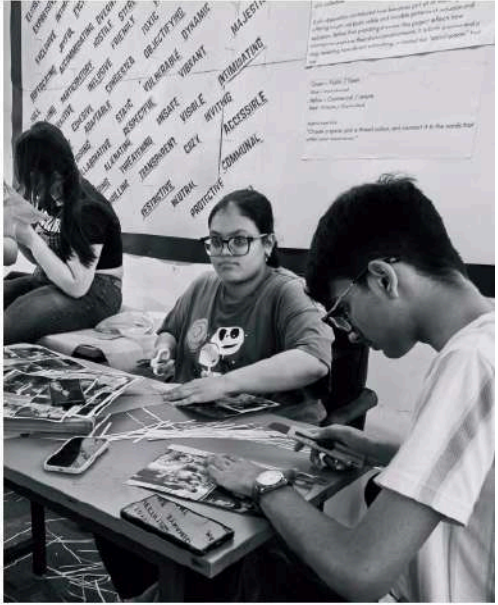


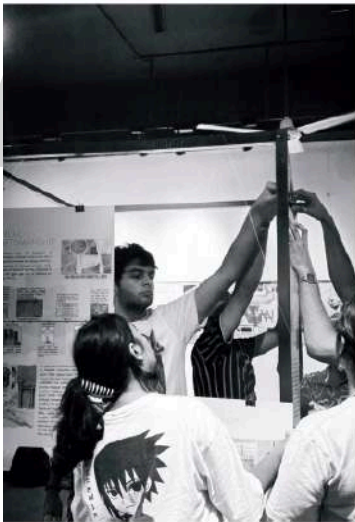
School of Art and Architecture
Sushant University

Inclusive Environment in Growing Cities

ICAAUS 2025

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SUSHANT SCHOOL OF ART AND ARCHITECTURE
Inclusive Environment in Growing Cities:
A publication of Abstracts and Sessions

International Conference on Art, Architecture and Urban Studies (ICAAUS)
17th September – 19th September 2025
School of Art and Architecture, Sushant University, Gurugram

3 Days | 4 Themes

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International Conference of Art, Architecture and Urban Studies

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Partners

Scientific Committee

Organising Committee

Foreword



**Prof. (Dr.)
Rakesh Ranjan**

Patron : ICAAUS 2025

*Vice Chancellor
Sushant University,
Gurugram*

It gives me great pride and joy to present the 1st International Conference on Art, Architecture & Urban Studies (ICAAUS 2025), organized by the School of Art and Architecture at Sushant University. The theme of this conference, “Inclusive Environments in Growing Cities”, is both timely and essential. As our urban centers expand at unprecedented scales, we are confronted with critical questions of sustainability, accessibility, equity, and resilience. This gathering of distinguished scholars, practitioners, and policymakers is not just an academic exercise, but a meaningful step towards shaping environments that uphold human dignity and ecological balance.

I believe that ICAAUS 2025 is more than a conference ; it is a stepping stone towards a continuing legacy of inquiry and action. By nurturing dialogue across disciplines, we lay the foundation for a body of knowledge that will guide not only today’s cities, but also those of the future. The strength of this initiative lies in its vision: to create inclusive urban spaces that accommodate diversity, embrace change, and harness innovation. Looking ahead, I see this as the beginning of a series of scholarly engagements that will expand in scope and impact, positioning Sushant University as a hub for thought leadership in art, architecture, and urban studies. Each paper, presentations, and discussions in this volume adds to a collective narrative of hope, responsibility, and progress.

I extend my heartfelt congratulations to the organizing committee, faculty, staff, and students whose tireless efforts have made ICAAUS 2025 a reality. Your commitment has set a benchmark for academic excellence and institutional collaboration. As we turn these conversations into actions, I am confident that this conference will inspire new partnerships, innovations, and pathways to make our growing cities more inclusive, sustainable, and humane.

Foreword



**Prof. (Dr.) Sanjeev
Kumar Sharma**

*Patron : ICAAUS 2025
Pro Vice Chancellor
Sushant University,
Gurugram*

It is with great joy that I present this Book of Abstracts for the 1st International Conference on Art, Architecture & Urban Studies (ICAAUS 2025), hosted by Sushant University, Gurugram, on the theme “Inclusive Environments in Growing Cities.” Cities are more than built spaces; they are reflections of our collective spirit, aspirations, and responsibilities. As we look ahead, we must remember that inclusivity is not just about physical accessibility, but also about nurturing environments where dignity, compassion, and opportunity become part of everyday life. In this sense, the conference theme is deeply aligned with our guiding vision—Ahead. For Life. There is a timeless English proverb that says: “We do not inherit the earth from our ancestors, we borrow it from our children.” This thought reminds us that what we design, build, and preserve today will shape the world that future generations inherit. To create truly inclusive cities is therefore both a moral duty and a spiritual calling. Another saying tells us: “Charity begins at home.” Likewise, inclusivity begins with the smallest of gestures, decisions, and designs within our immediate environments. From there, it radiates outward, shaping communities, cities, and eventually nations.

ICAAUS 2025 is not merely an academic event, but a reminder of our collective responsibility to shape humane and sustainable urban futures. It brings together minds and hearts across disciplines, nurturing the wisdom that arises not in isolation, but in collaboration. I congratulate the organizers and participants for creating this meaningful platform of exchange. May the insights shared here inspire us to go forward with courage, creativity, and compassion—always ahead, and always for life.

Foreword



Col. V.K. Malik

*Chairperson : ICAAUS
2025*

*Dean, School of Art and
Architecture, Sushant
University*

It gives me great satisfaction to present the Book of Abstracts for the 1st International Conference on Art, Architecture and Urban Studies (ICAAUS 2025), organized by the School of Art and Architecture, Sushant University. The chosen theme, “Inclusive Environments in Growing Cities”, is not only relevant but also urgent. We are at a turning point in urban history where the pace of growth challenges our ability to ensure equity, sustainability, and inclusivity. The issues we address today will shape the lived experiences of generations to come.

Conferences such as ICAAUS are like sowing seeds. Each idea shared, each discussion nurtured, becomes part of a larger process of growth ; one that takes root in research, practice, and policy. With time and collective care, these seeds will flourish into tangible actions, transforming the way we design, inhabit, and experience our cities. The relevance of this gathering lies not only in responding to present concerns, but also in anticipating future ones. It encourages us to think critically and act responsibly, bridging disciplines and perspectives to co-create urban environments that are inclusive.

I congratulate the organizing team, faculty, and participants for their dedication in bringing this vision to life. May ICAAUS 2025 serve as the foundation for many more such endeavors, continuing to inspire thought, dialogue, and action for a better urban future.

Foreword



Prof. (Dr.) Navin Piplani

Chairperson : ICAAUS 2025

Director, School of Art and Architecture, Sushant University

I am delighted to write this foreword for the first-of-its-kind international conference on art, architecture and urban studies hosted by the School of Art and Architecture, Sushant University. The primary focus of the conference is on an inclusive environment in growing cities, and it raises some of the key questions: How can inclusivity drive future urban transformation? How can cities empower communities and build resilience in an ever-changing landscape? How can cities ensure that economic growth benefits everyone and strengthens social cohesion rather than deepening inequality? And, how can governance and technology create cities that are not only technologically advanced but also just and inclusive?

The conference provides a shared venue to academics and practitioners of multi-disciplinary domains to voice their concerns and explore possibilities in relation to inclusive growth, urban transformation, universal accessibility, heritage-led growth, sustainable development, community participation and so forth. These issues become most relevant today as we inch towards the idea of 'Viksit Bharat' (Developed Nation) by 2047.

