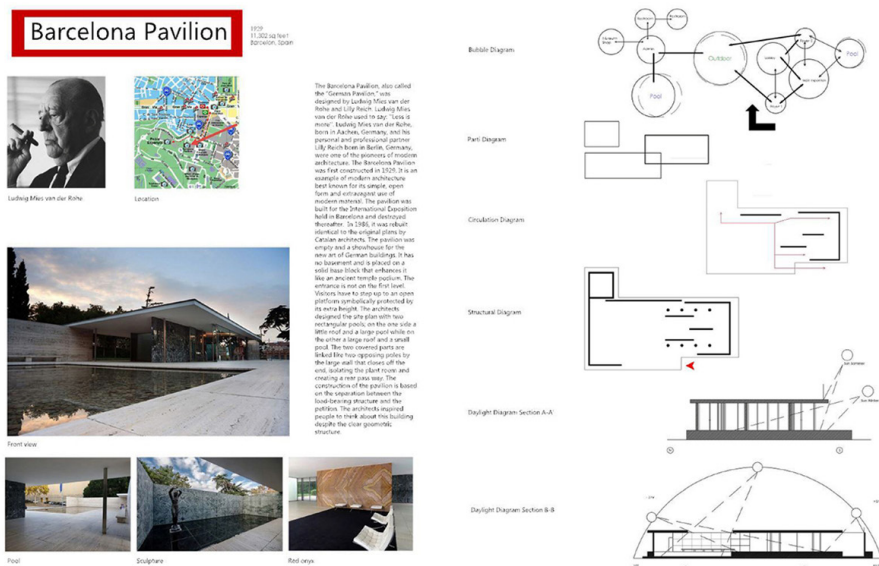


Fig. 1. Barcelona Pavilion from: "Studio Lesson 101: Architecture Precedents." Hawkins, Andrew, *Life of an architect*, 14 Jan. 2021. <https://www.lifeofanarchitect.com/studio-lessons-101-architectural-precedents/>. Accessed 8 Nov. 2021.

When do we conduct the study of Architecture Precedents?

One of the biggest concerns of introducing the studies of architectural precedents to students is that, students tended to copy directly from the architectural precedents and styles of great architects they studied, with little or no input of their own into the project.

Therefore, the question is when architecture precedents should play a role in the design process? Based on my personal experience, architectural precedents studies should only be started when the designer has conducted a thorough site analysis, the design brief has been understood fully and has an idea of what the outcome they wish to achieve. Once these tasks have been completed, the search for Architectural precedents shall commence.

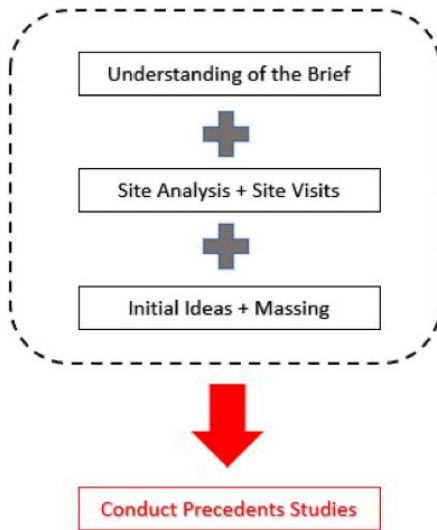


Fig. 2. Steps with conducting precedents studies, Siong Vui Choong

Architecture precedents should be carefully chosen according to scale, functions, programs, location and climate. It is worth noting that Architectural precedents should also be limited to a few well-analyzed precedents, rather than a large number of poorly analyzed precedents. Students and Architects should critically questions themselves the appropriateness of Architectural precedents selected.

When site analysis is conducted, aspects such as: climate, site and planning constraints, history and urban context, architectural characters and urban morphology should be carefully scrutinized. Full knowledge in these aspects will provide us the parameters for design, which is what sets every project apart, even if the same Architecture precedents is referred to – it is our understanding that matters.

Without understanding the brief and site analysis in full, students or architects who only initiated their design process after referring to architectural precedents for inspiration may suffer from the absence of a natural guiding language or concept throughout the design process, hence resulting in less likelihood to produce a compelling piece of architecture.

Must precedents always be architectural?

One of the easiest ways to find precedents is to identify what was on site by referring to historical maps, photos and plans from the archive. After all, local history plays an important part to define the architectural characters of local neighborhoods. Significant historical events which formed a part of collective memory from the past should precede over the history of other periods, particularly significant history which deals with life and death, sufferings and tragedy which evokes public memory.

Daniel Libeskind's Jewish Museum in Berlin, Germany is an example of drawing precedents from human experience and significant historical events. Visitors were presented with the opportunity to witness the Jewish experience through the continuity with German history, emigration from Germany and the Holocaust. Libeskind's zigzag building plan lead visitors through galleries, empty spaces and dead ends. The building tells the story that it is hard to escape as the slot openings are located high above the atrium space and beyond the reach of anyone. The building is less of a museum but instead a testament of Libeskind's skillful translation of human experience into an architectural composition.

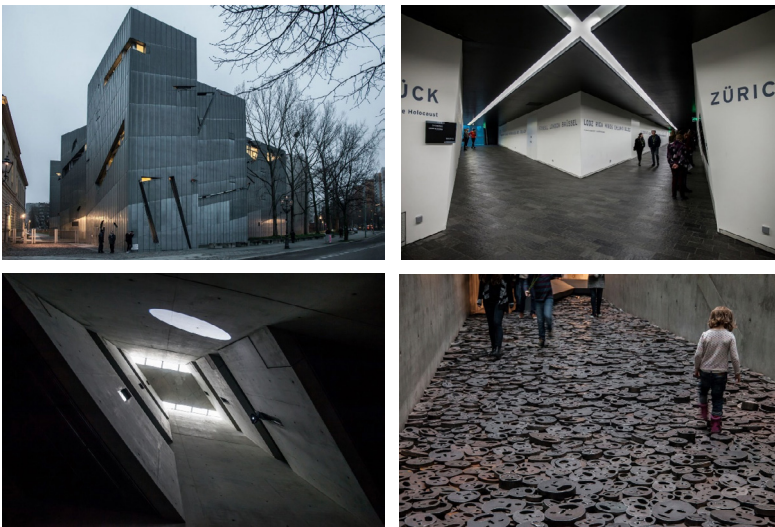


Fig. 3. Photographs of the Jewish Museum from: "Jewish Museum Berlin | Studio Libeskind". Denis Esakov. ARCH2O, <https://www.arch2o.com/jewish-museum-berlin-studio-libeskind/>, Accessed 8 Nov. 2021.

Conclusion

In conclusion, Architecture precedents studies is a good learning exercise for students and professionals, provided that it is properly studied and is relevant to the project the designer seeks to undertake. Architecture precedents research should be conducted only after the architect had a thorough understanding of the Brief, conducted site analysis and site visits and have an initial concept and massing. Architects should be made aware that their design process should not start by referring to architectural precedents for inspirations, as this tends to subtract from creativity. Precedents do not necessarily have to be architectural. History, experience and etc. have in the past been used as precedents which resulted in compelling works of architecture.

References

Callender, Jassen. *Architecture History and Theory in Reverse: From an Information Age to Eras of Meaning*. London: Routledge, 2017.

Clark, Roger H., and Michael Pause. *Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Partis*. 4th ed. Hoboken, NJ: Wiley, 2012.

Lin, Maya, with John McPhee, Michael Brenson, and William L. Fox. *Maya Lin: Typologies*. New York: Rizzoli International Publications, 2015.

Schneider, Bernhard. Daniel Libeskind: *Jewish Museum, Berlin*. Munich: Prestel Publishing Ltd., 1999.

3.0 Travel & Photography

3.1 Role of Traveling in Architectural Education and Learning Process

By Mohammad Arif Kamal

Introduction

Architecture and traveling always have a close and meaningful relationship. As architecture is a part of our ordinary environment it is difficult to overlook it, particularly assuming that it has recorded historical, social, cultural and artistic values. Traveling plays an important role in the architectural education. Traveling helps a student to know about relation between the environment and architecture. Most of the visible aspects in cultural landscape is generally built form and architecture of the place, which implies that how travelers will perceive to its termination with respect to the visual experiences and learning. The experience majorly depends on how appealing is the architecture of that location¹. While discussing about traveling in architecture it is not mainly focused in theoretical domain but also the cultural, social, artistic flows and the practical experiences². Today, traveling has become more demanding as it is something quite refreshing and has novel experiential learning. Thus, traveling has become a trend in understanding, learning and pursuing architectural education.

Traveling has foremost implications in the learning process and architectural curriculum. As probably the most outstanding forms of human creative and social articulation, architecture is both an art and science that can differ significantly starting with one culture to another and from one noteworthy period to another³. Indeed the best method for shuttling a design idea is to experience that space with regards to the specific time and culture. The most significant method for understanding the impact of culture on the development of architecture is to sink oneself within that particular culture. So, for this reason traveling plays an integral part in the architectural education. Some of the most compelling

pioneers and post-modernist architects, such as Le Corbusier and Tadao Ando, lacked formal architecture schooling and instead based their architectural education and their own empirical observations of cities and buildings while traveling abroad⁴.

Kay Bea Jones in the study 'Unpacking the Suitcase: Travel as Process and Paradigm in Constructing Architectural Knowledge' claimed the need to articulate a 'travel pedagogy' in order to resituate traveling from basic to professional developments of architectural recognition⁵. Jones likewise presents the historical traditions of traveling and architecture, and the impact it made on the education of an architect. This is a significant idea in light of the fact that architects were not only educated within the restricted dividers of a studio or atelier, but on the other hand were presented to the real works of ancient times and the contemporary indications of architecture through traveling and educational excursions. Traveling reveals innovative ideas and learning experience through physical, social, economic and climatic conditions. It also showcases varied cultures and traditions of different places, which are very important for the interpersonal and interdisciplinary skills of an architect.

Experiential Learning

As travelers opt to take specified routes and method of traveling to get a much better experience, researchers utilize explicit interpretative ideal models or techniques for exploration to comprehend the significance of their studies⁶. These techniques additionally assist the researcher with fostering a method of request and a way to comprehend the implications of the research. Kolb's experiential learning provides a theoretical framework to comprehend the pertinence and meaning of experiential learning while traveling. The first and foremost part in experiential learning cycle is the underlying exposure to the environment⁷. The core and the paramount part of the cycle is the conceptualization stage. Here the student interprets and sums up the occasions while simultaneously scrutinizing the significance of the learning experience. The last stage is the most critical because the student has the chance to change practices or thinking and apply these progressions to another situation. These progressions are intentionally planned and thus, the knowledge is subsequently transferred into substantial activities.

Conclusion

Therefore, traveling has an important role in the architectural education through excursions, which contribute to the growth of student's learning experience. The study trips are intended to acquaint the students of architecture with various aspects of the world. Therefore, it should be assessed academically and technically to achieve the desired result for the students. It shows that the two main features of architecture are visual perception and learning experience, which can also contribute to the complete knowledge of travellers. In summary, traveling should be considered as part of the architectural education and profession, which can make a significant contribution to the visual learning of an architect's learning experience depending on the needs, expectations and preferences.

References

- 1 Hudman, Lloyd E., and Richard H. Jackson. *Geography of Travel and Tourism*. Australia: Thomson/Delmar Learning, 2003. <https://www.worldcat.org/title/geography-of-travel-tourism/oclc/772907462/>.
- 2 Vukadinovic. "Architecture in Tourism." Master's thesis, 2011.
- 3 Nesbitt, Kate, ed. *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory, 1965–1995*. New York: Princeton Architectural Press, 1996.
- 4 Culver, L. D. *The Influence of Study and Travel Abroad on the Personal and Professional Development of Students in Architecture Design Programs*. 2011.
- 5 Traganou, Jilly, and Miodrag Mitrašinović. *Travel, Space, Architecture*. Burlington, VT: Ashgate, 2009.
- 6 Sayrs, Lois. *Review of InterViews: An Introduction to Qualitative Research Interviewing*, by Steinar Kvale. Thousand Oaks, CA: Sage Publications, 1996.
- 7 Montrose, L. "International Study and Experiential Learning: The Academic Context." *Frontiers: The Interdisciplinary Journal of Study Abroad* 8, no. 1 (2002): 1–15.

3.2 Can't unravel 'til you feel the gravel

By B R Mohan Shiva



Architecture speaks; would anyone ever disagree? But as it holds true for any form of 'conversation', a dialogue can only be fully complete when the listener is closely listening. And to fully listen, it is indispensable that every one of your senses, including that of your cognitive ability is called in for action.

As an observer standing beneath or amongst a built-form, there are simply too many elements or emotions that are constantly trying to communicate with you, be it the ever-changing play of light that guides your feet as much as your eyes, the easing or awing influence of the relative-scale of a structure, the use of colors that make you engage or disengage, or perhaps sometimes it goes beyond the physical, of that longing of the artisan who breathes from beneath the stuccowork, still waiting to be heard and acknowledged by none other than you.

It is no doubt a fact that today 'seeing a place' has become way easier than 'being in that place'. One might argue surely this isn't a bad thing? But for those who also look at the other side, that 'being' at any place you want to be has equally become more affordable today, it immediately opens up a whole new realm of discovery and learning that no form of media nor book can offer; particularly so for a student or yearner for building-science. It is probably fair to go as far as to say that your intellect can only gather as much tangible information as you choose to move about in this vast world of markedly distinct contexts!

Interestingly however, the art of building is as old as the human race and this serves as a significant reminder when you are on the country roads, for you realize that deep down within every villager you come across lies an innate architect. Although on the one hand you clearly notice the differences in construction styles between different geographical regions, on the other lies the strikingly common and human-need for a shelter, anywhere across the globe. As students of architecture and eventually practitioners, this realization that there exists an infinite array of wisdom that we must tap into even before hitting the books on the relatively recent phenomenon of institutionalized architecture can contribute immensely to one's outlook while traveling. For instance, this very cognizance can completely alter the transition speed of your chosen journeys, spicing up your mood for inquiry. All of a sudden, every little hut or even a simple open-well catches your eye, becoming an object of study and inspection. You begin to get away from the sealed enclosure of your car, you get comfortable talking to strangers as you are more curious now to know the why(s) and the how(s) and in turn learn to value the simple yet efficient use of materials. Exposing oneself to the local context in this manner can go a far distance in appreciating the subtleties in architectural marvels that you subsequently visit.