As one of the oldest premier architecture institute in the country, our collective responsibility gains importance to steer the dialogue on cross cutting issues of gender equality, human values, professional ethics and sustainability. Under the leadership of Professor (Dr) Rakesh Ranjan, Hon'ble Vice Chancellor, Sushant University - this international conference is a giant leap in providing a leading direction to planning, architecture and design disciplines and professions.

I wish the entire conference team of the Sushant School of Art and Architecture for a grand success of the meeting of minds, ideas, efforts, energies and actions.

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From the Editorial Desk



**Prof. (Dr.) Pooja
Lalit Kumar**

*Convenor, ICAAUS 2025
Director, School of Art
and Architecture,
Sushant University*

As Convenor and Editor for the 1st International Conference on Art, Architecture & Urban Studies (ICAAUS 2025), it gives me great pride to welcome you to this timely dialogue on “Inclusive Environments in Growing Cities.”

The idea of inclusivity has always carried deep personal and professional meaning for me. Yet, when we think of “inclusivity,” we often confront its opposite—exclusivity. This contrast reveals the very challenge before us: our cities, in their growth, too often create divides instead of connections. To commit to inclusivity is therefore to make a conscious choice—to imagine and design spaces where everyone has a voice, a place, and a sense of belonging.

ICAAUS 2025 has been conceived as a platform to nurture this commitment. By bringing together scholars, practitioners, policymakers, and students, the conference encourages dialogue across disciplines, geographies, and perspectives. Inclusivity is not a one-time act, but a continuous process of collaboration and shared learning. Only by moving beyond silos can we begin to address the layered complexities of urban life.

My hope is that the conversations shared in this book will spark collective visions for our future cities—visions where ideas are not confined within institutions but grow into shared frameworks for transformation.

I extend my heartfelt gratitude to the organizing team, contributors, and participants who have made this vision possible. May this dialogue inspire us all to imagine and build urban environments that are not only sustainable and functional, but truly inclusive?

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Prologue

The First International Conference on Art, Architecture & Urban Studies, hosted by the School of Art and Architecture, will focus on discourses and innovations surrounding Inclusive Environments in Growing Cities. This conference aligns with the Sugamya Bharat Abhiyan (Accessible India Campaign) and the United Nations' Sustainable Development Goals (SDGs), particularly: SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities), and SDG 11 (Sustainable Cities and Communities).

The conference envisions an India that integrates accessibility into its urban and peri-urban fabric, ensuring that cities are inclusive, sustainable, and responsive to the diverse needs of their citizens. As urbanization accelerates, the conference will investigate how cities can become adaptable, barrier-free, and future-ready drawing on policy frameworks, innovative design approaches, and advanced technologies, including Artificial Intelligence (AI), to create thriving and inclusive urban environments.

The conference will act as a platform for exploring innovative design approaches, policy frameworks, and technological solutions that promote inclusivity and social equity in India's rapidly growing urban landscapes. Comprehensive discussions on culture, heritage, psychology, governance, environment, universal design, technology, AI and judicial frameworks etc. As cities and peri-urban areas face increasing environmental, social, and economic pressures, ICAAUS 2025 aims to spark dialogue, showcase research, and develop actionable strategies to create cities that are not only advanced but also just, inclusive, and responsive to the needs of all citizens.

Objectives

- Inspiring Keynotes by thought leaders shaping inclusive urbanism.
- Curated Conversations on policies, design innovations, technological advancements, legal frameworks, and community-driven solutions.
- Workshops & Seminars to develop actionable strategies for accessibility and urban inclusivity.

- Cutting-Edge Research on universal design, adaptive urban frameworks, smart city infrastructure, and legal mechanisms for ensuring equitable access.

Importance of Inclusive Environments

1. Physical Needs

- Inclusive cities must ensure accessibility for all, including individuals with disabilities, the elderly, and those with differing physical abilities. Urban design should incorporate barrier-free mobility, accessible public transportation, and universal design principles.
- Public spaces should be safe, secure, and welcoming, encouraging engagement regardless of physical ability.

2. Social Needs

- Fostering social inclusivity involves promoting diversity and creating spaces that reflect and celebrate cultural differences. No group should feel marginalized.
- Gender-responsive spaces, inclusive housing policies, and accessible education systems are essential to bridging social gaps and encouraging representation in urban planning processes.

3. Economic Needs

- Equitable access to economic opportunities supports social mobility and reduces inequality. Inclusive urban environments should promote job creation, affordable housing, and fair labor practices.
- Access to economic resources and markets ensures that all residents can thrive.

4. Judicial Needs

- Justice and equity should be at the core of inclusive environments. Legal frameworks must protect vulnerable communities and ensure fair access to housing, healthcare, and essential services.
- Advocacy for citizens' rights to the city and participatory urban governance strengthens inclusivity.

5. Technological Needs

- Smart city initiatives should be designed with inclusivity in mind, ensuring that technological advancements benefit all citizens.
- Digital access, smart infrastructure, and tech-based urban services should be equitable and user-friendly.

Prof. (Dr.) Pooja Lalit Kumar

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Eminent Guests



Shri Rajesh Aggarwal

Secretary, Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment

Shri Rajesh Aggarwal, a 1989-batch IAS officer, serves as the Secretary of the Department of Empowerment of Persons with Disabilities (DEPwD). A Computer Science graduate from IIT Delhi, he is a fervent advocate for e-governance and accessibility for persons with disabilities. His distinguished career includes leadership roles in initiatives like Aadhaar and Jan Dhan, and as Secretary for the Ministry of Skills Development. Since taking charge of DEPwD in September 2022, he has focused on leveraging technology to drive inclusion and distribute assistive devices to beneficiaries.



Ms Manmeet Kaur Nanda

Additional Secretary, Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment

Ms Manmeet Kaur Nanda, a 2000-batch IAS officer of the West Bengal cadre, has held key positions in the Government of India. She served as Joint Secretary in DPIIT and later as MD & CEO (Additional Charge) of Invest India, spearheading investment promotion and industrial policy initiatives. In 2023, she was appointed Joint Secretary in the Cabinet Secretariat.

Recently empanelled as Additional Secretary, she now serves in the Department of Empowerment of Persons with Disabilities, Ministry of Social Justice & Empowerment. Known for her leadership and policy expertise, she continues to contribute significantly to governance and national development.



Mr. Pradeep Dhaiya
IAS, Commissioner, Gurugram

Pradeep Dahiya, IAS, is a 2013-batch officer of the Haryana cadre and presently the Commissioner of the Municipal Corporation of Gurugram (MCG). Over his career, he has served in various leadership roles including Deputy Commissioner of Jhajjar, Kaithal, Nuh, and Hisar; Additional Deputy Commissioner; CEO of the District Rural Development Agency. Known for his proactive approach and on-ground inspections, he has consistently emphasized transparency, accountability, and citizen-centric governance. At MCG, his priorities include improving sanitation and door-to-door waste collection, identifying and addressing flood-prone areas, enhancing civic infrastructure, and ensuring efficient grievance redressal mechanisms to make Gurugram a cleaner, more sustainable, and responsive city.



**Prince
Manvendra Singh
Gohil,**

*Founder, Lakshya
Foundation*

Manvendra Singh Gohil is the Crown Prince of Rajpipla, an erstwhile princely State of Gujarat and the 39th direct descendant of the 650 year old Gohil Dynasty. He is the first member of a royal family to openly come out as gay to the world. He is the only Indian to be interviewed by Oprah Winfrey three times and has been featured on the show "Keeping up with the Kardashians ". He is the Chairperson and Co founder of Lakshya Trust dedicated towards Empowerment of LGBT community. He is also the Brand Ambassador of AIDS Healthcare Foundation India Cares, the world's oldest and largest non profit organization for HIV testing and treatment. Currently he is developing his dream project, A LGBTQA community campus at his royal establishment of Hanuman Eshwar for the social and financial empowerment of LGBT community.



**Ar. (Prof.) Abhay
Purohit**

*President, Council of
Architecture*

Ar. (Prof.) Abhay Vinayak Purohit graduated in architecture from V.R.C.E., (presently known as VNIT) Nagpur in 1985 with First Class and later he did his Masters on City Planning (MCP) (1987) from I.I.T., Kharagpur.

He has vast experience of over 25 years with the Council of Architecture and has worked on many committees related to Education and Professional reforms. He also represented COA as the nominee on UGC Inspection Committee for universities. He is the Elected representative of Heads of Institutions on the Council of Architecture for the term 2016-2019 & 2019 – 2022, and 2022-2025. He closely worked with the Council of Architecture for the last twenty years on various Boards and committees. He was also on the Member – Executive Committee, of the Council of Architecture (2016-2019).

He worked as the arbitrator, advisor, and convener of many committees with the Council of Architecture. Currently, he is a member of the Academic Advisory Boards of numerous schools across India.



Mr. N.K. Patel

*President, Institute of
Town Planner India*

Shri N. K. Patel is the President of the Institute of Town Planners, India (ITPI), a national body of town planners. Patel is a gold medalist in Urban Planning from CEPT and has served in the Gujarat government's town planning department, as well as with the Ahmedabad Urban Development Authority (AUDA). He was elected President in late 2020 and has since been involved in promoting dynamic urban planning practices.



Ar. Vivek Logani
*Chairman—IIA
Haryana Chapter*

Ar. Vivek Logani is the Chairman of the Indian Institute of Architects (IIA), Haryana Chapter, where he actively leads initiatives to promote professional growth, knowledge exchange, and architectural excellence in the state. Founder of Vivek Logani and Associates, Gurugram, he brings expertise in architecture, interior design, landscape consultancy, and valuation. With a career dedicated to blending creativity, functionality, and sustainability, his practice reflects a deep commitment to design innovation. Under his leadership, IIA Haryana has been a platform for dialogue on urban challenges, design thinking, and future-ready architecture. Passionate about strengthening the role of architects in shaping resilient and inclusive environments, Ar. Logani continues to inspire younger professionals and contribute to the growth of the architectural community.

Keynote Speakers



Dr Gaurav Raheja
*Professor & Former
 Head (Architecture &
 Planning),
 IIT Roorkee*

Dr. Gaurav Raheja is Professor and Former Head, Department of Architecture & Planning, IIT Roorkee, with over 18 years of academic and research experience. An expert in design thinking, universal and inclusive design, and social sustainability, he founded the Laboratory of Inclusive Design, focusing on human-centric approaches through disability and diversity studies. He has advised the Government of India on landmark projects including the New Parliament Building, IGI Airport, and Mumbai Suburban Railways. He is the lead author of national accessibility guidelines such as the Harmonised Guidelines (2021). A DAAD Research Ambassador and Fellow, he has held visiting fellowships in Germany and contributes globally as an advisor, reviewer, and keynote speaker on accessibility and inclusive design.



Mr George Abraham
*Chairman—World
 Blind Cricket
 Association*

Born in London on 31 October, 1958, George Abraham is a Social Entrepreneur, Inspirational Speaker and a Disability Activist. He has been visually impaired since the age of 10 months thanks to a near fatal attack of meningitis. He started his career in Advertising in 1982 working with Advertising & Sales Promotion Co and Ogilvy Benson & Mather. His professional life took a sharp turn when he visited a school for the blind in 1988.

He launched cricket for the blind in India in 1990. Setup the World Blind Cricket Council and was elected as its Founding Chairman in 1996. He conceived and organized the inaugural World Cup of Cricket for the blind in 1998 at New Delhi. In 2013, he conceived and produced a 13 part TV serial—"Nazar Ya Nazariya" featuring Naseeruddin Shah and Harsh Chhaya as anchors. The serial which had over 39 case stories was about possibilities and potential.

George co-authored the book "A Handbook of Inclusive Education" in 2004 which was published by Sage Publication. Has delivered 2 TEDx talks in 2011 and 2017.



Dr Ashok Das
*Professor and Chair,
 Department of Urban
 and Regional
 Planning, University
 of Hawai*

Ashok Das is Professor and Chair of Urban and Regional Planning at the University of Hawai'i at Mānoa. He earned his Ph.D. in Urban Planning from UCLA, M. Arch. and M.A. in Environmental Planning and Management degrees from Kansas State University, and B. Arch. from the School of Planning and Architecture, New Delhi. Ashok's research explores institutional challenges to and innovations in ameliorating urban inequality in the Global South, especially in Asia. He was appointed Co-Chair of the Global Planning Education Committee (GPEC) of the Association of the Collegiate Schools of Planning (ACSP). He has contributed advice/research to the Asian Development Bank, the Ford Foundation, the World Resources

Institute, UN-Habitat, and UNDP. In recent years, he has conducted workshops for young scholars at Indonesian universities to strengthen critical research writing capacity.



Dr. Priyanjali Prabhakaran
Professor, Department
of Architecture and
Planning
College of Engineering
Trivandrum

Dr. Priyanjali Prabhakaran is a Professor at the Department of Architecture and Planning, College of Engineering Trivandrum. She holds a Ph.D. in Architecture from Jawaharlal Nehru Architecture and Fine Arts University, a Master's in Housing, and a B.Arch. from the University of Kerala, along with a PG Diploma in Management from IGNOU. With over two decades of teaching experience since 1999, she has also served as Head of Department (2023–2025).

Dr. Prabhakaran is an empanelled Access Auditor with the Department of Empowerment of Persons with Disabilities and Principal Investigator of the Barrier Free Consultancy Cell, Kerala. Her research includes projects on universal accessibility, land pooling, and sustainable urban planning, reflecting her commitment to inclusive and future-ready built environments.



Ms Anya Sirota,
Sr. Associate Dean of
Academic Initiatives
and Professor,
Taubman College of
Architecture and
Urban Planning,
University of
Michigan

Anya Sirota is an architectural designer and founding principal of the internationally recognized studio Akoaki. She is Professor and Senior Associate Dean of Academic Initiatives at the University of Michigan Taubman College of Architecture and Urban Planning. Her work operates at the confluence of architecture, urbanism, and cultural production, advancing a design methodology that integrates spatial aesthetics with systems of social and economic reciprocity. Through both practice and research, she investigates how architecture can serve as a platform for civic agency and collective expression. Sirota currently leads the architectural visioning for the Detroit Cultural District, a long-term urban design initiative reimagining the role of cultural institutions in shaping equitable city futures.



Dr. Mohammad Saquib
Associate Professor,
Faculty of
Architecture & Ekistics
Jamia Millia Islamia
University

Dr. Mohammad Saquib is an academician and architect with twenty-five years of experience in academia and practice. He currently serves as a faculty member at Jamia Millia Islamia. He is dedicated to transforming studios into vibrant learning environments for architectural research, helping students cultivate a culture of creativity, inquiry, inclusiveness and experiential learning. He also coordinates the doctoral program and master's course in Architecture Pedagogy in the Department of Architecture. He has been actively engaged in research, with his contributions published in prestigious journals and publications. He provides ongoing guidance to doctoral candidates in fields as diverse as architecture education, artificial intelligence, and climate change.