One of the most fascinating qualities that this domain of design rewards us with is the necessity and hence the ability to correlate ecology, geography, history and sociology through this all-encompassing lens that is architecture. Add to this the ever-mutating layer of technology and you are brought up against a full-course meal of contrasting flavors, and yet remarkably these co-exist in a harmonious equilibrium. Tasting each of them, one after the other, slowly and steadily, leaves you with a

high degree of insight and upliftment. The critic within you becomes more sensitive to situational constraints and limitations while new perspectives to one's own design philosophies also start to surface. Most often, architectural education leaves us with an illusive image of what designers must stand for. However, traveling helps in reinforcing the truth that design is purely a site-specific response to the people involved and the contextual demands. The more places or countries that you pay a visit to, the more you unlearn and relearn the design details that hold good only in unison with its context, which is critical for one's growth as a professional in this industry.

Traveling and only traveling can let you feel what the digital screen forbids you from experiencing, which is the building in the act of conversation, with the people and its surroundings. So, pick up your sketchbooks and ramp up your time outdoors with your feet on the gravel, for there maybe something right around the corner that was always waiting to spark up that conversation with you; all you need to do is spare that little time and become the listener!

3.3 A Travel that teaches!

By Prithvi Mahadevan

Travel has always been a part of my life and something that I aspire to keep in my life forever but photography is a passion that I adopted through much of my travels as a way of collecting souvenirs – you know minimalism. As much as traveling alone is a joy, traveling with someone else is joy multiplied.

One such experience of travel among many that I cherish is when I traveled as a teacher with my teacher – it was one of my most surreal experiences I have had in a long time. This trip was a part of 'Travel Themed Studio' that we run in our institution RVS CHENNAI where we take the first year on a theme based travel for their basic design and art studio subjects because what can teach better than a travel experience.

The experience of traveling with my students as a faculty and traveling with someone who inspires me and has taught me art was quite endearing. His name is Artist Koilpitchai Prabhakar a national award winning artist but humble and self aware as anyone can be. He inspires me to be a better teacher and I learnt so much through the trip just by observing him than I ever did in his classes. I visited many places through this trip but what stood out was this particular stretch of trekking we did in the forests of Nilgiris near Pachaiyar Dam. The image I share today is from that stretch, a surreal set of scenarios that presented itself between thick bushes as we passed through them. The climate was cloudy and there were single streaks of sunlight enlightening the space and there were the Nilgiris in the background watching us silently. As we walked on, through the bushes we saw a waterbody with crystal clear water and we could smell the earthy smells. Everyone was a tad bit excited and enthusiastic like there was some kind of magic in the air. As my great master says "art lies in observation and feeling of the space", we were all mesmerized by the beauty and calmness that the forest brought us. We walked on water and bushes to reach a stream that was the happiest to see us as the water gurgled on and we became children in the hands of mother earth. KP sir was the first one to get into the water and as all of us were washing our

feet, he bent over and washed his face, took out his bottle and caught hold of the water and started drinking it saying later that this water has all the medicinal properties of the Nilgiris. Seeing him and being inspired by him, I moved forward and my students followed me. This point in time brought all of us to ease and after that we saw the students catching fish in dupattas and then letting them free. I felt something had opened up in their brains that made them creative and open to newer experiences. I rediscovered my passion for photography here which I had lost a few years ago – I felt inspired.

The famous Architect PETER ZUMTHOR says “Time to me, I can only imagine so that it really means something to me – is the moment I live. I’m living, obviously, in this moment and I’m surrounded by things which come from the past. I myself am 99% history and if I look around I’m surrounded by things which have been made by people – they might not even live anymore, the trees outside are older than me and they will outlive me; I love this and this gives me a feeling of, I must be a part of something bigger.” For me travel is this exact feeling where I get to experience things that are bigger than me and I get to feel my truth through these experiences. Travel teaches me to be humble and accept experiences as they come by and not to hold on to one type of thinking. Travel keeps me grounded as I get to travel through the narratives of another person, another place and another culture. As Zumthor rightly quotes that he is 99% history, 99% of travel is also lived experiences that are enriching and inspiring. One of my greatest passions is photography and I see travel and photography as two sides of a coin. For me no trip is complete without some good photos to cherish. Even today I go back to my photos to relive the moments to get inspired and to miss those moments that are frozen in time.



3.4 Travelling with Vitruvius

By Georgina Chappel

Like human beings, architecture also speaks different languages, yet buildings within a settlement speak the same dialect of design.

As architects, we learn to speak the mother language of our urban fabric. Since architecture is 'people-centric', architectural language is borne out of culture, and architects are therefore obliged to speak to this culture, to appease and appeal to those for whom we are designing. Today, however, the bounds of this language are not so easily defined. It has become necessary to borrow design elements from different architectural languages to respond to global shifts, such as in environmental patterns, against which some design languages are better equipped. In this quest to broaden our architectural linguistics, we turn to travel: the opportunity to experience an untold variety of design first-hand, and to meet new buildings with an enriched vocabulary and depth of design methods and influence. Our loyal friend, ancient Roman architect and engineer Vitruvius, has only a single suitcase of architectural considerations with which to take on-board, to make your travel count.

A strong case could be made that architecture still ought to be founded on Vitruvius's simple statement: that buildings "must be built with due reference to durability, convenience, and beauty" to be considered wholly "architectural". I propose that, as architects, we allow ourselves the freedom to borrow successful aspects of any of the three ideals from whomsoever and wherever they emanate, thereby creatively merging the most effective version of each ideal. Potential shortcomings in a particular architectural language – in respect of stability, function, or aesthetics – perhaps may be solved through referencing another architectural dialect.

Stability: an essential lens through which to digest one's surroundings

"Are the buildings largely tectonic (read: of the air) or stereotomic (read: of the Earth), and why?" Simple questions of structural stability and engineering performance can help explain local construction techniques. Considering the rapid densification of cities, and our ever-changing

environmental conditions, the assumptions of structural requirements associated with a specific locus should always be addressed: there is always a range of options to render a building more robust. Perhaps we examine how skyscrapers in Dubai can handle the considerate forces which act upon them, in order to aid the structural failures of high-rise buildings in densely populated urban conglomerates such as Lagos and Hong Kong?

Function: architecture doesn't just speak, it gestures

Indeed, architecture is dynamic: it doesn't just speak a design language, but it shows one around. This is an ideal for which one has to 'peep through openings', both literally and figuratively: one can grasp the function of a building through understanding or imagining how different people engage with their spaces. The red epoxy-coated wrap – around front stoep of South African homes is the home to spilt morning coffee and Sunday afternoon braais, and Friday fish-day lunch wrapped in newspaper. The azure-tiled Moroccan doorways are thresholds between the earthly and the heavenly: a symbol of respite from the heat and dust within the tight and interlocked derbs of ancient ksars. Moreover, in a Dutch town, one could hardly forget to allocate space for bicycles; in New York, for coat racks at the neatly face-bricked entrances to radiator-heated apartments. An acute awareness of architectural function can enhance an understanding of architecture for social cohesion in our communities.

Aesthetics: not just a pretty façade

When one considers an 'architectural trip', per se, one thinks of the Pantheon in Rome or Gaudí's marvellous delights in Barcelona. These are architectural masterpieces, but perhaps aesthetics can also be interpreted differently: try "seeing a World in a Grain of Sand and Heaven in a Wild Flower" as suggested by William Blake in his *Auguries of Innocence*. One can apply this to architecture: a sliver of delicate wrought-iron 'brookie lace' or an inch of plaster detail on structural columns, tells us about the hands who made it, opening an imaginative realm of possibility... and so, an 'architectural trip' can take one anywhere! This attitude invites one to look beyond the tourists, the cacophony, and

cosmopolitan chaos; rather delve into the micro-aesthetics of those spaces around us. As our architectural linguistics develop, we are more likely to find beauty in everyday design and unexpected places.

Travel is essential to becoming an architectural polyglot: being able to access a diverse range of architectural languages to inform new designs. Through travel, lessons in Vitruvius's three ideals can afford us a multi-faceted approach to design, which is paramount to solving, for example, environmental design issues. Therefore, we need no longer speak only one architectural language and suffer its inadequacies when merely a flight or a train away lies the possibility of developing this bank of architectural languages: an opportunity to augment our design minds towards designing for a better collective future.



Peeping through openings: windows of opportunity

3.5 The Passion

By Yashika Murali

Architecture is considered to be a multidisciplinary field with its branches flowing into all possible sectors, like writing, travel, photography, drawing, and much more. This means that architecture affects anything and everything. Now this connects us with travel. We must travel, to go through some kind of experience and journey in order to reach and explore the vast structures and spaces that reflect the place's history and future. This is what architects do, right? We have the urge to constantly explore and learn about the wonders that the world has in store for us. It gives us a feeling of accomplishment, a feeling of being connected to what we like.

Whenever we go to a new place, be it a city or a particular built space, or even meet new people in a cultural setting, we try to amalgamate with it and create an experience of our own, which defines us as an architect. Now, these experiences and observations are further used by us in designing our future buildings or spaces. These spaces will reflect what we have learnt from the places we have been to and how they have affected us.

Growing up, I had numerous travel experiences with my family. We invariably loved to travel and capture the beauty of space. We were always fascinated by the complex and appealing use of elements in the structures, whether it was the white, intricate marble details of the Taj Mahal or the use of stone and wood in katha kuni architecture. We also appreciated nature and how the built form was made to enhance its surroundings while also connecting to it. All these experiences inculcate a passion for architecture, buildings, and creating spaces for people. This led me to becoming an architect and exploring my passion for travel with the eyes of an architect. The way architects perceive space while travelling is far different than ordinary people. We are said to have a special pair of eyes that notice what others can't see, like the behind-storey of the materials used, the support required for the structure to stand, and why the leaning tower of Pisa is slant. Architectural travel has

ushered in a lot of new careers. We can now see architects working as tour guides, just so that others can learn more about the details that only architects can explain. Tourists seek unique dimensions to the place, and the architect serves that thirst.

I recall studying Himachali architecture in depth once, and getting in touch with one of the architects working on the style and learning a lot of background stories and specifics about it. I even got to experience the novelty of the style, and that's when I got even more interested in vernacular architecture and started designing my buildings accordingly.

We, as an architect or as a person, will always look for something new, something that our mind has never gone through, and then we simply start investigating each and every ingredient, capturing the feed and taking it all in, never allowing our architectural senses to shut off.

Nowadays, at a time when we are talking about universal design and sustainable design, we sure need to expand our horizons and look through all of our past and present to create a collective future. Travel and photography solve this. We can always start at a micro level by going through the countryside, capturing all the traditional techniques and how they are fused with the people and their culture, while also reaching a macro level to understand the overall character of architecture in a place.

The worlds of travel, architecture, and photography are the threads that can be well woven to create amazing encounters. Travel and capturing the character of a place can be accomplished at all levels as long as it makes us learn and apply the knowledge while also serving the community to create a better place.

3.6 Travel: The Gateway for a Global Architect

By Saisha Monga

“Consider the best way to learn about architecture and you most likely won’t come up with a series of online videos.” – Greg Pitcher, Architect’s Journal

The past two years have steered the world onto a technological path altogether that has its fair share of benefits but doesn’t come without drawbacks, especially pertaining to the field of architecture at both the institutional and professional levels.

Architecture, as a course, consists of a bulk of subjects outlined with a practical aspect, apart from the studio experience which is at the core of learning. The curriculum also includes a plethora of market surveys, field visits, and study trips exposing them to the pragmatic end of the professional spectrum. It also warms them up to the idea of learning on the go, through traveling extensively regardless of the distance.

Travel blogger and photographer Matthew Karsten believes “Investment in travel is an investment in yourself.” The vast possibilities allow you to break free from the confines of a limited purview and broaden your horizons.

Study trips are purpose-driven vacations aimed at scouting the man-made landscape rather than relaxing in the lap of nature. As novices still developing a sense of design thinking, it is the perfect opportunity to nurture it by experiencing the works of master architects in person. Even as a professional, the exposure is bound to break the fourth wall and fuel your creativity.

While the internet is a wonderful tool that exposes you to the architectural acumen of the world at the mere click of a button, it cannot make up for what you may learn by being physically present.

The first step in the travel experience is acknowledging the existence of a multitude of worlds within the one we know. Cities all over the world comprise the same set of structures – residential, institutional, hospitality, commercial and industrial, yet each city is astoundingly diverse from the

next one in terms of the architectural style, the construction techniques, technology used, and most importantly, the socio-cultural aspects.

On-site, there's a different ambiance altogether that allows you to step into the shoes of the architect and truly understand their thought process. Tour guides are usually locals who carry with them the wisdom of their ancestors who witnessed the construction firsthand, the stories and legends passed down generations. The historical aspect comes to life, providing an insight into the society, culture, traditions, materials, and technology available at the time of construction and how it impacted the design.

One such example is that of the Qutub Complex in Delhi. Having overthrown the Chauhans, their capital city of Mehrauli, underwent major changes at the hands of the Mamluk Dynasty beginning with the construction of a mosque. Only when you visit the site and observe closely will you realize that the 'kalash' and lotus motifs were in fact the plundered remains of the temples in the complex used in rebuilding. A look at the arches gives an insight into the predominant skills. While the use of arches in Islamic architecture was commonplace in the Middle East, it was a new concept in India. Unaware of the construction technique, the craftsmen here came up with their own method hence the corbelled arches interspersed with the true arches.

Experiencing the climate at the location reveals yet another aspect of the building design. Given that mechanized cooling and heating was not an option a century back, the micro and macro climate exerted a great deal of influence on the design process right from its orientation to climate-responsive techniques like fenestrations and overhangs. Sometimes, the site was chosen in a way to optimize the user comfort within the building. For instance, most Mughal Palaces in North India like the Red Fort were built along a waterbody to create a cooler microclimate contrasting the hot and humid weather up north. Other climate-responsive techniques include meticulously placed jaalis, chhajja overhangs, and extensive use of locally available stones like red sandstone.