Ar. Ankita Kapoor,
Senior Program Manager, Safetipin

Ankita Kapoor is a seasoned professional with a background in architecture and urban planning. As a Senior Program Manager at Safetipin, she specializes in data analysis, visualization, and crafting actionable recommendations to enhance the safety of public spaces, particularly through a gender-responsive lens. Her interests deeply lie in urban mobility and gender equity, and she adeptly manages projects and stakeholder relationships to advance these themes.

She has a background in architecture and urban planning and works with both government and non-government urban stakeholders for creating safe and gender responsive urban spaces and systems. With a keen interest in research her work focuses on issues of gender and urban mobility. She completed her master's degree in Urban and Regional Planning from CEPT University, Ahmedabad, India in 2018.



Mr. Rajneesh Sareen
Director, Sustainable Habitat Programme, Centre for Science and Environment

Rajneesh Sareen is the Director at the Centre for Science and Environment (CSE), New Delhi, where he leads work on sustainable habitat, urban development, and climate-resilient growth. With over two decades of experience in research, policy advocacy, and programme design, he has been instrumental in shaping national policies on housing, building efficiency, mobility, and resource management. His work emphasizes integrating equity, affordability, and sustainability into India's urban transition. He has authored and contributed to several policy papers, training modules, and capacity-building initiatives for governments, academia, and civil society. Rajneesh continues to guide multi-stakeholder dialogues, promoting innovative approaches that align environmental priorities with developmental goals, making him a recognized voice in sustainable urbanisation and climate action.



Dr Ana Paula Pimentel Walker
Associate Professor in Urban Planning at The University of Michigan

Ana Paula Pimentel Walker is an Associate Professor in Urban Planning at The University of Michigan. She investigates how communities engage with urban governance and evaluates the significance of participatory institutions in planning socially and environmentally just cities. Her action research identifies overlapping systems of oppression that prevent marginalized communities from participating in local governance and focuses on amplifying the voices of informal dwellers and migrants in the Americas through community organizing, capacity building, and access to justice. Dr. Pimentel Walker has served as co-chair of the ACSP Global Planning Educators Interest Group (GPEIG) and is the current co-chair of the Global Planning Education Committee (GPEC). She is the recipient of the 2025 Marilyn J. Gittell Activist Scholar Award from the Urban Affairs Association. She holds a law degree from Brazil, a dual master's degree in urban planning and Latin American studies (UCLA), and a Ph.D. in anthropology (UCSD).



Sreejata Roy
Co-Founder, Revue

Sreejata Roy is a Delhi-based artist, researcher and educator, working at the intersection of community, public space and socially engaged art. Through Revue, her collaborative practice with media practitioner Mrityunjay Chatterjee, she explores how migration, gender, memory and everyday narratives shape urban life. She holds an MPhil in Media Art from Coventry School of Art and Design, UK, and a practice-led PhD from the University of Technology Sydney. Her projects have engaged with working-class and migrant communities in Khirki, Hauz Rani and Jama Masjid, using media such as painting, dialogues, wall-blogs, installations and performances. Actively involved in teaching at Ashoka and Ambedkar University, she continues to foster critical conversations on art, society and inclusive urban environments.

Panel Discussion 1 : *Inclusive Futures – Designing Cities for All*

This panel explores how inclusivity—physical, cognitive, social, and cultural—can be embedded as the foundation of urban design. Moving beyond checklists of accessibility, the discussion highlights universal design strategies that create equitable mobility, housing, and public spaces. Experts will address cognitive and cultural inclusion, acknowledging neurodiversity, mental well-being, and pluralistic traditions as vital to shaping cities. The conversation also links inclusivity to economic opportunities and heritage preservation, reframing it as a driver of growth rather than a constraint. The panel aims to create a vision of cities where every individual, regardless of ability or identity, can participate fully in urban life.

As the moderator for this session, I am keen to draw upon your expertise and experience to shape a meaningful dialogue. To help guide the conversation, I am sharing below a set of broad questions that may be posed during the discussion. In view of the time available, it may not be possible to cover all of them, but they provide an overview of the directions in which the dialogue will unfold:

- If cities are meant to welcome all, whom do you think is being left out today?
- Do our current frameworks and policies genuinely support inclusivity? Or is it just on paper?
- When it comes to public spaces, is exclusion primarily a design problem, a social problem, or a market-driven economic one?
- Looking ahead, what kind of inclusivity will the future demand?
- In your opinion, what steps or strategies can help us move toward creating such inclusive cities?



Prof. (Dr.) Suruchi Modi

*Moderator
HOD, School of Art & Architecture, Sushant University*

Dr. Suruchi Modi is an architect and urban designer with academic roots at SSAA and CEPT University, a specialization in Tall Building Design from the University of Nottingham and a doctorate from SPA, New Delhi. Her research on inclusivity had a focus on social spaces for children in residential high-rises. At Sushant University, Dr. Modi is Senior Professor and Head of the Department at the School of Art and Architecture. She has been recognized for her project “Revival of Mixed Land Use Concept as a Tool to Develop a Sustainable City Model” at CEPT and has received international acclaim for her award-winning proposal “Passivehaus Skyscraper Design for New York City. Her professional experience spans India and abroad and today she continues to advance context-sensitive, sustainable, and technologically driven approaches to high-rise development, with a vision of shaping resilient and inclusive cities for the future

Panellists



Dr. Tarush Chandra,

Professor, MNIT Jaipur

Dr. Tarush Chandra is Professor in the Department of Architecture and Planning at Malaviya National Institute of Technology (MNIT), Jaipur, where he has served since 1996. He holds a Ph.D. in Urban Planning from CEPT University, Ahmedabad, and has over 27 years of teaching and research experience. His specialization and research interests include sustainable urban development, urban transformations, urban ecology, and infrastructure planning and management. He has guided doctoral and postgraduate dissertations, published in reputed journals and conferences, and convened national and international conferences on urban sustainability. He has also led sponsored projects, consultancy works, and training programs on green buildings, ECBC, and universal design. Recipient of the MNIT Outstanding Teacher Award (2024), he remains actively engaged in academic and professional bodies.



Dr. V Sam Prasad,

Director at AIDS Healthcare Foundation India Cares

Dr V Sam Prasad, Country Program Director of AHF INDIA CARES is a practicing Public Health Policy Professional for over two decades. As a trained Medical Doctor armed with a Master's in Public Policy, Dr. Sam has been instrumental in designing innovative programs for the benefit of PLHA and the marginalised SEXUAL MONORITIES in India. Under the aegis of AHF - Dr. Sam and AHF team was instrumental in the first ever National FREE CONDOM store in India and initiating the MOON LIGHT HIV testing (Night testing among HRG population) in India. Dr. Sam also supervises the AHF Centres of Excellence India Cares HIV ART Clinics in New Delhi & Mumbai offering free HIV services for around 4000 patients. Dr. Sam also brings his experience working with the WHO - World Health Organisation for the eradication of Polio and implementing programs for strengthening Health systems during his assignment with USAID and UNICEF in India. As a Public Health / Policy practitioner with strong field experience, socio-cultural understanding, interwoven with his scientific temper places Dr. Sam as a perfect panel member to address this gathering.



Dr. Sonali Kataria,

Founder, Sunrise Learning School

Dr Sonali Kataria, a Medical Doctor, an ex-AIIMS Consultant, is the Founder of Sunrise Learning Foundation, SLF is a non-profit Non-Government Organization, dedicated towards providing empowerment, employment, education, vocational training, inclusion and support services to children and adults with Autism and other special needs, and their families.

As of now, this organization runs several programs for families that are directed towards Independence and Dignity of persons with special needs. Besides being a senior doctor, a social activist, an autism professional, a special-school head, a 2-times TEDx speaker and an autism parent. In this

journey of empowering families, she has shared the stage with Vidya Balan, Shabana Azmi, Sania Mirza, Smiriti Irani, Saima Nehwal, and been invited to Dr Subhash Chandra Show, trying to create every possible opportunity for these influential people to understand the challenges faced by special families, and working towards creating more & more INCLUSIVE SYSTEMS at a larger level.



**Prof Anand
Khatri**

Founder, Urban
Village Charitable
Trust &
Director, AITSAP

Educationist, architect, researcher, theosophist, healer, and national powerlifter, Anand Khatri, enriches his research on villages and urban villages in India with intersemiotic discussions on vernacular, poetry, healing architecture, and planning. He is the founder of the Poesis Society for Poetry, he works to bring poetry into daily living. The founder director of the research repository UVCT - Urban Village Charitable Trust, he is working to develop the knowledge of organizing settlements to better people's lives. At AITSAP, he is the head of the research cell and has several publications on villages and urban villages. He is a consultant to the Ministry of Panchayati Raj on the GPSDP for the village of Kalonda. His policy recommendations for urban villages were accepted for implementation in G20T20, 2022, and the communique he edited was received in G20U20Y20 2023. A consultant to the Ministry of Panchayati Raj, through the Research Cell, Anand works is also the Director of AIT-SAP.



**Ar. Bankim
Kalra**

CEO, Centre for Green
Mobility

Bankim Kalra is the Chief Executive Officer of the Centre for Green Mobility, where he leads transformative programs in active mobility, equitable access, and sustainable transport planning. Trained as an architect and urban planner, he has delivered over 100 projects globally, from Auroville to Vancouver and Bhubaneswar to Miami. His work bridges design and policy, winning accolades such as the APA's International Planning Award for Bhubaneswar Smart City. With experience spanning public sector advisory, street design, and capacity building, Bankim is committed to reimagining Indian cities as inclusive, people-first spaces anchored in climate-responsive urbanism.

Panel Discussion 2 : Governance & Innovation for Inclusive Growth

An inclusive city goes beyond basic accessibility, acting as a dynamic ecosystem where governance, progressive policies, and innovative technologies converge to empower every resident. It's a place where citizen awareness transforms into active participation, and policies are brought to life through the "gravitas of provision"—the critical act of translating intentions into tangible, human-centered spaces. Architects and urban planners are key enablers in this process, ensuring that the physical environment embodies the city's equitable goals. Ultimately, an inclusive city uses technology not as a panacea, but as a tool to amplify human needs and build a more resilient future for all.



Prof. Himanshu Sanghani,
Moderator
Professor, School of
Art & Architecture,
Sushant University

Himanshu is an Architect and Policy & Programme Analyst with a focus in Sustainability, Rail and Road Infrastructure, Transport-ParaTransit, Last mile connectivity and development sector. He has qualifications in Masters in Environmental Engineering & Sustainable Infrastructure and Post-Graduate Diploma in Environmental Architecture. He has experience in administering projects of urban scale and worked with agencies such as GLZ, IFC, IIEC, World Bank. He is now channelizing his skills and experience to excel in the sectors of Sustainable Development, Best Practice Management, Policy and Regulatory Support, Institutional Strengthening, Urban Infrastructure and Sustainable Financing, AR/VR/MR in Urban Systems and Governance. He has published papers in various domains and was former Associate Dean of the School of Art and Architecture, Sushant University; post his Associate Dean tenure he is now managing Design Track of the school.

Panellists



Ms. Sarika Panda,
Co-founder, Raahgiri
Foundation

Sarika Panda Bhatt is an Indian urban planner, architect, and social entrepreneur known for co-founding the Raahgiri Foundation and the Raahgiri Day movement. This initiative, which temporarily closes streets to vehicles for recreational activities, has been replicated in dozens of cities across India.

An expert in sustainable mobility and road safety, she champions urban planning that prioritizes pedestrians and cyclists. She has been recognized as a global leader in urban mobility and was named the Bicycle Mayor of Gurugram. Her commitment to urban development and road safety was also highlighted with a National Film Award for co-producing the documentary *The Silent Epidemic*.



Mr. Subhash Vashishth,
Director, CABE foundation

Subhash Chandra Vashishth is an Accessibility, Universal Design & Diversity Inclusion Specialist, working on standards, capacity building, access audits & advocacy. As an Expert Member on Bureau of Indian Standards Committees for National Building Code & Smart Cities, he has contributed to standards formulation incorporating universal accessibility. He litigates disability rights cases before judicial forums, lectures in architecture & engineering institutions & is empaneled as Trainer for Access Audits as a part of Accessible India Campaign. He is Founder Director of Centre for Accessibility in Built Environment Foundation based in India.



Ms. Anubha Singhal
Director, Enable Me Access

Anubha, an architect by profession and an expert in accessibility and universal design, has over six years of experience. She is the cofounder and director at Enable Me Access. As a member of the International Association of Accessibility Professionals (IAAP), she is a passionate advocate for creating accessible and inclusive environments for everyone.

Her work is deeply personal, stemming from her and her younger brother's diagnosis with Limb-girdle Muscular Dystrophy, a progressive condition causing muscle weakness. This experience fuels her commitment to working for physical accessibility and promoting Universal Design principles. Anubha is dedicated to transforming India's accessibility landscape through education and a comprehensive approach to problem-solving.

Her work emphasizes on community-led governance to foster truly inclusive urban spaces



Ar. Vivek Gupta,
*Principal Architect,
Arvind Vivek Associates*

Vivek Gupta is a design practitioner in the field of Architecture, Urban Design and Interiors, for the past 36 years, having a mid-sized studio in New Delhi. The Studio is best characterized by its methodology to explore and test responses, to produce designs that fulfill the spirit of the brief, in an inventive and unique way. The process irrespective of scale of project includes, developing concepts with collaborative research. Material innovation, climatic responsiveness and a design approach, distinct to each project - collectively resulting in a completely metamorphosed spatial experience.

Over the years, the studio has had the opportunity to work with very illustrious, reputed clients and the design outcome has been enriching and exciting.



Ms Sonali Vyas,
*Director, Programs &
Operations, Safetipin*

Sonali Vyas is Director, Programs & Operations at Safetipin, a social impact organisation working to build responsive, inclusive, safe, and equitable urban systems using data and technology. As an architect and urban planner, Sonali brings over 10 years of cross-sector experience leading projects on gender-inclusive urbanisation, sustainable transport, and safe cities across Asia, Latin America, and Africa.

Her work bridges urban planning, gender equity and youth engagement, — driven by a commitment to co-creating impact with both government and non-government stakeholders. She has collaborated with city authorities, international development agencies, and civil society networks to design data-informed interventions that make public spaces safer and more accessible, especially for women and marginalised groups.