While the tangible aspects are enough to turn the cogs in your brain, one of the most important aspects is to understand the user. Traveling allows

you to meet diverse groups of people, sensitizing you to their varied cultural, social, and ethnic backgrounds hence enabling you to gauge their needs and design with their comfort as the priority. It is also a great opportunity at expanding your network in terms of employers, peers, and clients.

All architects are responsible for designing a certain set of buildings, but it is only those who travel that hold the power to breathe life into their designs. They are master craftsmen capable of narrating a story through their design and construction complete with an introduction, setting, plot, and characters. To quote the medieval Muslim traveler Ibn Batuta who authored one of the most famous travel books, the *Rihlah*, “Traveling – it leaves you speechless, then turns you into a storyteller.”

3.7 Photographs are something we take, and something we leave behind on our travels

By Alannah Ferry

To see a photograph is to see a fragment of a place, a shard of pottery fallen from the full piece. It may be smooth, vibrant and give you clues about the destination, its age or its origin, but without all the shards together it cannot show the true form or the true scale of the piece. To travel, is to see the form in its actual scale, feel the texture, hear its sound and journey through the constructed vessel. There, you may take a fragment with you, and leave it for another explorer to find.

As architects, as explorers, as people, we must fill our pockets with places, with textures and sounds. So, we can sprinkle a trail around us, a sparkling road for the “searchers”, the “collectors” and the “stumble-up oners”.

A photograph is both the beginning and the end of a journey, a memory. But travelling is the process, the moulding of a memory and the carving of a connection with a place. Some places carve deeper than others, some break the mould and; more importantly, some mend it.

I first followed a photo when I was 15, I became a searcher. A house, a wall, and a hill that stared out to sea – called to me. It was the true home of my great grandmother in Donegal, whose family had been forced to move to another county in Ireland during the Ulster plantations. That summer I walked with my whole family to that hill – and we stood. We stared at the sea from there, for the first time, as if it were the last time, we would ever see such a beautiful place. Then, as a family – we understood.

The journey showed us what a photograph of that place never could – what it feels like to leave a place behind. If you don't travel, you don't collect, you don't remember – you imagine. Imagining is a form of exploring on its own, but for the searcher, the feeling is what's being found, not the fragment.

In Onil on the East coast of Spain, I felt the shade of olive trees trace across my skin, hot sand scald my soles and a warm wind wrap itself around my body as I wandered. This is but a memory, not a photograph. A camera cannot capture sensory stimulations. It can attempt to describe them to a collector, however, it will never provide them in a physical reality, like exploring a place can.

A collector is provoked by photographs. Photographs are scaleless, they are flat, they fit in your hand or in your pocket and are perfect for collecting. However, the collector simply uses them to represent the places they have been to. A place is an experience, its rounded, and inhabited. Its scale can only be carried by memory and connection, the ability to carry such weight comes from the growth you are provided with through travel.

The more you experience the scale of a city or building's architectural context, the more you perceive something from your own human perspective, not the perspective of a lens, or camera on a tripod. Travelling to a place, makes a photograph real – not an illusion. Then you can take photograph yourself – you've collected a place.

When travelling through a city's circuit, buildings release signals to the "stumble-up oners". Energy flows within people, who flow within places. On a journey to a new city, you may expect to feel the charge of the main attraction, the main photograph of the place, but the people make that place real. You hear their foreign voices echo through the chambers of their city ceramic, you stumble upon their community, how people live and work. You feel the material from their own lands and learn the limits to their location. This teaches you that you do not separate concept with social function. This close observation shows us what is essential to a community, and what may benefit our own. A camera cannot tell you this.

This sort of innovation, requires release from isolation, imagination and observation. A "stumble-up oner" learns this swiftly. You must simply be a part of it. You are at once escaping and being released on your journey. This sort of tangibility with a location, cannot be experienced digitally, it cannot be planned out and it cannot be photographed. This form of growth is rapid-expansion. It's the carving of a holistic connection, a civic

connection and a shift of perspective – this is travelling. You become an inhabitant for a period of time, in this new place. There – you search, you collect and you stumble upon. Then you return – with your photographs... Then the cycle begins again...

Where will you go next?

3.8 A Street Walk to Agatsya Lake

By Poonam Solanki

The Badami Chalukyan period (6th to 8th century AD) was an important period in the development of South Indian Temple Architecture. Chalukyas developed the chalukya or Vesara style of temple architecture that culminated under the Rastrakutas and the Hoysalas. Vesara is a blend of Nagara and Dravidian style of architecture.

Temples of the Badami Chalukyas can be divided into two stages:

1. The early rock cut and structural temple and caves at Aihole and Badami
2. The structural temples at Pattadakal

I visited Badami and Pattadakal, Karnataka, in 2019. The agenda of the visit was to document the settlement from architect's eye, including the amazing Bhootnath temple, Yellamma temple and Jamia Mosque.

The site has its own historical importance due to the presence of the Agatsya lake nearby. Bhootnath temple sits on East side of the lake whereas west side is Yellamma temple and Jamia Mosque. North side is the Lower and Upper Shivalaya and granaries, South side is the famous Badami caves. All these mesmerising structures and caves are facing Agatsya lake, and it is said that the horse shoe shape mountain range around has lots of herbs which drain off to the Agatsya lake during monsoon. It is said that bathing in the lake after that cures many of living beings' ailments.

The settlement which we studied starts from a chowk where a century old temple is located and ends at the Archaeological museum gate, the path of which apparently takes you to Agatsya lake and Bhootnath temple. This street is almost 350mts long. The temple from where the street begins, is a place where all women of the community above the age of twelve, get together for a ritual and procession of Lord Shiva. It is said that the ritual is done for the wellbeing and prosperity of the females who are considered as in-charge of the entire family's wellbeing. The archaeological museum

is a place, where community members get together for many purposes.

The street is very live in character since most of the household or routine activities are happening on street / outside the home (i.e. cleaning vessels, washing clothes, bathing, cooking etc.). One can find the interior of the houses are used for very less purposes like sleeping at night, dressing up, storage, parking, cattle space etc. The unique thing about the narrow streets is, it is throughout the day shaded by the settlement houses on both the sides, which makes the exterior comfortably barrable in summer as well. The streets get wider at few points which becomes a social gathering space in presence of a huge banayan or Pipal tree forming a chowk. Generally, this space has high plinth and a large tree in the centre or corner. This type of quality in the street break the mass and bring in light and breeze. The relationship between two houses adjacent to each other is like a twin-house concepts, we have in modern times. The walls are shared, material is saved at the same time social bond between two houses is stronger. The roof or the ceiling is either flat or sloping, with typical details of timber structural members and mud/lime flooring on top of it. The walls of the houses are very thick and generally made with sand stone, random rubble masonry (450-680 mm thick) with thick lime plaster, which protects the interior of the house from heat and creates ambient temperature. The houses are generally single floor with kitchen and few multipurpose rooms. Another unique feature of the street is plinths of the houses which is open on streets and called "Otta" with steps, kota stone covering the open drainage system can be seen throughout. Lot of pigs can be found in the surrounding due to the open drainage system. "Otta" of small, compact and beautiful houses can be used by everyone on street. Here, people sit, read, chat, sleep / rest as well as do their occupational work like carpentry, sewing.

All these flexibilities of the ancient / heritage settlement are getting a facelift. By the demand of the residents here the open drainage is getting covered by 100 mm thick concrete slab instead of removable 35 mm thick sand stone. The houses are constructed in frame R.C.C. frame structures instead of thick sand stone walls and load bearing structures with R.C.C. slabs instead of thick mud and timber slab. Streets are getting wider for vehicular access and parking instead of narrow shaded and comfortable streets.

If such so called up dation continues, chances of the entire charm of the heritage street can be lost.

Is there an architect's role to preserve and maintain the existing and come up with a submerging idea possible?



3.9 Majuli – The mighty Brahmaputra & the symbiotic relationship of human with nature

By Shreeya R Kanade

Majuli, the world's largest river island is situated in the heart of the river Brahmaputra in Assam & is a rare case of human habitation that coexists with the riverine island ecosystem. I had the wonderful opportunity to visit this place while pursuing my masters in urban design. Limited connectivity of island with the mainland has been its greatest strength as it has contributed in retaining the rich culture & traditional practices of arts & crafts hidden from the rest of the world. After reaching Jorhat in Assam you need to take a 45 minutes ferry ride to reach Kamlabari ghat, the only point of connect between the island & the mainland. The major commute on the island is still through its waterways & Brahmaputra & its tributaries are used as the medium of transport while all the major & minor roads of the subdivision are connected with waterways.

Majuli was a landform formed out of continuous depositions of sand due to the changing course of river Brahmaputra & its tributaries. Brahmaputra governs the life of the people in Majuli & provides bounties of nature to the inhabitants & very often ravages the island with massive devastations. Satras, the neo vaishnavait institutions that have originated here have further strengthened this coexistence. The river bank erosions in Majuli are caused due to instability of river course & the braided nature which keeps on changing their directions as per the topography. Hence, there has been change in the land parcels (chaporis) as per the shifting of the river course and also in the settlements as per the availability of the area for construction. The only native to the place is the rich flora & fauna due to its fertile floodplains & highly productive wetlands which have formed the ideal habitat for a variety of birds, fishes, trees, shrubs, herbs & aquatic plants which make Majuli the ecological hotspot of the area.

Settlements here are an essential element in cultural environment as they are mainly influenced by ecological factors. A typical house in majuli consists of a rectangular ground floor with inclined roof and chang-ghar (stilt house) to sustain during floods as they store the foods and other

essentials here. RCC houses (pucca) are rarely found in all the flood affected villages while there is some handful of pucca houses in non-affected villages. The people living here show a sustainable approach in their living & are content and satisfied in their way of living. I found few people dancing in the chang ghar & the reason was simply that they were satisfied & happy with their earnings which made them enjoy. Such is the contentment and satisfaction of the people irrespective of the number of problems they might be facing due to the unpredictable and vulnerable nature of the mighty Brahmaputra.

The economic structure of the place also complements to this simple way of living which is more self-consuming in terms of fulfilling basic needs & the notion of surplus or excessive revenue income is less. The occupations here are rooted with the traditional setups which are in tandem with nature, some of which include – fishing, handloom & weaving, pottery, mask & boat making & agriculture. But today due to the transformations & modernization people are also involved in few of the contemporary occupations such as hospitality, trading, dairy products, retail, wholesale & transportation.

These interactions with the outer world in addition to the flow of new ideas have brought in the urbanization to the island which has posed the utmost threat to its traditional cultural setup rooted in nature. Hence, holistic approach is needed towards conservation of the island which will lead towards a sustainable development by strengthening their existing practices. The aspirations of the people need to be responded in an analytical & rationalized manner in which the locals can be empowered with the courses or practices which are very much essential & rooted to the island which will surely make them proud off. One needs to establish the link from the past to the future for continuation of this wisdom & to appropriate its physical manifestations is the ideal way to understand the interconnectedness of the various aspects of life which has been one of the best examples of human inhabitation that symbiotically coexist with island ecosystem & its constantly fluctuating geography. This co-existence is reflected in all the spheres of life here ranging from the architectural practices to the everyday crafts to the performing arts to the architecture & the settlement patterns creating a whole in itself.



Image credits: PVPCoA, 1st year M.Arch urban design studio, Pune

3.10 Architectural Expeditions & Expressions

By Mahima Jagadeesh



Memories. We form memories in diverse ways, through our actions, words with the people we meet and most significantly, the places we visit. Travel is closely associated with memory. The advancements in technology have paved way to capture travel journeys through various methods such as pictures, photos, videos, sketches, paintings, doodling, writing a journal etc. However, travel experiences are widely captured through a Camera. The pictures are a beautiful reflection of the places we see through our eye. Quite often, we disregard the fact that the human body is blessed with the most natural camera which is the “Eye”. The concept of a camera is essentially originated inside of the eye.

It becomes essential to understand that what we see through the eye creates memory through cognition. Cognition is a term referring to the mental processes involved in gaining knowledge and comprehension. Thus, cognition translates to memory in the brain. Architecture and the

cognitive memories created through travel, channelizes the mind of the creator of the built structure and the traveler or observer into an oasis of awe and admiration. This is conceivable when the traveler reads the edifice with an open heart and not just captures with a technical camera. Unfortunately, most of us are victims of camera and mobiles to create memories which do not hold value as much as one can experience a place thoroughly with all their five senses. We have become vulnerable and dependent.

Without traveling, Architecture is merely academic and narrow learning process. Through travel, one can explore the architectural character and comprehend the cultural context in which they're built in. Architectural works/buildings are to be experienced in a way where one's senses are utilized to their best by feeling the volume of the spaces created, touching the textures of the finishes, gauging the scale of the work through the eye, reading the façade and weaving a story that glorifies its architectural beauty and essence.

A travel journal is certainly a unique and exciting way to learn and document the journey as it involves the travelers mind, focus, cognition, thoughts and perspective about a place visited. Travel journal can be made more interesting in many ways. A travel sketch journal, using exciting mediums such as rendering pens, watercolors, pencil etc. Creating photo collages and scrapbooks are equally exciting ways to capture the memories. Memories can be unleashed through studying intricate details and textures of a monumental architectural piece. Textures can be traced and chronicled directly on site. Live sketching helps an architect to understand scale and proportion of a built structure. Writing about the experiences of being in a building is another technique by which we can get the reader to visualize and comprehend the building, although he or she may not have seen it. Their creative visualization abilities are enhanced and boosted. This is very essential for an architect to possess as it initiates the conception of a project. Imaginative travelers may also choose to express their journeys and associative feelings through writing poetry, articles and essays. The important aspect in the process of keeping travel memoirs and journals is to stay inspired and passionate to absorb the flavors of architectural works that one comes across during their travel.

As architecture enthusiasts, we need to understand that learning is endless. One needs to travel in order to learn the architectural fabric of a city or a place as he moves from one place to another and he gets exposed to the reality of a building. He or she can become aware of the numerous design factors observed during his or her journey and can grow by adapting the best practices, avoiding the mistakes or unfavorable elements and evolving towards becoming a better architect and designer. The role of travelling becomes as significant and crucial as an architect seeks to raise the quality and standards of his profession and the subsequent outputs. The path of travel for exploring the prevailing architectural wonders and marvels is divine and diverse.

3.11 Growing through a Journey

By Louis Chan

As architectural enthusiasts, we would undoubtedly embrace every travelling opportunity. However, our purpose of travelling is not solely to experience architectural spaces, but ultimately to grow spiritually and discover new aspects or ideas. This growth, to me, is something that cannot be experienced in the same form through reading architecture books or staring at photographs. Generally, travelling is so appealing to us as we can experience architecture through our five senses – sight, sound, smell, touch, and taste; through which we are led to a pathway of discovery, broadening our perspective of the world.

Wherever we travel, we would instinctively look around the architectural space; it allows us to experience the depth, shapes, and colour of a structure. Personally, I have always been fascinated by heights, and therefore my visit to Taipei 101 was especially significant. As I looked up the skyscraper, its soaring height, the seemingly endless glass facade, and the sheer size of the structure instantly creates in me a sense of excitement for the prominence of the building, but has also led me to put into perspective one's powerlessness when I compare the scale of the skyscraper and myself. From the top of the tower, I naturally felt a sense of superiority for physically being above the activity of the entire city, but also an inevitable sense of loneliness for being isolated from any other structure around. Only through travelling can we experience these brief mixes of emotions brought by the building, while being reminded to reflect on the duality that exists around us.

We must also try to incorporate the various sounds into our interpretation of an architectural space. Such sounds could be from the buzzing city activity, but the sounds of natural elements I experienced at Japan's Kurobe Dam have made a special impression on my perspective of travelling. As the reservoir gates closed, I took the opportunity to listen to the peace and charm of the sounds of trees and birds in the surrounding mountains harmonising with the water that has been held stationary by the dam. Moments afterwards, there was a loud, continuous splash as

water had been let out at nearly 200 metres high. It is precisely because of the dam's withholding of the water, that I was able to experience the power and energy of nature as water crashed onto the lake below. Through travelling, we are able to reflect on the idea of coexistence and equilibrium of power between built structures and the natural world.

The smell of materials and the surroundings could also play a role in our understanding of a place. During my visit to a historical Japanese village in the Gifu mountains, the smell of the traditional huts especially stood out to me. The smell of straw, hay and reed of the thatched roof added a sense of authenticity to the space, while reminding me of the tranquillity of the fields in the valley. This was complemented by the rich smell of the oak floorboards and the freshness of the mountain air. Such unique atmospheres could only be experienced by travelling, and as such we are able to reflect on why we commonly bring natural elements into architectural spaces.

We often overlook the elements of touching and tasting in an architectural journey. I have been fortunate to visit various works of Japanese architect Tadao Ando, whose buildings feature simplicity and the use of concrete. As I began to touch the expansive concrete walls, I was intrigued by the smooth texture. I felt a special attachment to the structure, seeing how the cold surface extended towards the ceiling. Combined with the simplicity of the design, I was able to pause for a moment to experience the architectural atmosphere as I was physically connected to the wall. This allowed me to discover how architecture can connect to people. Moreover, we could establish certain links between the smells associated with a place and its architecture. The historic Jumbo Restaurant in Hong Kong offered Chinese seafood, and the authentic taste of Chinese cuisine was seen to be mirrored by the restaurant's traditional Chinese architecture, which had tiled roofs, and round pillars with carvings of symbols for good luck. The experience of tasting could lead us to understand the historic and symbolic significance of a space, and to discover a culture through travelling.

Through experiencing a journey with our senses, we could develop new perspectives of design and cultures, and more importantly, these journeys allow us to reflect on our relationship with nature, position

in the world, and complex emotions that are highlighted by various styles of architecture. If we enhance our sensitivity and attentiveness to our surroundings, we will all be able to achieve personal growth to a certain extent.

3.12 My travel experience of Bishnupur Temples

By Aradhana Jindal

The world is a book and those who do not travel read only one page.

– St. Augustine

Travelling is the window for an architect to venture into the realm of natural and built environment. Through his five senses, an architect perceives architecture & critically explores various facets of the design. The more one travels, deeper the understanding of the design & spaces gets ingrained in the subconscious mind.

The educational tours provide opportunity for an architecture student to explore the intricacies of design, space & its juxtaposition. My own understanding of architecture started growing through such explorations during the college days. A building which was nothing more than mere piece of structure, gradually started to reveal its beauty and spaces. The need for such travels was realized to refine my understanding of architecture in true sense. In ensuing years, I undertook countless travels in India & abroad to not only admire some of the ancient as well as contemporary architectural marvels but also to imbibe their essence. One such lasting impression was made in 2015 during my visit to Kolkata and its surrounding places. This particular trip opened up my eyes to an architectural marvel, the memories of which are deeply etched in my mind forever.

When I started my journey from my hometown for Kolkata, one of my friends had suggested not to miss the one day trip to Bishnupur, famous for its Terracotta temples. So, I included this place in my tour schedule and enquired a little bit about the temples from him before departure. The first rendezvous of the sleepy town was the shabby railway station. The place looked quite deserted and made me wonder whether I had landed at the right place? Moving on, I took a taxi and set out on my memorable journey of visiting the ancient terracotta temples.

There are total 20 temples dedicated to Lord Krishna in the town built by Malla kings who ruled a part of West Bengal between Burdwan and

Purulia from 10th to 17th century. Within few minutes I was in front of one of the temples! Wah! What a sight! I rubbed my eyes twice to look at the terracotta temple in front of me. It was incredible! I was reading a beautiful piece of poetry. It had all its rhythmic composition and beauty! With well-proportioned intricately woven terracotta brick façade, the Rasmancha temple was looking like a museum collector's piece. It was a giant sculpture in Terracotta colour standing majestic all alone. Once I became sure that I indeed was standing in front of a real building, I filled up my eyes with the captivating beauty of the temple.

The temple built in 16th century, stands on a high podium built of laterite stone. Standing far away at one of the corners of the temple, I appreciated the rhythmic cusped arches of the ornate terracotta brick façade. I was being informed that the carving on the temple façade is comparatively less than the other temples. The bas relief work on terracotta tiles in between the cusped arches had faded at places over the period of time.

I could make out the architectural vocabulary of the temple as a mix of Bengal (prevalent at that time) & Islamic architecture. The pyramidal roof of the temple reminded me of the ziggurat of Mesopotamian architecture. The entire structure rested on the massive pallet drum (damroo) shaped columns. When I counted the total number of columns, the figure came out to be 108, the spiritual number! It was incredible!



Front view of the Rasmancha temple

The truncated pyramidal roof of Garbhgriha and the turret roof (Bangla Do-chara roof) over the galleries appeared in total contrast with the cusped arches of the facade. As I entered the temple after climbing up the steps, suddenly I felt a gush of cool breeze. The building structure which provided a magnanimous view had suddenly shrunk to the human scale. The play of light and shadow inside the galleries was really dramatic. I took a complete round of circumambulatory galleries and peeped inside the sanctum sanctorum but could not find any idol there. Walking on laterite floor through pointed arched walkway took my imaginative mind to that era when the galleries must be abuzz with rasleela throughout the day. It was an awesome feeling! The guide told that the galleries were used for Ras festival till 1932 and during the festival, the Radha Krishna idols from nearby shrines were taken to this temple and kept on display for the public darshan.

From there I continued to visit other temples as well but could not remain without appreciating the sculptural façades of other temples and wondered whether we, the contemporary architects could create such an exquisite architectural marvel!



Play of light and shadow inside the gallery

4.0 Orating History

4.1 Architecture and Christianity – A Symbiosis

By Pranaya Reddy

The 4th Century. This was when an overhaul of the highest order in terms of Christianity had occurred. The son of Helena, an emperor of Rome – Constantine was a man of distinction. Dubbed Constantine the Great and rightfully so, he was the catalyst behind the spread of Christianity and its consequent influence. This century had seen the initial rise and evolution of church architecture and the religion of Christianity as a whole.

Early Christian architecture had an unassuming scope. It focused mainly on fulfilling two needs of the people; one was provision of space for spiritual needs of the living and the other, was provision of burial space for the dead. The character of the architecture of this time can be described as gradual. Residue of the Roman style could be seen, with elements of earlier Roman temples being reused in the churches. Mosaic decorations depicting fables and allegories were introduced which were rich in culture as well as colour. The church had risen from the necessity of a gathering place for the citizens. Their meeting spaces before the spread of the religion had been their own dwellings. These dwellings were also rebuilt into full scale places of worship.

The basilicas were the token of this time period. Constantine, the mastermind behind the adaptation of these structures, had to make sure the advent of Christianity was well-versed within these buildings. For achieving this, the main focus was kept on the interior spatial arrangement and ornamentation. The apse, arguably the most important element of the basilicas, was placed at the length's end. This was where any other roles played by the basilica could be performed, including libations or sacrifices during pre-Constantine times. However, with the dawn of Christianity, it was used a place for celebration of Christian rites.

St. Peter's church, precisely the building known as Old St. Peter's accurately represents the development of spaces within the church and

the meaning behind them. A new architectural form called the 'transept' had evolved which was essentially the axis running through the apse, perpendicular to the nave (the main aisle of the church running through the center).

This crossing of the transept and the nave was done in such a way that the entire concentration was on the tomb of St. Peter located in the apse. Through spatial arrangement, the churches found a way to shift the complete focus of the user towards the main deity. Moving forward in the history of Christian architecture, every church has been following this basic skeleton with expanding ornamentation.

In present day churches, this cruciform ground plan format is still being used. This shows that Christian worship has continued to stay focused on the coming together of people towards a common cause. The history of churches has surely played a crucial role in the development of Christianity into what it is today. Different elements of the churches have been modified and adapted according to context in various parts of the world but the holy grail of them all has remained the same.

4.2 Architecture of Nagpur under Bhoslas

By Reewena John

The vision of urban innovation excites the imagination. Innovation is the final stage of chronicle order. A city or a town always got ahead with development on raw land where oldest vestiges of habitation are furnished by domains and other sepulchral monument which can be noticed in imagination in the vision of present town or city.

Nagpur, a city which is growing on a high speed. Nagpur districts lies between 21.146633 latitude and 79.088860 longitude. It is the third biggest city in state of Maharashtra, India. Its is dominated by Zero Miles.

The city of Nagpur grew into an urban centre because of the economics development of the region based on oranges, cottons and also for defense establishment particularly during the times of Bhoslas of Maratha confederacy. Nagpur formed the part of Gondwana which was ruled by Gond Rajas, till it was conquered by Raghuji Bhosle I.

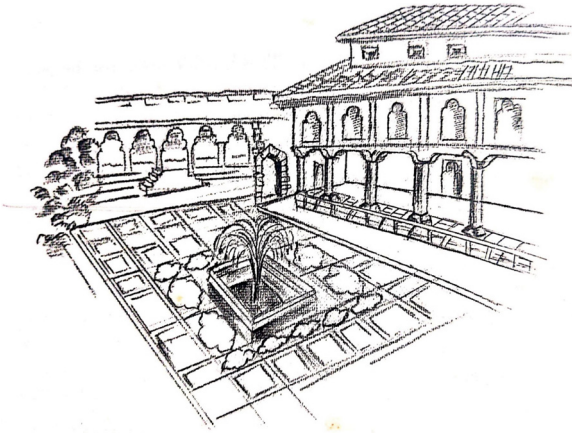
Architectural base of the city falls under architecture of Bhoslas of Nagpur. The city planning is in radial form. Initially the city was known as walled and gated city as it was enclosed by the wall (Tatbandi) on the periphery and there were four gateways (darwazas) in all four direction and also some smaller ones to enter the city. Presently the city is surviving with Shukrawar Drawaza, Bhutiya Darwaza, Sakkardhara Darwaza and eastern Darwaza. These gateways now act as the gateway to enter a particular area.



The history of Nagpur tells us that before the ascendancy of the Raja Raghuji Bhosle to the throne it was Chand Sultan, the Gond Raja who ruled the area. The had built a fort in on the East of Nagpur (Mahal Area) which still exists in ruin and called “Gond-Raja-Cha-Qila” (Fort of Gond King). The qila built is survived by beautiful wooden work on the arches, door frames etc. the forts were classified into forest forts, Land forts, hills forts, Gadhi forts. Forts site, Approach to the fort, vertical summit, the bastion, the Rampart are the designing and planning aspects of the forts under Bhoslas period. One of the forts which is situated in the heart of Nagpur is Sitabuldi fort. The fort is erected on two hillocks to an average height of 30 meters.



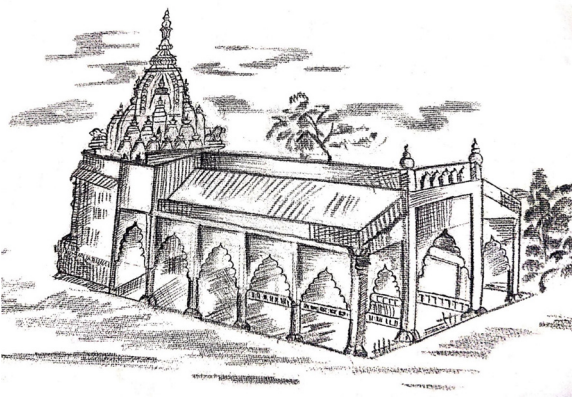
Wada is actually a manor-house by a mighty sardar of military within the land of his fiefdom. The cities which enjoyed the status of 'center of power' during maratha rules and supremacy namely Pune, Satara, Kolhapur, Indore, Baroda, Gwalior and Nagpur dotted with beautiful wadas which even now tells the story of the glory and power of the builders. The designing of the wada was made in such a way that it should comprise the main building and vast courtyard. A bagh (Garden) was an integral part of the wada. The building were constructed usually around the chowks (quadrangles). In nagpur, every wada has its family shrine or a temple dedicated to either to Lord Shiva or Ganesh. The wada used to be associated with various decorated elements such as columns, colorful walls, wood carved doors, maratha styled arch etc.



The Brihat Samhita, one of the earliest extent treatises dealing with the subject of temple says:

Van-opanta-nadi-saila-nirjhar-opanta-bhumishu/
Ramante devata nityam puresh-udyanavastu cha//

Meaning, the gods always plays where groves are near river, mountains and springs and in town with pleasure garden.