EVENTS

Poster Making Competition: Vasudhaiva Kutumbakam



Rooted in the timeless ethos of “Vasudhaiva Kutumbakam”—the world is one family—this poster competition seeks to nurture the spirit of inclusivity among young minds. Inclusivity, at its core, is about acknowledging that people, animals, birds, and nature form our larger family. When we embrace others, our society becomes stronger, friendlier, and happier. It is through collective growth and shared responsibility that we truly build harmonious environments.

As part of the 1st International Conference on Art, Architecture & Urban Studies (ICAAUS 2025), hosted by Sushant University, Gurugram in collaboration with the Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice & Empowerment, Government of India, this competition offers school students a creative platform to explore the idea of “Inclusivity” through visual expression. Organized in association with Raahgiri Foundation, the competition emphasizes that inclusivity begins with everyday spaces familiar to children—their parks, streets, and favourite places in the city.

Themes & Age Groups:

- Classes 1–3: My Neighbourhood Park
- Classes 4–5: Streets in My Neighbourhood
- Classes 6–8: My Favourite Place in My City

Submission Deadline: 16th September 2025 (by 12:00 midnight)

Results Announcement: 19th September 2025 (Closing Session of ICAAUS 2025)

Submission Link: <https://forms.gle/umfWeqm9u1McN5PV9>

This initiative is designed to instill empathy, creativity, and awareness in children, encouraging them to reimagine their surroundings as inclusive spaces. The winner and runner-up in each category will be awarded a prize with certificate, and their achievements will be showcased on the university’s official webpage and social media platforms.

Through the imaginative strokes of children, we hope to spark conversations on how inclusivity can shape equitable, sustainable, and accessible cities of tomorrow.

Aaina: Inclusivity Ki Pehchaan



Our nukkad natak “Aaina: Inclusivity Ki Pehchaan” is a theatrical exploration of the theme of inclusivity, performed as part of ICAAUS 2025. Using the metaphor of a mirror, the play critically reflects on how society continues to marginalize individuals despite legal and institutional progress. Structured through three scenes, it portrays the struggles of an acid attack survivor confronting social stigma, a young individual facing ridicule for gender expression, and an adolescent grappling with body image and self-acceptance.



The performance employs the traditional form of street theatre—chorus, rhythm, and direct audience engagement—to bring forward voices that are often silenced. It emphasizes that inclusivity extends beyond policy or symbolic justice; it requires a transformation in collective attitudes and everyday behavior. By presenting narratives rooted in lived experiences, the natak calls for dismantling prejudice, enhancing empathy, and reaffirming the shared responsibility of building a society where dignity and equality are universal realities.



हाथों से सोचना



हाथों से सोचना is a collaborative work created by BFA students during a clay modeling workshop. The installation consists of clay tiles carrying imprints of human forms and gestures—marks of hands, faces, and expressions pressed directly into the material. Each surface holds the immediacy of touch, preserving fleeting encounters between body and clay.

The work foregrounds inclusivity and accessibility by shifting art from something to be looked at to something that can also be touched and felt. These tactile impressions transform the clay into a shared language of recognition (pehchan), where form and emotion are communicated through texture rather than sight alone.

By inviting audiences to engage with the tiles through their hands, the work challenges conventional restrictions around touch in art spaces. It emphasizes that perception is not singular: for some, the ridges of a palm may evoke intimacy; for others, a pressed expression may become a point of connection.

Haatho Se Pehchan thus becomes both an archive of human presence and an invitation to experience art through embodied, democratic, and multisensory means.

Voices of Belonging: A Journey from Longing to Inclusivity



Our performance, "From Longing to Belonging", is a musical journey that mirrors the theme of inclusivity in architecture and life. Through three songs, we explore the human quest for identity, acceptance, and celebration in shared spaces. We begin with Nadaan Parindey, capturing the universal longing to find a place called home. The journey continues with Ye Honsla, a reminder of the strength and resilience needed to create environments where every individual feels seen and valued. Finally, we conclude with Ilahi, a song that celebrates freedom, diversity, and the joy of togetherness. Just as architecture shapes inclusive environments, music too brings voices, emotions, and people together in harmony. This performance is our way of showing how inclusivity transforms spaces into places of belonging.

Riwayat



Riwayat, the publication society of the School of Art and Architecture, has curated an engaging exhibition that brings together the creative and critical works of students. The showcase reflects the society's vision of making academic expression more accessible, while giving a platform to ideas that question, provoke, and inspire. The highlight of this year's exhibition is a unique living infographic, designed as a dynamic installation rather than a static display. It engages viewers by posing a core question: How social are our social spaces?

This interactive element goes beyond conventional visual representation, encouraging participants to reflect on how people occupy, share, and experience spaces in everyday life. By visualizing patterns of social interactions, inclusions, and exclusions within built environments, the infographic becomes both an inquiry and a mirror of our spatial realities.

Through this innovative format, Riwayat aligns the exhibition with a larger discourse on inclusivity in architecture and urban design. It opens up conversations about who gets represented and who remains overlooked in social spaces. In doing so, the society underscores its broader aim of amplifying student voices while contributing to the ongoing dialogue on creating more equitable, inclusive, and socially responsive environments.

Introduction to ICAAUS 2025

The First International Conference on Art, Architecture & Urban Studies (ICAAUS 2025), hosted by the School of Art & Architecture, Sushant University, is envisioned as a dynamic platform for exploring the theme “Inclusive Environments in Growing Cities.” The conference aligns with the Sugamya Bharat Abhiyan (Accessible India Campaign) and the United Nations’ Sustainable Development Goals (SDGs)—particularly SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities), and SDG 11 (Sustainable Cities and Communities).

As India’s cities expand at unprecedented rates, ICAAUS 2025 seeks to reframe the conversation around urbanization by placing inclusivity at its core. The conference aspires to imagine an India where accessibility and equity are seamlessly woven into the urban and peri-urban fabric, ensuring environments that are sustainable, adaptable, barrier-free, and responsive to the diverse needs of all citizens. It will highlight how policy frameworks, innovative design strategies, and emerging technologies, including Artificial Intelligence (AI), can drive this transformation.

ICAAUS 2025 is conceived as an interdisciplinary forum, bringing together architects, urban planners, social scientists, lawyers, policymakers, technologists, educators, and community leaders to share insights across disciplines. It acknowledges that inclusivity extends beyond physical access to encompass social justice, cultural recognition, gender equity, economic participation, and legal protections. By incorporating these diverse voices, the conference will reflect the layered realities of cities and develop more holistic responses to their challenges.

The program will feature inspiring keynotes, curated conversations, workshops, and research presentations that span the spectrum of accessibility, universal design, governance, technology, culture, heritage, and socio-economic equity. By addressing the physical, social, economic, judicial, and technological dimensions of inclusivity, the conference aims to spark dialogue, showcase pioneering research, and build actionable strategies for equitable urban futures.