A temple is the most important centre of spreading the religion. All the three major religion of India viewed with each other in using this medium for furtherance of their ideologies. Nagpur being the geographical center of the country also represented heart of the cultural activities in India. Especially at the times of Bhosla's rule. The finer cultural feelings

of the Indians have been expressed in the abstract form which may be broadly classified under two categories religious architecture and secular architecture.

Nagpur has witness various types of architecture typology during the rule of Bhosale's. As being the diverse city the has diversity in architecture structures.

4.3 Footprints on the Sands of Time

By Priya Sasidharan

Does history pen down only the westernized definition of public space or weaves the fabric of Indianness? Public space or people's realm? – Questioning the rise, reign and redefinition of the public realm in historical interpretation forms the crux of the inquiry.

The reawakening of Indian history through the chronological emergence of public realm in its contextual moorings is the crux of this essay. The interpretation of the “public” realm, is a mired definition as a corporeal construction of the British, rooted in entitlement and codes of practice rather than authentic everyday urbanism. The publicness was jaded though legal shades that mired the socio-cultural connotation of people-place-posterity. Chroniclers of history have recorded the christening of open spaces, design of gardens, events in the space and the dominant Indo Saracenic architectural style – an indelible marker in history of colonial presidencies in India. The chronological recording of typological tenets, transitional traits of public spaces and demystifying the colonized architectural history of Indian public spaces needs addressal. History of architecture eludes the architecture of urban open spaces of the people in its essence of being integral to everyday life, livelihood, collective memories and repositories of intangible urban transformation.

Chennai city in its historical legacy has recorded the Marina Beach, the largest public realm of the city only in its formation and locational significance. Looking through the senses of the public realm, the Indo-Saracenic architecture along First Line Beach Road has been the most manifested, alongside the eclectic memorials with metaphors on the political leaders. The exhibition of democratic power in Seerani Arangam, the humble beginnings of a podium of expression traces a trajectory until the Jallikattu protest to be interpreted as communal voicing for a cause. From being a subservient port town at Mylapore to Mamallapuram and Vasavasamudram of the Pallava empire, to playing a muted host to the establishment of trading post as the bastion of power at Fort St. George, the Marina has a narrative in time, space, people and power.

The ghats celebrating water in its sanctity, the groves and gardens or thottams in its veneration of nature, promenades along the coast and sacred precincts of shrines were integral to life, lore and legacy. An agglomeration of rural ethnicity, Chennai, a city of villages exuded a trajectory of power, commerce, social order and community participation realized in its temple architecture. The protector shrines/deities (ellai kaval deivam, ellai=boundary, kaval=protection, deivam=God) at the periphery of the village were the scaled down version of guardians of crop, water and natural assets while demarcating boundaries of administrative jurisdiction. The celebrated temple settlements of Mylapore, Thiruvannamiyur and Triplicane, beyond architecture of the Pallavas, Cholas and Vijayanagara rulers were the pinnacle of architecture, but history remained silent on its potency as a hub of commerce, ritual spaces that linked nature to people in a sacred triad – theertham(tank/water), vriksham(tree) and sthalam(place). The processional routes, dedicated festivals that celebrated seasons, brought community together and the participation in maintenance of the waterbodies (kudimaramathu, kudi=people, maramathu=repair / maintenance) defined spaces of, by and for the people. Universal access being inclusive by codes and regulations was an integral phenomenon in the settlement history. Historical documentation and recording have to redefine its interpretations beyond time, power and personalities and approach through embodiment of nature, evolution of life, people and practices.

Colonial era embarked on classified typologies realized in the architecture of summer houses, colonial bungalows, clubs, coffee houses and landscapes of esplanades and gardens that defined privatized public realm. The British ushered in an era of creating, fostering and merging the westernized concept of public space in the Indian context presenting a rich canvas for documentation and debate in history. While the exclusivity of the public spaces of the British gained unpopularity on the grounds of discrimination, the strategic ploy of introducing “company” shrines mooted collaborative support from the merchant community. The twin temples (for Lord Shiva & Vishnu) also termed as Pattinam (pattinam – coastal town) temples at George Town & Chintadripet, shrines at Kaladipet and Mint Street were the colonial trails at fostering the public

realm of the natives through architecture of the most revered.

The post-Independence timeline of misappropriation and infringement in its myriad dimensions in placing names, siting cultural centers and memorials as a trade-off to natural networks has also reared its tentacles in the emerging traits of the public realm. The cultural icons and the reminiscent memorials of collective memory in public architecture etched in history transcend beyond visible manifestation to identity of language, political fervour and rooted lineage in communal evolution. The architecture of the public realm is yet to find an indelible historical recording and an interpretation beyond its celebrated legacy to the negotiated strategies, unbridled urbanisation tactics and vestiges of traditional wisdom.

4.4 Tales and Times

By Abhigna B

A human being stages three constants in his work – his belief in institutions, his sense of accommodation, and integrity. These constants change the necessary changes and create a cycle of evolution. The interpretation of what happened and its relevance to the current day depends on the choices humans make. For instance, Louis Kahn believed that the architecture of his times defined social contact than technology. In particular, the Indian Institute of Management, Ahmedabad is a building whose school of thought evolved from the Pantheon along with informal spaces (i.e., the corridors). In the contemporary era, we look at it as a definition of a minimalistic marvel. Quite often, the function or the appearance of a building does not define what is attributed in history, but how one sees it in the current time.

We are the interpreter of the forces but not the makers of them, hence, history can only be interpreted than be put into a particular discipline of action.

Each period in time personifies itself into multiple adjectives seen through time. For instance, Le Corbusier's buildings will eternally remain institutions of peace and harmony through free planning, the piloti, and roof gardens whereas, the same peace and harmony in contemporary times have been talked about as social and public spaces – the lungs of urbanism. The aesthetics and order of thoughts can be matched with the past just through distinctive characteristics.

Furthermore, as humans, we have encountered faiths and cultures to be rooted and kind. In the early 1800s, humanism was a concept that spoke of devotion to human welfare, along the line, now in the early 2020s, we have avidly used it as a devotion to every living being; though here, through time and now, the interpretation remains the same, the subject changes. Oration of history teaches a lesson from the past for the future, otherwise, it would have been a void with meaningless interpretations each subjective to a certain period alone.

To conclude, Alvar Aalto quotes, “Nothing old is ever reborn but it never completely disappears either, and anything that has ever been always re-emerges in a new form.”

I think as humans, we need to question the following and one will know that there is always a new story each time you question,

- Who decides for whom?
- Does the one who decides really know the needs of the one who it is meant for?
- Does the user know it better than the designer or does the user understand it better than the designer?
- Has it always served the purpose for which it was designed or made?
I wonder if the stairs were just to go upstairs or were they a flight of hope for the mother to take and greet her child each morning.
- Architecture is form and substance, abstract and concrete, its meaning is derived from its interiors, characteristics, and particular context. What if there was another way of interpretation – architecture romanticized into poetry, structured into a language of usability, what if the history of architecture was written in poetry through verses talking of how the blue in Casa Batlo created magic like the place was a whisper from the ocean?

The world is a wonderful yet mysterious place for one can never know the complete of it, each element – whether a deep-rooted stylistic tradition or a superficial standardization arising from a misunderstanding of the new architecture – prevents architecture from telling its full story in the battle of life and thus, history in a way, degrades the significance and effectiveness yet somehow, makes what lies today, a better place to be. The challenge remains in how we interpret and see it and go on from there.

4.5 Narrating stories through architecture

By Khushi Tandon

Le-Corbusier once quoted, “Today I am accused of being a revolutionary, yet I confess to having had only one master: the past; and only one discipline: the study of the past.”



Photo by Natalia Yakovleva on Unsplash

MAN, who seeks to understand everything, seeks to understand himself. He can never discover the hidden secrets or even understand the world around him with half his knowledge about himself. Similarly, every living or non-living thing in this world has a story to tell, an account that can tell us something unique about every era, making history come into view, and something from the past that can help us understand our future better. It is the Idea of History that makes a man a curious being. History tells us how we were and how we changed to survive as time passed. It is a bridge that connects us to our future. Unless we know our past, we will never know our future.

Architecture is widely perceived to possess meaning, to be more than mere structure. Like Umberto Eco, an Italian philosopher, said, “we commonly do experience architecture as communication, even while recognizing its functionality.” Look around yourself. More buildings would surround your house. Your house, as well as the buildings surrounding you, have a story to tell. They convey the culture, beliefs, and technology of a particular era, strengthening the fact that architecture represents

humankind. The more we study architectural history, the more we realize that we have come a long way, from believing that we exclusively need God's help to make architectural marvels to having extensive technology to build for the future. You certainly can't escape the influence of architectural history!

According to some scholars, architectural history is a kind of science; where questions arise, and we try to answer them, although it is still different from traditional science as it is involved with "events" and "human activities." It has an extensive range, as the extent of the world and the depth of all human actions, and as the famous saying goes, 'No documents, no history. In ancient times, history was written only for the educated class for research purposes and therefore was more opinionated towards one side and not too much into capturing how a specific event or building affected all classes of people. Today, orating history means discussing all the scenarios that could have happened in the past, all the whys and hows. Architectural history aims to evaluate and interpret what man constructs for his various physical requirements and to express himself culturally. In the book "Space, time, architecture," Sigfried Giedion considers the space quality and its properties as the basis of most of his comparisons and analyses of architecture in different times and places.



Photo by Andrew Neel on Unsplash

When we state that history can be very subjective due to differences in opinions, this is called interpretation. For example, two historians can

look at the same primary source information and consider the same facts but come up with very different conclusions. One architectural style can be empowering while underwhelming for the other. At the same time, different civilizations reacted to natural phenomena differently, proving how unique each civilization has been. The historical methodology is the process through which a historian formulates interpretations and creates their vision of history. Another term is historiography, which studies historical interpretations and how they develop through time.

While orating this vast architectural history, a big part would be Conservation. Within the concept of culture, there is a concept of “conservation”; therefore, Conservation of culture and education are two essential methods for retaining our glorious built heritage. Understanding cultural heritage and conservation principles is critical for architecture students and people from all walks of life. Education is at the forefront of actions that will help people develop environmental awareness. However, the most important aspect of architecture is its relationship to human life and the impact it produces.

When we talk about the history of architecture, time is a crucial component. A building grows with time. Architecture has been able to carry out its core goal of touching human lives, with its stories enduring for generations through the passage of time and various techniques of orating history, such as oral or written methods. Material, infrastructural, and socio-economic factors are the three minimum conditions that give rise to any architecture peculiar to a period and place. These parameters’ documentation filter out the substantial historical evidence. Rather than determining which interpretation is “right,” it seems more acceptable to accept the diversity of meanings. These diverse versions – these different translations – will be considered in an authentic interpretation of the structure. After all, everyone has a different story to tell, isn’t it?

5.0 Water and Evolution of the Cities

5.1 Socio-cultural importance of Water Sensitive Urban Design (WSUD) in the context of Indian urban landscape

By Urvashi Purohit

Water Sensitive Urban Design (WSUD) carries profound socio-cultural significance in the context of Indian cities. Though the terminology of WSUD, is relatively recent and foreign, Indian urbanscape has not been alien to the nuances of WSUD. India's expansive history and rich cultural tapestry have been intricately woven around its water bodies, recognizing WSUD as a pivotal element in urban planning and development, since time immemorial. This essay delves into the socio-cultural importance of WSUD, particularly through the lens of stepwells and coastal communities, in the Indian urban landscape.

India's historical and cultural ties to water are deeply rooted and have manifested in various socio-cultural practices. In our socio-cultural context, water is not just an essential life-giving element; rather it holds spiritual, religious, and communal importance, and holds a place of reverence. Stepwells, often referred to as 'baolis,' stand as an embodiment of this cultural relationship. These elaborate structures, woven across the country's landscape, have served as fundamental water storage, and harvesting systems, particularly in arid regions. Beyond their utilitarian purpose, stepwells often doubled as communal gathering places adorned with intricate architectural character that reflect local culture and artistic traditions. An emblem of unity and community, step wells have been the stage for cultural events, religious ceremonies, and social gatherings for centuries.

Incorporating WSUD principles into modern urban design aligns seamlessly with the preservation and promotion of this cultural heritage. The integration of WSUD doesn't merely address contemporary water scarcity and sustainability challenges; it ensures the sanctity of stepwells as cultural landmarks. Strategically, this has enabled the reviviscence of

communal spaces linked with stepwells, transforming them into vibrant hubs of community life and celebrations, once more. It preserves these historically significant sites while addressing the practical needs of urban water management.

Water's socio-cultural significance in India is heightened by its spiritual significance. Rivers like the Ganges, Yamuna, and Godavari are venerated as sacred entities that attract millions of pilgrims each year. However, as a result of urbanisation, these holy rivers are today subjected to serious pollution and destruction. By regulating urban runoff and pollution and protecting their cultural and ecological importance, WSUD acts as a strong means of revitalising these beloved water bodies.

The spiritual connection to water is deeply woven into the fabric of Indian society. It is evident in the rich tapestry of rituals, festivals, and ceremonies. Immersions in rivers during festivals like Chhath Puja, Kumbh Mela, and Ganesh Chaturthi, where millions participate, underline the deep-rooted spiritual connection with water. These rituals underscore the centrality of water in the cultural and religious consciousness of the Indian populace.

Despite these profound spiritual and cultural ties, India's water sources are in grave danger. Pollution, encroachment, and over-extraction all endanger their purity and sacredness. WSUD, which incorporates sustainable water management practises such as sewage treatment, rainwater harvesting, and water body restoration, provides a realistic answer for preserving the sacredness of these venerated water bodies. This approach aligns with the spiritual beliefs of the people while reinforcing the sustainable use of these resources, ensuring their availability for future generations.

Coastal communities in India, situated along the Arabian Sea, the Bay of Bengal, or the Indian Ocean, maintain their unique socio-cultural relationship with water. These communities depend heavily on the sea for their livelihoods and have developed rich traditions closely connected to it. The intricacies of fishing and the rituals surrounding it are handed down through generations, creating a living cultural heritage deeply intertwined with the ocean.

However, coastal areas are among the most vulnerable to the effects of climate change. Rising sea levels, frequent storms, and coastal erosion present significant threats to these communities and their socio-cultural practices. Integrating WSUD into coastal cities becomes not just a matter of environmental necessity but a socio-cultural imperative. Restoring mangroves, collecting rainwater, and enhancing coastal infrastructure safeguard communities and their traditions. These efforts also preserve the enduring connection between people and the sea, inspiring art, music, and spirituality.