The discussions will unfold across four key themes:

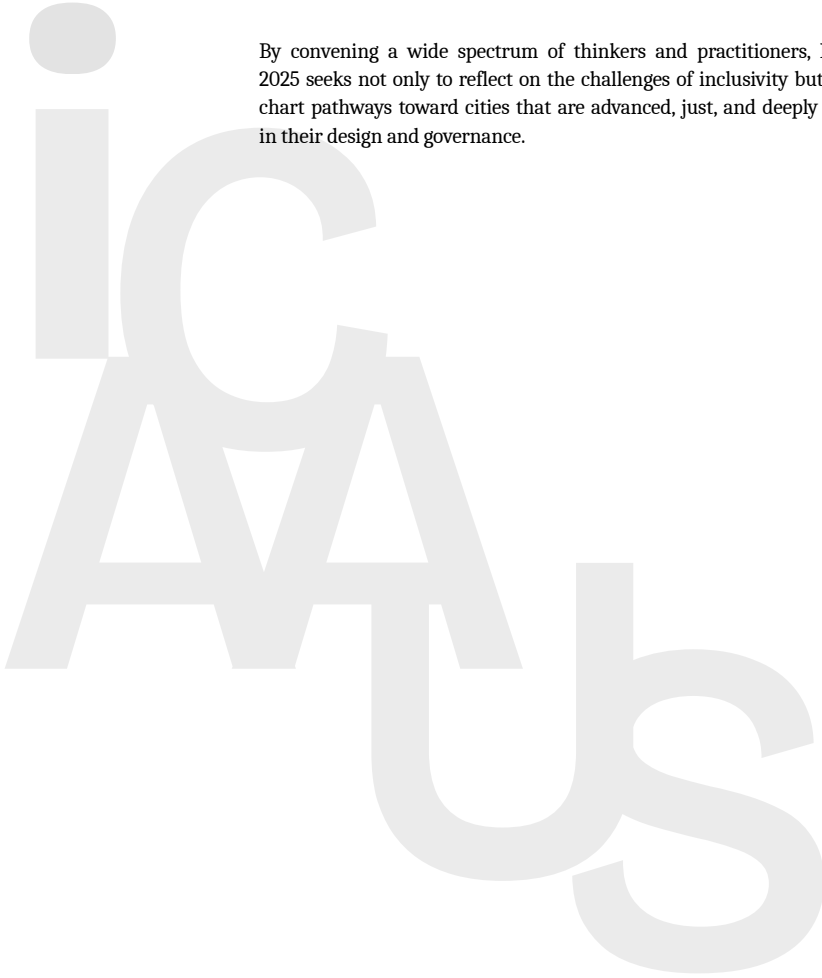
Accessible, Inclusive and Universal Design – advancing barrier-free mobility, inclusive transport, and revitalized public spaces.

Social, Cultural, and Cognitive Equity – nurturing cultural continuity, gender-responsive planning, mental well-being, and fair representation in cities.

Economic, Resilient, and Heritage-led Growth – strengthening community-based economies, adaptive reuse, and climate-responsive urbanism.

Governance, Policy, and Technological Innovation – shaping equitable frameworks, safeguarding citizens’ rights, and leveraging AI and smart city innovations to build responsive urban systems.

By convening a wide spectrum of thinkers and practitioners, ICAAUS 2025 seeks not only to reflect on the challenges of inclusivity but also to chart pathways toward cities that are advanced, just, and deeply human in their design and governance.



Inclusive Environments for Growing Cities Key Themes

Theme 1

ACCESSIBLE, INCLUSIVE AND UNIVERSAL DESIGN

Theme 2

SOCIAL, CULTURAL, AND COGNITIVE EQUITY

Theme 3

ECONOMIC, RESILIENT AND HERITAGE-LED GROWTH

Theme 4

GOVERNANCE, POLICY AND TECHNOLOGICAL INNOVATION

ic AAAS

Accessible, Inclusive, and Universal Design

Inclusive cities must provide equal access to spaces and resources through thoughtful design and accessibility. A truly inclusive urban environment combines physical, social, and cultural infrastructure to serve all people, regardless of ability, age, gender, or socio-economic background. Rethinking access, mobility, and participation allows cities to become more engaging and fair. As cities evolve, innovative strategies are essential to ensure that no one is left behind, making urban spaces vibrant, adaptable, and socially just.

This raises a key question: *How can inclusivity drive future urban transformation?*

- **Barrier-Free Environment:** Applying universal design principles to improve accessibility in public spaces.
- **Inclusive Mobility:** Strengthening public transportation systems to ensure equal access for all.
- **Reactivating Historic Public Spaces:** Revitalizing urban areas to encourage community interaction and social inclusion.



ic AAAS

Are Inclusive Cities Also Age-Friendly? Reimagining the Concept of 'Ageing in Place' in Indian Urban Neighbourhoods

Nidhi Dandona, PhD scholar, School of planning and architecture, New Delhi.

Prabhjot Singh Sugga, Assistant Professor, M.Arch.SA, Bharati Vidyapeeth, College of Architecture, Pune.

ABSTRACT :The Age-friendly Cities initiative by WHO (2007) offers a global framework to make urban environments more inclusive for older adults. In India, where seniors now make up over 8% of the population, this is increasingly relevant. While traditional joint families supported ageing at home, the rise of nuclear households, especially in metros where there is a disconnect between older adults' needs and current urban infrastructure.

This research focuses on how mid-rise apartment neighbourhoods in Delhi-NCR can support "ageing in place," enabling seniors to live with dignity, independence, and social connection thus making the city more inclusive. It assesses housing and community design through physical, medical, social, and cultural lenses, examining inclusive features like healthcare access, intergenerational spaces, and outdoor areas. By drawing on literature and case studies, the study questions whether inclusivity automatically ensures age-friendliness or calls for context-specific solutions rooted in Indian urban realities. The findings offer actionable insights for design, policy, and planning to create neighbourhoods that empower older adults

KEYWORDS: Ageing in place, Inclusive city, universal design, age friendly city, Indian neighborhood, older population

The Alchemy of Public Space: Strategies for creating Urban Commons in Constrained Environments

Ruchi Saxena, Department of Architecture, School of Planning and Architecture, I.P. Estate, New Delhi, India

Department of Urban Regeneration, Faculty of Architecture and Ekistics, Jamia Milia Islamia, New Delhi, India

ABSTRACT : Free to access and use public spaces are an essential component of urbanity. However, access to such spaces has been unequitable worldwide. Dense urban environments, characterized by high population density and built-up areas, often suffer from a severe lack of an accessible urban common. Yet, even in the most densely populated and seemingly inhospitable urban environments, cities are finding innovative ways to carve out and revitalize public spaces. This paper explores the strategies and approaches employed by cities to create public spaces in areas where it seems impossible, highlighting successful examples and the broader implications for urban life. The study utilises a multiple case study analysis as the prime methodological approach. By examining a diverse range of cities, with specific geographic, economic, socio-cultural characteristics and urban densities, the study aims to identify common patterns and strategies in urban public space creation. The innovative initiatives are discussed with a focus on their transferability and potential adoption. The results are presented as a synthesis of findings, organized around the themes of spatial strategies, policy applications, tactical partnerships, adaptive design approaches or creative thinking, to create public spaces in constrained environments. The documented case studies have shown that where a city's commitment lies, so does its ability to create public spaces, regardless of density. Consequently, cities have taken over road infrastructure, utilised residual spaces or, where the ground remains unavailable, public spaces have been elevated in the sky, employed FAR incentives or co-created with communities, temporarily repurposed spaces, and when nothing seemed plausible, brought in mobile playgrounds to address the lack of recreation.

KEYWORDS: Constrained environments, public space creation, spatial strategies, policy applications, density.

Fostering Children's Independent Mobility in Gurugram: A Comparative Analysis of Urban Neighbourhoods and Design Strategies for Inclusive Cities

Varun V Nair , JV Ventures, Hyderabad, Telangana.

Ms. Ria Kapoor, School of Art and Architecture, Sushant University, Sector 55, Gurugram, Haryana.