In conclusion, the socio-cultural significance of Water Sensitive Urban Design in Indian cities is profound. It not only addresses pressing urban challenges like water scarcity and climate change but also ensures the preservation of cultural heritage and traditions deeply rooted in India's relationship with water. Stepwells and coastal communities exemplify how WSUD can harmoniously bridge modernity and socio-cultural significance, ensuring that India's cities remain vibrant, sustainable, and deeply connected to their rich water-centric traditions. The adoption of WSUD should be seen as a fundamental step towards building resilient, culture-aware urban landscapes in India. It provides a pathway to honour the sacredness of water, protect coastal traditions, and ensure the long-term sustainability of the country's precious water resources, all while preserving the deeply ingrained socio-cultural significance of water in India's diverse urban landscape.

5.2 Water and the Making of Cities

By Rudy Kundu

Walking down a grueling path with no company to amuse one, having exhausted all water and food supplies, and the journey seeming too strenuous to continue, what would a person do if she stumbled upon a civilization by the river? A civilization that started with the blessings of the river goddess, a civilization the existence of which is incomplete without the water source that initiated its construction. This abstract paints a comprehensive picture of the way history perceived water and its adjoining cities. A safe haven for travelers and a pleasant domicile for its inhabitants, these cities evolved and later found their way into the history books of modern times. But what started as riverine civilizations later transfigured into examples that set into motion practices of water conservation, evolving, and slowly turning into the most habitable cities of its times.

Why is water considered to be an engineer of cities? Why is the evolution of a city and its architecture heavily dependent on this resource?

The basic form of origination in terms of a city or a human establishment is a source of water, upon which depended the lives of the entire city and its inhabitants. However slowly and steadily it turned into a method of transportation with the formation of ports, an aesthetic perspective on architecture with the construction of elements like aqueducts and stepwells, a means of survival in the hot and unforgiving climates, and so much more. From the earliest establishments like the Harrapan civilization or the Roman empire, the role that water played in its continuance cannot be overlooked, not one bit. When we go around ancient ruins and cities in India, the most consistent form of water architecture is the step wells, and their history alone can take a few centuries to be deciphered completely. Urban cities or places are centers of growth and assimilation where water is one of the key drivers for survival and resource-saving for posterity. However, due to extreme pressure on resources like water as a result of the growing population and urban infrastructure, sustainable solutions are being looked into. The concept of sustainability too cannot be

assessed without the presence of water. From practices like greywater reuse, rainwater harvesting, or just basic water conservation, this is a commodity and a necessity at the same time, something that has defined water as a resource for more than a hundred years.

In the Indian context, water was not only an architectural element but a ritualistic component as well. The presence of water for cultural and social rituals signifies its importance and the strength it exhibits in its hold on people. The majestic river bodies in our country are true manifestations of the almighty for us Indians and the fact that people even in today's world worship rivers like Ganga and Yamuna due to their sanctity as described in the holy texts of India, is an astonishing feat.

The coming years ascertain the intensification of floods and droughts, and the only way to alleviate this issue is water management. The steps to practice water management must be closely bonded with the prevention of water scarcity and the economic impacts altogether. It is a matter of a few years before the water culture of our society will lead to catastrophic results if not surveyed. It is in our efficiency as a society that lies the subtle nod to the justification of water conservation. We as a society must challenge the problems we created and take accountability to manage and circumvent the prevalent issues of water scarcity and conservation, to create a more humane and sustainable environment.

Evolution has made a huge contribution to mankind and its components, and it is only a matter of time before we introduce and inculcate this evolving attitude in us to envisage a future with justified distribution and usage. From reviving old practices like katta, sand bores, johads, bawdi, and bamboo drip irrigation systems to more awareness created in this domain, all such acts and processes will yield a connection established between water as a resource and the people on a societal level with sensible and responsible activities gaining ground as well.

5.3 Water and the City: A Force of Life and Challenge

By Shailesh Kunwar

Water, as an elemental force, wields the potential from Cultivation to Calamity, it profoundly influences the course of humanity's journey. It is an indispensable agent in the life of a city, playing its role in the natural world where it permeates and transpires into every structure of the urban jungle, much like it sustains plants and trees. As a ubiquitous force, water is essential for ecosystem health, soil fertility, crop cultivation, and supporting marine life that caters to the populations of thriving cities. Its presence also attracts birds, enriching the cityscape with its vibrant inhabitants.

Urban settlements often emerge in areas with abundant resources, and water stands as a paramount example. The origins of water bodies come in diverse forms, ranging from timeless, ever-flowing sources that have nurtured life over eons to seasonal watercourses that gifts their precious liquid resource. Water in all its states is a cherished asset, deserving of our respect and care. Water, regardless of its form, is an energy generator, breathing vitality into the urban landscape and fostering the growth of life.

The duality of water's character is manifest in the urban context. It is both a life-giver and a potential of calamity. Water's life-sustaining virtues are evident in its capacity to nurture the urban populace through freshwater sources and aquatic habitats. These resources are integral for agriculture, fulfilling the nourishment of cities. They also serve as a natural haven for diverse ecosystems, where creatures find refuge, adding to the City's biodiversity.

Conversely, water's destructive potential should not be underestimated. Its periodic deluges can bring floods and devastation to cities unprepared for it. Nevertheless, these challenges, rather than deterring the growth of cities, act as opportunities of adaptation and resilience, forging urban communities with innovative spaces, coexistence and harmony. It is a constant reminder that in our quest for urban progress, we must remain ever vigilant, recognizing the vital importance of water, both as a nurturing force and as a challenge that, when understood and harnessed, leads to

more resilient and sustainable cities.

Water due to its kinetic nature brings in movement which can be harnessed by humans. It has always been by human ingenuity in various ways. One of the prominent techniques for tapping into water's kinetic potential is through the generation of hydroelectric energy. This method, employed by humans for a considerable span of time, underscores our capacity to leverage natural forces for the benefit of urban development and sustainability.

In the same breath, humans have also displayed remarkable prowess in the preservation and restoration of water bodies. They've implemented a diverse array of techniques to safeguard these essential resources. For instance, the practice of constructing artificial wetlands stands as an exemplary method to foster water purification and ecological balance within urban landscapes. Similarly, sustainable urban planning, which prioritizes green infrastructure and riverfront restoration, embodies the collective human endeavour to coexist harmoniously with water resources.

Throughout history, the preservation of water bodies in urban environments has been a critical challenge, as these sources of life and sustenance are often threatened by pollution, overuse, and urban expansion.

Early urban civilizations, such as the Romans and Greeks, were masters of aqueducts and canals. They engineered sophisticated systems to transport fresh water from distant sources to urban centers, ensuring a reliable supply for both consumption and sanitation.

The advent of modern sewer systems in the 19th century, as seen in London and Paris, transformed urban hygiene. Proper disposal of wastewater prevented the contamination of water bodies and helped control the spread of diseases like cholera. Modern cities utilize storm water management systems to control rainwater runoff. Techniques include permeable pavements, green roofs, and retention ponds that mitigate flooding and protect natural water bodies.

The human attitude toward water bodies profoundly influences their life cycles. Poets have immortalized these tales and turns in verses, recognizing their harmonious coexistence with nature. Amid this delicate dance, the holiest of rivers, the Ganga, bears witness to humanity's contrasting behaviours. Some revere its sanctity, while others exploit it for greed, resulting in neglect that undermines its vitality.

In our attitude, we find the power to shape water bodies' destiny, be it through respect, which preserves their splendour. In the connection between water and cities, we see that water is important for our urban areas. It can help our cities grow, but it can also cause problems like floods. We need to take care of our water to make sure our cities stay healthy. We can use water to make energy, and we can also protect it by creating places like wetlands and taking care of our rivers. The way we treat water, whether with care and respect or by being greedy and neglectful, affects our cities' future. So, we need to be mindful of water to keep our cities thriving and resilient.

5.4 Water and Survival in Ancient and Modern Times

By Mysha Kejriwal

“Thousands have lived without love, not one without water.” – W.H. Auden

Many people on this planet have struggled through life to find water. The quote indicates that it is possible to live without love, but not without water. According to water.org, countries such as Brazil, that have an abundance of water still face water scarcity in urbanised areas due to lack of infrastructure. Water is a resource that impacts all sectors of life directly, and indirectly. It affects agriculture and the country's economy as well, therefore it is vital to provide every citizen with enough water to survive. Water is a vital resource to survival, and finding solutions for countries with abundance and scarcity of water is very important.

Civilizations in ancient times had to figure out their own way of finding clean and fresh water for themselves. According to Ask Dr. Universe, some people used to harvest rainwater in big containers to use as freshwater. Although, the majority of people used to find water in water bodies nearby, water bubbling up from a spring, or digging deep into the earth to obtain some water. They would use a well sort of structure called a baoli.

A baoli consists of 2 main parts, the tank, and the well that extends deep into the earth for groundwater. It would fill up by collecting rainwater in the tank, and sucking up groundwater from the earth (Global Center). According to Julie Padowski, they would collect flowing water, or groundwater. Groundwater is safer to drink as it is protected from the contamination that is present in the atmosphere. Ancient civilizations as well had many smart ways of finding a good water source for them without the technology needed.

There are a lot of water abundance and scarcity problems globally today, and there are a few actions being taken to solve these problems. In a country like Brazil that has an abundance of water, but has not used it well or distributed it evenly across all parts of the country, it is very important to create a good way of supplying water all around the country. In Brazil,

there is no reliable and safe water source for people to use. One of the lowest populated parts of the country has an abundance of water, and therefore has not been developed using infrastructure and urbanisation. The Amazon River Basin consists of 68% of Brazil's freshwater, but only a little under 12% of its population (Water Action). Water.org, Thirst Project, Water4 and many such organisations are working towards helping people in such countries to get clean and safe water. Many countries have water scarcity due to climate change that is messing the weather and water flow. Solving water issues around the world is vital for survival.

Through the use of architectural ingenuity and urbanisation, we can solve water problems globally. A macro idea that could be implemented in countries with water scarcity is to build small baolis in areas that are prone to flooding and water scarcity. The baolis would be made deep underground, allowing them to collect groundwater and rainwater. If the baolis are made at reasonable distances, they would prevent a lot of people from dying of thirst. Another macro idea that would help solve water scarcity and abundance from being evenly distributed due to lack of infrastructure is creating a pipeline across the country that creates a man made underground water body for areas that don't have one or the space to have one. The pipes would connect the water bodies from places that have them to urbanised cities where they can form an underground waterbody to supply around the city. From that waterbody, there would be many pipes connecting to buildings, schools, hospitals, restaurants, etc. this will reduce the amount of water shortages and times when the flow of water has stopped for a few hours. Implementing this idea will allow constant flow of water for everyone in the area and country if it is built properly. Since the water pressure would be reduced due to the idea of waterbodies, there will be high pressure pumps that will pump up the water to high rise buildings and have a good flow and pressure in the water. There are a lot of ways to solve water problems with architectural ingenuity and urbanisation, here are mentioned 2 strong ways to do so.

To conclude, ways of managing water in a country and in an area have evolved a lot since ancient times. Even though, there are a lot of countries that face problems related to that due to it not being very developed and urbanised. Finding solutions and helping people with these problems is vital to survival, as every year there are 3-4 million people dying due to water related problems.

References

- 1 Advancing Earth and Space Sciences. "Given Its Continental Dimensions and..." *Water Resources Research*, July 5, 2023. <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2023WR034914/>. Accessed October 14, 2023.
- 2 Ask Dr. Universe. "How Did People in Ancient Times Filter Water?" August 31, 2018. <https://askdruniverse.wsu.edu/2018/08/31/dr-universe-people-ancient-times-filter-water/>. Accessed October 14, 2023.
- 3 Civil Society. "Baolis Tumble out of Hyderabad's Past." October 2022. <https://www.civilsocietyonline.com/cover-story/baolis-tumble-out-of-hyderabad-past/>. Accessed October 14, 2023.
- 4 Classy. "5 Nonprofits That Make Clean Water a Global Reality." March 2, 2023. <https://www.classy.org/blog/5-nonprofits-make-clean-water-global-reality/>. Accessed October 14, 2023.
- 5 Global Center on Adaptation. "How Ancient Water Conservation Methods Are Reviving in India." December 22, 2020. <https://gca.org/how-ancient-water-conservation-methods-are-reviving-in-india/>. Accessed October 14, 2023.
- 6 Marine Corps University. "Water Scarcity in Brazil." October 23, 2019. <https://www.usmcu.edu/Outreach/Marine-Corps-University-Press/Expeditions-with-MCUP-digital-journal/Water-Scarcity-in-Brazil/>. Accessed October 14, 2023.
- 7 Rehydration Project. "Water and Health." <https://rehydrate.org/water/>. Accessed October 15, 2023.
- 8 Water Action Hub. "Brazil: Country Overview." <https://wateractionhub.org/geos/country/31/d/brazil/>. Accessed October 14, 2023.
- 9 Water.org. "Brazil's Water and Sanitation Crisis." <https://water.org/our-impact/where-we-work/brazil/>. Accessed October 14, 2023.

- 10 World Bank. "How Brazil Is Managing Its Water Resources." Feature Story, August 5, 2016. <https://www.worldbank.org/en/news/feature/2016/07/27/how-brazil-managing-water-resources-new-report-scd/>. Accessed October 14, 2023.

5.5 From Civilizations to SDGs: Water and Urban Futures

By Ankita Shukla

The fact that the largest cities on earth are just a few kilometers from seas should come as no surprise. Many of which located and evolved over and around natural water sources like rivers, springs, lakes, etc. These settlements during their evolution process have left a legacy of augmentative patterns. Archaeologists, historians, planners, allied scholars have time and again visited these sites to study this progression.

Research with in-depth investigation have shown the evidence that urbanization is largely influenced by water. Greatest empires in the history of the world have been founded, defeated, destroyed owing to water alone. Cities could not sustain themselves until the last century without a source of water nearby for trade, exchange etc.

Water as a resource has been the catalyst to physical growth of cities, in addition to social and cultural aspect of life. Water can easily be termed as a lifeline for humans and civilizations. Socio-cultural analysis of dynasties symbolize the role of water in racial evolution of its inhabiting ethnic group and the attributes assigned to it. Example: water around temple represents religious beliefs that contribute to spiritual well-being and reverence; Contrarily water also withholds a pursual as a destructive element.

Every society has adapted to water on varied levels of livelihood. Water has not only been a life and occupation defining source but also created taboos and classifications within people. Class division, access to water sources, occupational stratification, are all hugely based on availability of water. Beyond the idea of class ranking, water also drew the bias over gender roles and gentrification in societal structure. Right from the responsibility of collecting water to facing the planned/ unplanned atrocities due to lack of water, is both encountered by females.

Sensitizing water availability, its access, monitoring usage and reporting responsive indicators in formulation of an utopian society is of prime necessity. Water has evolved like a currency; its value and worth are an

exponentially growing parameter in the current age. Notifying number of destructions have gathered attention towards the imbalance in environment causing climate change and global crisis. Destructions lead by water sources rank the highest fatality rate in the world.

The course of growth pattern witnesses the urban emergence based on theories, concepts, proposals curated by planners and designers of former centuries. The cities are planned over the premise proposed for ancestral societies. The theories of planning and design in urban studies are age old! The reforms made are only to mitigate crisis at hand. This critical juncture in the lieu of alarming crisis, its dire to reconsider the role of planning towards a dynamic and sustainable growth of cities.

As an overview towards urban planning, it's of utmost importance to propose new methodologies. Focusing on unfolding ideas towards newer concepts and approaches that dwell on the current requirements of the people. The planning reforms need to be established upon the climate change with other issues at length. Time has come to evaluate the hierarchy of planning approaches, from regional planning to urban planning, neighbourhood planning and urban design concerns on each paradigm.

World today does not need urbanization or development; it is an advancing procedure. What the world needs, is tactical urbanism approach towards understanding the gaps in planning explorations. The challenges of planning now are not the need of urbanized geographies rather they are larger than life emergencies; lead due to over-population, unemployment, housing shortage, sanitation, health hazards, terrorism, and water crisis to list a few.

About 17 sustainable development goals (SDG) were adopted by the United Nation (UN) in the 2030 agenda. While the UN creates an awareness towards the implementation of these goals, it is the responsibility of every concerned individual to ensure result-oriented change. Few goals under these proposed aim dwell around water, likely; provision of clean water and sanitation, sustainable cities and communities, responsible consumption and production, climate action, and life below water.

We as urban scholars are at stake to design a framework of policies to regulate and surveil the accomplishments for SDGs. Planning approaches like transit-oriented developments promoting swale systems, preserving the water-related heritage cities, evolving planning ideas on urban water management techniques via ecological solutions. Adaptive water sensitive practices like protecting urban water rivers, wetlands, and natural drains, resurrecting aqua duct systems so on. While proposing ideas, constructing a blueprint to achieving these goals is pivotal.

The most crucial issue with failure towards measures is fragmentation, which can be achieved by creating awareness, sensitizing users towards crisis at sight. Creating awakening in via marketing, education, social media, art, live events, participatory tools can bridge the gaps between planning approaches and concerns. We must act now to address the issues of water scarcity and climate change, taking small steps for a bigger impact!

5.6 Water: The Architectural Muse to Urban Cities

By Sofia Zara

Is there a single force more potent in shaping the physical and cultural landscapes of our cities than water? As we now stand on the precipice of a new era, in which cities are grappling with the consequences of climate change and burgeoning populations, the evident role of water in architectural design and urban city planning and development has never been more critical. Water has been an integral part of city planning throughout history. It is both a life-sustaining source and a timeless muse for architects. Water bodies have shaped urban development in revolutionary ways, ranging from places like ancient Mesopotamia to modern-day Singapore, water has acted as a catalyst for which architects adapt their designs.

Ancient Water Engineering

Architectural marvels of the past, such as ancient civilisations like Mesopotamians and Egyptians had taken inspiration from water and incorporated bodies of water into their design, and stand as testaments to the relationship between water and human settlement. The Mesopotamians, for instance, were able to incorporate their rivers into their irrigation systems, ensuring not only the survival of their civilisation but laying the foundation for modern urban city planning. Similarly, the Egyptians' mastery of the Nile's seasonal floods gave them a chance to create sustainable agricultural systems.

Modern Cities and Water Scarcity

In modern day and the contemporary era, however, the relationship between cities and water has taken a different turn. Water scarcity poses a significant threat to modern urban cities. Los Angeles, Cape Town, and Chennai are just a few of the cities facing these challenges. Case studies show that these cities, however, were able to respond with various measures to conserve water and ensure sustainable access for their populations. Responses like these emphasise the need for sustainable water management in urban city planning.

Venice: a city on water

Venice, a city like no other, is a prime example of a unique urban development born from its aquatic environment. Built on a lagoon, Venice's architectural and urban planning thoroughly reflect the interaction between water and their civilisation. Its canals, bridges, and well-known palazzos are testaments to Venice's fusion of culture with its scenic landscape. However, Venice also faces an existential threat due to the rising of sea levels. The city is adapting to their circumstances by implementing innovative solutions, such as the 'MOSE project', which involves the construction of movable flood barriers to protect the city.

Sustainable Urban Planning

One critical aspect of urban planning in response to water-related challenges is the incorporation of sustainable design principles. Cities like Singapore have demonstrated remarkable success by integrating green spaces, parks, and sustainable landscaping to mitigate the heat-island effect of the city and enhance water retention. This year, I myself had the chance to visit the city's famous 'Spectra: Light and Water Show', which is set against the backdrop of the Marina Bay Sands resort. The show set on the bay showcases how architectural ingenuity can transform a body of water into a city-staple tourist attraction without disrupting the surrounding environment. Spectra's stunning visual display is a testament to the power of sustainable and ethical urban city design to both celebrate the natural body of water and incorporate it into the city's man-made architecture.



“The history of a city can be told by the stories of its rivers and the bridges that cross them.” – Anthony T. Hincks

The architectural journey through the ages reveals the profound impact of water on the development of urban cities and urban spaces. From the ancient engineers of Mesopotamia to the modern challenges of water scarcity and climate change, city architects have continuously adapted to utilise water in preserving environmental sustainability, whilst also forming beautiful architectural structures and paying respect to its natural beauty and already existing structures. Venice stands as a living example of a city living in harmony with its aquatic surroundings, and modern cities like Singapore showcase innovative solutions to integrate water into architectural structures and convert existing bodies of water into stunning tourist hotspots without eliminating them altogether.

As we look to the future, the history of architecture and civilisations, and the current efforts of cities worldwide, we are reminded of the need for sustainable urban design. By embracing water conservation and attempting to create innovative approaches to nature-friendly architecture, we can ensure that this life-giving resource remains at the heart of eco-friendly living spaces. Water, as the architectural muse, continues to inspire architects world-wide to build cities and structures that reflect our connection to the natural world, even as we grapple and struggle to deal with the challenges of our modern age.

5.7 Water and the Evolution of the Cities: A Comprehensive Perspective

By Vidya Kamath

“Water is the driving force of all nature.” – Leonardo da Vinci

The relationship between water and cities dates to ancient human civilization. Throughout history, the development of cities has been closely tied to water. This relationship remains deeply significant in India, where ancient traditions coexist with modern urbanization. Water has been a crucial element in the development of cities throughout history. It has fuelled urbanization by providing essential resources, facilitating trade, and shaping cultures. In India, a country known for its reverence of water, cities like Varanasi along the sacred Ganges and bustling Mumbai along the Arabian Sea vividly illustrate the importance of water in city growth.



Figure 1: City of Varanasi along the banks of Ganges



Figure 2: City of Mumbai along Arabian Sea

Varanasi, a historical city dating back thousands of years, showcases the integral link between water and Indian urbanization. Situated on the banks of the Ganges, this city has been sustained and enriched by the sacred river. The Ganges serves as a water source and holds immense spiritual value, drawing in millions of pilgrims and tourists for religious rituals and cleansing. It's a cultural and religious hub, shaping Varanasi's identity and traditions.

Throughout history, water has played a crucial role in India's urban development, powering agriculture and trade. The Indus Valley

Civilization flourished thanks to advanced irrigation systems, and rivers like the Yamuna, Godavari, and Brahmaputra fostered cities along their fertile banks.

Water management has also been essential for public health and sanitation. Early urban planning in the Indus Valley focused on efficient drainage systems, which became crucial as cities grew. Water also served as a source of energy, powering watermills for industries like grain milling and textile production. As urban populations expanded, infrastructure like dams, levees, and drainage systems became necessary to manage the complexities of water resources. Mumbai, a historic maritime trade center, exemplifies the lasting impact of water on India's economic and cultural diversity.

Access to clean drinking water is a fundamental human right and a significant concern for modern cities. Water remains an essential component of urban life in today's world, particularly in rapidly urbanizing countries like India. Cities like Delhi have made it a critical goal to provide residents with clean water access and have put extensive water supply networks in place to achieve this.

In densely populated urban areas, efficient sewage systems are necessary to maintain public health and sanitation. Many Indian cities, including Mumbai, have been working tirelessly to modernize their sewage infrastructure to meet the growing needs of their residents. Water also plays a crucial role in transportation and trade, making ports essential hubs of economic activity. Indian cities are upgrading their port facilities to support global business, with the Jawaharlal Nehru Port near Mumbai serving as a prime example of this. These upgrades are significantly impacting the economic vibrancy of the city.

In addition to its practical uses, water also enhances the quality of life for city residents. Many urban planning initiatives incorporate water features like lakes and fountains to contribute to the city's aesthetic appeal and provide recreational spaces for residents. Chandigarh in India, for instance, includes Sukhna Lake in its design, which has become a beloved part of the city's landscape.

Two urban areas that exemplify the enduring importance of water in the

contemporary context are Copenhagen, Denmark, and Venice, Italy.

Copenhagen, renowned for sustainability and waterfront development, has transformed its harbor into a vibrant urban waterfront. Once an industrial port, the inner harbor is a thriving public space called “The Copenhagen Harbor.” Water is central to the city’s recreational activities, such as swimming in the harbor’s clean waters. This transformation reflects the city’s commitment to creating attractive and sustainable waterfront communities that enhance residents’ quality of life.



Figure 3: Copenhagen's industrial harbor is being developed into a recreational hub.



Figure 4: The City of Venice, Italy

Venice is celebrated for its unique relationship with water. Built on a network of 118 islands in the Venetian Lagoon, it's often called the “City of Canals.” Water is not only a defining feature but also the lifeblood of Venice. The city’s intricate canals serve as its primary transportation system, with water buses and iconic gondolas being standard modes of getting around. Venice’s historical significance as a maritime and trading power is still evident today, making it a global center of commerce. However, Venice faces challenges, like the risk of flooding during high tides, which it addresses with projects like the MOSE system.

The intricate and enduring relationship between water and cities reflects historical continuity and adaptation to modern challenges. As urban areas continue to grow, responsible management of water resources becomes increasingly crucial for maintaining public health, economic prosperity, and overall quality of life. India’s Varanasi and Mumbai are prime examples of the significance of water management, while cities like Copenhagen and Venice demonstrate the enduring importance of water in urban environments. Water will undoubtedly remain a defining element in the story of cities.

5.8 The Urban Landscape Shaped by Water: Udaipur

By Nandini Ganesh

A colorful city wakes up every morning at the sound of faint warbles that grow into the chatter of tourists. Palaces in stone glisten in golden light. Between the silhouettes of ancient trees and royalty, unmissable and powerfully quiet, is... Water.

Almost all of the lakes in the sublime city of Udaipur are man-made, being added over time during the reign of different rulers. It is a prime example of how water moulds the urban landscape, all the while being the fulcrum about which life in the city revolves.

Before the 13th century, Udaipur was part of the Mewar kingdom. At the time, residents suffered from water shortage and poor sewage systems. Rulers at the time constructed 7 artificial lakes to address water issues. Under the British regime, Udaipur came to be known as the 'City of lakes', and till today, the water bodies remain its lifelines. The topography of the region and landscape dominate the overall settlement pattern in the city. While tourists are the beating heart of the city, the lakes are cultural and social landmarks that serve as a quiet undercurrent.

Despite the many beautiful lakes, Udaipur's water crisis is worrying. Since its inception, the city has faced issues of water scarcity. The lakes built were looked after not only by the administration of the rulers but also local people. With growing population and unregulated rapid commercialization, the inflow of pollutants escalated quickly, and the scant attention to cleaning operations only intensified the problem. The health of the lakes has grown more precarious every year. The people of Udaipur have taken efforts to draw the attention of the authorities to the lakes through public meetings and lecture sessions.

This is perhaps one of the initial steps we can take to preserve our water systems. Awareness of the role water plays in everyday lives is necessary to fight for its proper care in times of distress. Mindful usage is key to cutting short water scarcity problems at the most basic level. A person who is truly conscious of how detrimental the effects of polluted or

scarce water are will think twice before throwing litter into water bodies casually. While foreign countries struggle to keep their water systems free of chemical discharge and hidden poison in water, we in India need to begin at a more tangible and fundamental level, where we eliminate the presence of solid waste in water. It should not be as common as it is to see a bunch of tourists throwing away a packet of chips into a serene lake on a boat ride. Strict punishment for those that do commit the crime of littering must be enforced by the local governing body.

Cities are epicentres of growth and efficient infrastructure is the backbone of an urban system. In Indian cities, infrastructure facilities are provided by multiple institutions and authorities. Perhaps curtailing the number of people involved in decision making will help in creating a more holistic and coherent city. While a general public vote may be taken on certain issues, it is necessary for an intimate group of learned individuals to ultimately propose a smart and sustainable solution. A fragmented approach to planning, such as creating a water supply plan or sanitation plan individually by sector, neglecting the whole, causes inefficiency in the system.

The success of a waterfront city depends largely on the quality and balance of the land-water confluence. Treating this interface between land and water will be crucial in urban development. Designing passive environments that capture the visual beauty of water and dynamic facilities to encourage activity around it will contribute positively to the urban landscape. The mere sight and sound of water has the ability to evoke and enhance psychological comfort. Harmony in the visual composition of the different elements of bazaars and palaces that together form the lakefront, is elevated by the presence of water. In some of these water bodies, fountains are curated, which in contrast to the tranquillity, create a sense of liveliness through their movement and symbolize celebration. Thus on an urban scale, it will be key to understand in what form to use available water such that it is catering to different needs and evoking a variety of emotions. Thoughtful use in this way can lend to the character of the city.

With growing awareness and the quest to preserve our culture, historic cities in developing countries are working hard to revive their waterfronts

in response to the need for sustainable development, conservation and growth in tourism. All the while in the process of change, it is essential that symbolic, religious and socio-cultural values are carefully considered in future proposals. These proposals and the actions taken thereafter will reinforce the city's identity and be a catalyst for community pride.

5.9 The Common Platform: Water and Urban Evolution

By Aniruddha Lokhande

CITY is more like a machine and evolution makes it work more co-ordinate and that increase the dependency. This dependency based on basic needs for human being and social relation. Nowadays very few of us can define what are our basic needs. Its true that to fit in that curriculum (be part of that machine) human being forget what we need actually for being in reality. We feel that change make us different from other and we continuously changing evolving to live a meaning full life, some are trying to make changes on social platform to improve collectively. But as a human being we forgetting our basic needs, we evolved in some period of time and start behaving different than other animals living creatures. So now we thinking we can make, change anything as we want without thinking of diversity (the place where we actually belong to and connected with). We don't even care about food-chain, water consumption and shelter which built uneven as we want.

Water is not only our consumption need but also as manufactural element. We all know in this day and age as a human being we want more relaxed easy and effortless life. That is the reason we manufacturing more that 50 percent things that not even needed. If they are not present then also, we can have good lifestyle. Just for luxury, effortless lifestyle, more important requirement of city and society create this abundance. As an architect we can change entire building construction techniques and make it more connected to diversity (have many references from past like Mohenjo-Daro civilization and ongoing projects like The Line). But its not possible and main reason behind it no one want to change. As we differentiate in every particular thing's society has so called two parts rich and surviving which is middle class (poor people not even considered while evolution of cities, creation and building as social aspect) and everyone want to make there pyramid of Giza. Storing things and living there after life in that tomb and don't even care about resident. On that note we are thinking about evolution, preserving N number of things but how does it work.

As an architect we have rationality to make changes, head the society and city infrastructure towards the era which capable of reawaken connection to biodiversity as ancient people but with current posture. SOLUTION is based in roots of human evolution and settlement formation. Its all related and depend on need, what if human beings don't have same most important basic three needs, then there are no settlements, we bind by our need and then humanity plays its role.

Water and evolution of city, there has to be a common platform for our basic needs then only all community want change to improve, to conserve, to maintained. Either there always both side edge sword nothing will change and just facing avoiding social problems until it turns in pandemic. What is actually a common platform? Before that have to decide what are the basic needs we actually have in this era, not only from food, water but also it includes transportation, internet, education. Then there we can built on singular platform have singular connective sense of attachment. For example, for transportation singular system for large context, internet connection can be only social that allow more control and avoid many consequences.

Then water and evolution of city plays more important role not only manufactures can decide about water usage but also common man can give his opinion about what projects need water where it is used and why it is used. Common platform doesn't required leader from some specific community because it's not like old days' government can contact to people. Then again there is this question, does machines really want change or just want to repair until it is signify as scrape?

5.10 Cities and Water: From Ancient Civilizations to Floating Futures

By Shifa Hussain

Cities have evolved from water and despite their water challenges, within their geo-climatic regions, and in the midst of natural calamities and disasters. Every sector of a city's development flourishes because of the likelihood of water availability in that city. The decline of most river valley civilizations like the Indus Valley, Mayan, and Khmer civilizations was due to water inadequacy.

At various historic sites of these civilizations, archaeology has revealed the existence of indigenous water harvesting and management systems, technologies, and practices that supported sustainable localized agriculture, and the household requirements of the community. The traditional technologies were constructed to suit their local surroundings and were also simple to construct.

Water management systems used by the ancient civilizations across the world include:

- Canal irrigation – The canal irrigation network effectively diverted water across large agricultural fields. It has been found in several civilizations including Indus Valley and Mesopotamia.
- Qanat – The water system was developed in ancient Iran by the Persians during the last millennium BC. It consists of a deep-settled water channel that conveys underground water to the consumption areas without excess loss of water due to evaporation. The Qanat water system spread to other countries along the Silk Route and from the expansion of the Arab empire. Variations of the Qanat water system can be seen in China where it was known as the Turpan water system.
- Terrace irrigation – The Incans cultivated on terraced hill slopes with water channels supplying each individual terrace with water from the hill lakes.

- Dams – The ancient Mesopotamians were the first to construct dams. Dams in ancient times were required for flood management, agricultural irrigation, domestic water supply, and navigation for water transport.
- Reservoirs and wells – The Indus Valley civilization had a sophisticated water storage and withdrawal system for domestic, irrigation, and ceremonial purposes.

As cities progressed, urbanized, and stratified, these methods became industrialized to serve the built environment. The field of hydraulic engineering in modern times determines the construction of a city's agricultural irrigation systems, domestic water distribution systems, firefighting and sprinkler systems, drainage systems, sewage

treatment systems, storm water management systems, rainwater harvesting systems, ground-water recharge systems, dams, and embankments.

According to the International Water Association, in the 21st century, 50% of the total world population lives in cities and towns, overcrowding urban centers. By 2050, 70% of the world's population is estimated to live in urban areas. This has led to the growth of informal settlements and settlements in peri-urban areas. The government water supply schemes cannot adequately meet the water requirements of these households. The affordability of clean and safe water for these settlers also constitutes a larger urban problem. Urban planning mechanisms can be optimized to ensure sustainable utilization of resources by the citizens. The 'new urban agenda' is towards the transfer of planning policies towards transitional holistic methodologies incorporating several other disciplines of urban life and the involvement of a range of stakeholders. The components of the planning would include – basic services and infrastructure, green buildings, transportation systems, water, and sanitation.

Simultaneously, by the year 2050, 90% of the world's major cities built around water edges are expected to be affected by sea-level rise and flooding. Regenerative city planning is a type of risk-resilient city planning approach adopted in several places. The construction of sea walls in

Shanghai, the elevation of buildings above the surrounding road level on mounds, and storm-water gardens in Hammarby were taken up as preventive measures. Neiderhafen riverfrontl promenade, constructed above the flood barrier along the Elbe River in Hamburg and the Dryline Project of New York are instances of public waterfront design integrated with the city's flood protection systems. The integration of energy production and wastewater treatment into eco-friendly urban landscapes in Sydney and the starting of the Rotterdam Innovative Nutrients, Energy, and Water Management project are steps towards sustainability.

The emergence of the floating cities concept for countries of Maldives, Busan, South Korea, Polynesia, etc. has remodelled the notions of city life from living on land to living on water. The aspiration for organic, detached, and replaceable cities has also brought about technological advances in the ability to utilize water effectively. Oceanix is one such city concept. The city would consist of repeating modules for better management. Each neighbourhood unit consists of around seven stories of high structures, individual services and amenities, and customized functional edges. The electrolytic properties of seawater minerals will be utilized to create anchors for the floating platforms. Hydroelectric plants, wind turbines, and solar panels will be harnessed together with ocean thermal energy converters to produce renewable energy for these cities. However, this would limit the energy utilization by the citizens to a certain extent.

The growth of cities, the threats due to climate change, the lack of technology, and city regulations will continue to cause distress and inequalities among several citizens. At the same time, small-scale and large-scale architectural interventions will affect the built environment through their processes.

5.11 Coastal Code Clash: Mumbai's fast paced battle for identity

By Mihir Kabani

What is Bombay without its waves? A city that never sleeps, now potentially lulled into slumber by the relentless hum of traffic sounds? The Arabian Sea's melodious serenades, forever intertwined with the soul of Mumbai, are at risk of being overridden by the disruptive machinery of the Coastal Road Project—an imposing spectre in the city's ever-evolving and infinitely accommodating skyline.

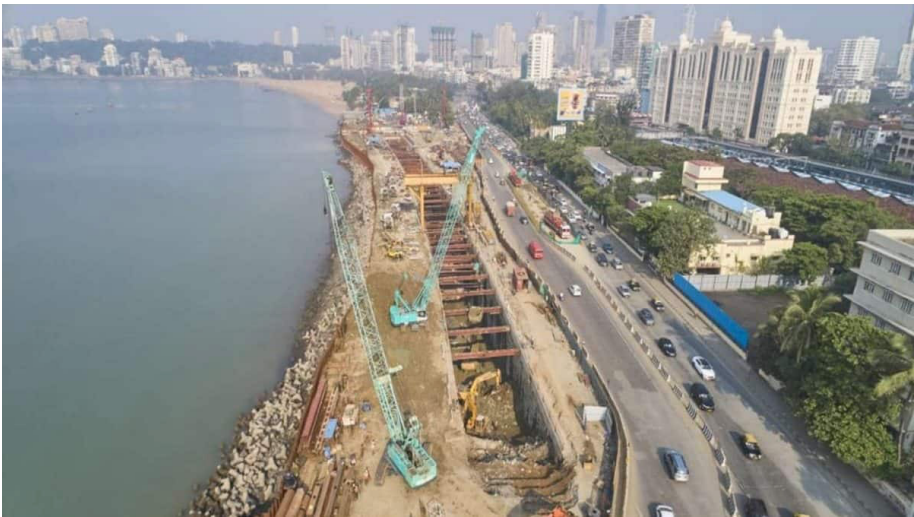
This narrative, far from ordinary, embodies a saga profoundly infused with Mumbai's essence. This metropolis of dreams, bustling with ceaseless aspirations, now takes center stage in a new act—the Coastal Road Project. This contemporary bargain tantalizes the city with the alluring promise of progress, swifter commutes, economic prosperity, and the dream of becoming a global tourist destination. An enthusiastic standing ovation resonates among investors and politicians, casting an anticipatory spotlight on Mumbai's forthcoming transformation.

“Everyone in Mumbai treats the ocean as a big dustbin, including the government and the people. Never in my life did I hear that the sea is nice,” laments 47-year-old Zoru Bhathena, a true Mumbaikar born and raised in this bustling metropolis. His words reflect a common sentiment among many residents who have witnessed the evolution of their beloved city. The construction of the Coastal Road represents a transformative chapter, reshaping Mumbai's coastline for the first time since the 1970s. Yet, this story is multi-layered, akin to intricate lines of code. The drama unfolds on the Urban Planning front, where the project's proponents lock horns with advocates of a more sustainable path. The critics raise their voices, lamenting the focus on road-based infrastructure while overlooking almost everything. In this clash of ideologies, a burning question emerges—can Mumbai afford to sever its deep-rooted connection with the sea, trading it for a concrete utopia?

In the ongoing execution of the Coastal Road Project, the city's path is akin to a complex line of code, a branching decision structure not

unlike the dilemmas faced by programmers. Here, two core variables, progress and preservation, engage in a binary struggle for the very essence of Mumbai's codebase. The central inquiry perseveres: Can the city effectively execute an algorithm that balances its aspirations for development with the mandate to safeguard its historical identity?

The resolution to this query won't be found within a standalone function. Instead, it will manifest through a collaborative effort across the city's extensive codebase, a network sustained by its inherent resilience. Mumbai, like a never-ending loop, must confront the paradox of code evolution while preserving its rich historical legacy. Within the vast domain of urban development, the Coastal Road Project is but one subroutine, and the city's narrative is far from reaching its terminal execution.



Source: Financial Express (<https://www.financialexpress.com/business/roadways-work-on-mumbais-ambitious-coastal-road-project-is-in-full-swing-check-latest-update-here-3087886/>)

Epilogue

As this anthology draws to a close, what remains with us is not merely a collection of essays, but an unfolding dialogue—between architecture and memory, between theory and practice, and between generations of thinkers who continue to challenge, unsettle, and reimagine the discipline. Each contribution, whether rooted in historical inquiry, critical reflection, or speculative imagination, demonstrates the vitality of writing as a medium through which architecture is not only represented but reconstituted.

In the Faculty of Media at Bauhaus-Universität Weimar, where my doctoral research is situated, we are constantly reminded that architecture is not an isolated field. It resonates across images, texts, films, and narratives that shape our understanding of the built environment. Reading through the diverse voices collected here, one becomes aware of how the act of writing transforms architecture into a cognitive space—a space where ideas take form, where questions acquire urgency, and where new imaginaries become possible.

The effort of the jurors, many of whom are doctoral researchers themselves, has been crucial in curating this dialogue. Their engagement reflects the intersectional lens that Bauhaus Weimar continues to cultivate—one that resists disciplinary silos and instead foregrounds cross-pollination between architecture, cultural history, philosophy, and media studies. Such a perspective is particularly vital in our present moment, when architecture cannot be studied apart from its ecological entanglements, technological mediations, and socio-political contexts.

This volume also stands as a testimony to the pedagogical value of essay writing in architectural education. Unlike the immediacy of a drawing or the materiality of a model, the essay allows for reflection, layering, and argumentation. It compels the author to position their ideas within broader discourses, to recognize precedents, and to articulate both doubt and conviction. The essays gathered here underscore how writing can serve not only as documentation but as invention, opening up

intellectual terrain that the built form alone cannot traverse.

What, then, is the legacy of such a book? I believe it lies in its invitation to future readers—students, practitioners, researchers—to continue the conversation. Every essay is a fragment of a larger mosaic, a provisional statement within an ongoing historiography of architecture. Some texts will resonate differently years from now, as contexts shift and crises evolve. Yet the courage to speculate, to experiment with language, and to situate architecture in dialogue with wider cultural concerns will remain its enduring gift.

As we look ahead, the challenge is not simply to preserve architecture's past or critique its present, but to imagine futures that are more equitable, sustainable, and humane. The voices in this book remind us that imagination, too, is a responsibility—and that the written word is one of its most powerful instruments.

May this collection inspire its readers to think, to question, and above all, to write.

Sneha Singh
Faculty of Media
Bauhaus-Universität Weimar



ARCHITECTURAL JOURNALISM
And criticism

**Bauhaus-Universität
Weimar**

This publication is supported by Open access funds by
Uni-Bibliothek, Bauhaus-Universität Weimar.
Cover Design: Sun Möller-Park

ISBN 978-81-955288-4-4