ABSTRACT :This research investigates the critical role of urban planning in promoting Children's Independent Mobility (CIM) within rapidly growing cities, using Gurugram, India as a case study. Through a comparative analysis of two distinct urban typologies - a gated community (Suncity) and an organically grown neighborhood (Sector 9A) - this study examines the complex interplay of physical, social, and individual factors that influence children's ability to navigate urban environments independently. The research addresses Sustainable Development Goal 11, as well as the Sugamya Bharat Abhiyan initiative. Using a mixed-methods approach combining primary surveys, spatial analysis, and policy review, the study reveals significant disparities in children's access to safe spaces, amenities, and opportunities for independent exploration. Key findings highlight that while physical proximity to amenities is important, parental perceptions of safety and social capital play equally crucial roles in enabling CIM. The research proposes a comprehensive five-strategy framework (Upgrade, Protect, Reclaim, Activate, and Extend) for creating more inclusive urban environments that support children's developmental needs while fostering community cohesion and sustainable urban growth.

KEYWORDS: Children Independent Mobility, Urban Planning, Neighbourhood Design, Built Environment, Inclusive Cities, Gurugram, Universal Design, Smart Cities

Inclusive Urban Informality: Livelihood, Infrastructure, and Insecurity in Gurgaon's Banjara Market

Hemanshikha Khanna, 4th Year, Integrated Bachelors and Masters in Urban Planning Student.
 Ar. Ria Kapoor, Department of Planning, Art, and Research (DOPAR), Sushant School of Art and Architecture (SSAA), Sushant University, Golf Course Rd, Huda, Sushant Lok 2, Sector 55, Gurugram, Haryana 122003

ABSTRACT : Serving as a cultural community inside the India's leading metropolitan city, Banjara Market in Gurgaon functions as a dynamic informal hub for home décor, furniture, and handicrafts at reasonable prices. Over the course of the past two decades, the market has transformed into a thriving marketplace, which serves a diverse community of around 250 migrant shopkeepers who depend on this dynamic environment for their livelihoods. The term "Banjara," historically tied to nomadic groups, serves as a reminder of the resilience of these vendors and the importance of creating stable, empowering conditions for them to thrive. However, the informal nature of the market exhibits the challenges of being persistently neglected by multiple stakeholders, resulting in a severe lack of basic infrastructure and services. The research paper explores layered impacts of these issues through the employment of integrated approach, that involves field observations and vendor interviews, alongside secondary literature review in the beginning. The findings reveal the incrustated infrastructural neglect and legal instability, affecting not only the economic sustainability of livelihoods but also the health and well-being of both shopkeepers and their families. Furthermore, the absence of inclusive urban planning continues to deepen the marginalization of the market community. The research concludes by advocating for a comprehensive and inclusive framework for the management of informal markets, such as Banjara. The proposal emphasizes the importance of integrating essential infrastructure, providing security, promoting tourism and implementing participatory governance mechanisms. These strategies aim to ensure both livelihood security and dignified living conditions for the community.

KEYWORDS: Informal Markets, Urbanization, Inclusivity Migration and Urban Poverty

Barrier-Free Architectural Heritage: A Study of Accessibility at The Chhatarpur Temple in Delhi

Ar. Sandhya Ayar, Welsh School of Architecture, Cardiff University

Ar. Toshi Dube, Associate Professor, MBS College.

ABSTRACT : Within a dynamic urban region like Delhi, where temples are visited by all classes of people with varying physical, emotional and mental abilities, the architectural setting has often unintentionally posed certain physical and intellectual barriers, thereby restricting a part of the visiting demographic (like the elderly and disabled) from fully experiencing these environments. The need for inclusivity and universal accessibility for these religious spaces within the growing urban setting is now more urgent than ever. The research aims to understand how heritage structures can be retrofitted to incorporate user needs and accessibility without compromising their spiritual and aesthetic importance. The study includes findings from existing legal frameworks that go into making built heritage accessible for all. Fieldwork includes detailed case studies of prominent temple complexes in Delhi, that are studied not just for their architectural significance but also for the way they function as active spaces of congregation and celebration. The findings reveal a range of physical and sensory obstacles, posing as barriers for people with limited mobility. Drawing on from this analysis, the research proposes a set of design strategies tailored to address both physical and mental barriers. Particular attention is given to retrofitting approaches for large temple complexes, emphasizing feasible interventions that respect cultural heritage while enhancing usability. The study concludes by advocating for an inclusive architectural approach, where sacred spaces truly reflect the universal values they stand for, and where every devotee, regardless of ability, has equal opportunity to participate in spiritual and communal life

KEYWORDS: Universal Accessibility, Barrier-Free Temple Design, Heritage Architecture, Retrofit Strategies

Developing a Framework for Evaluating Inclusivity in Urban Neighbourhoods: A Case Study of Gurugram, India

Poorva Singh, Total Synergy Consulting Pvt Ltd, Gurugram.

Ar. Ria Kapoor, School of Art and Architecture, Sushant University Gurugram.

Dr Varsha Khetrapal Kumar, RSP India, Gurugram.

Robbin Dwivedi, School of Art and Architecture, Sushant University Gurugram

ABSTRACT : Inclusivity in urban planning is conceptualized as a rights-based and human-centric approach that integrates equity, accessibility, and representation into the spatial and social fabric of cities. It underscores the imperative of participatory planning processes, ensuring that all population groups—irrespective of gender, age, ability, or socio-economic background are afforded equitable opportunities to engage with and benefit from urban systems. This study identifies the neighbourhood unit as a critical scale of analysis, given its immediacy and daily relevance to residents' lived experiences. The research is designed to evaluate inclusivity at the micro-urban level, with a specific focus on vulnerable and marginalized demographics such as children, women, senior citizens, persons with disabilities, and transgender individuals. Adopting a case study design, the research selects Gurugram, India, as the study area due to its rapid urbanization and visible disparities in social, physical, and economic inclusivity. Employing purposive sampling, three neighbourhoods: Sector 4 (old Gurgaon), Sector 56 (transitional development), and Sector 82 (new Gurgaon) were chosen to represent distinct temporal and morphological typologies of urban growth. This selection enabled a comparative cross-sectional analysis of inclusivity outcomes. The study utilizes a mixed-methods framework, integrating both qualitative and quantitative data collection techniques. The results reveal spatial and programmatic disparities across the three neighbourhoods, particularly in infrastructure accessibility, public participation, and inclusivity in governance. The findings informed evidence-based spatial interventions and policy recommendations to improve inclusivity. The assessment framework developed serves as a diagnostic tool for planners, RWAs, and ULBs, facilitating responsive and inclusive neighbourhood planning. The research concludes that inclusive neighbourhoods are foundational to realizing equitable and sustainable urban development.

KEYWORDS: Inclusivity; Assessment Framework; social equity; physical equity; economic equity; inclusive neighbourhoods

Inclusive Informal Campus Spaces through Walkability Lens

Komika Walia, Department of Architecture, School of Planning and Architecture, New Delhi, India
Shuvojit Sarkar, Department of Architecture, School of Planning and Architecture, New Delhi, India
Anil Dewan, Department of Architecture, School of Planning and Architecture, New Delhi, India

ABSTRACT : University campuses are essential spaces that support not only educational aspirations but also social, recreational, and personal well-being for students. The presence of thoughtfully designed informal spaces on these campuses plays a crucial role in enhancing students' academic journeys by providing areas that encourage interaction, relaxation, and engagement with nature. University campuses are microcosm of cities. Built environment characteristics exist in campuses as those of any city. Land use has residential, commercial and transport networks which behave in similar way like a city, although, the scale and context remains quite less. Similarly, the campus informal spaces are essentially the leisure and recreation centres for the students. Therefore, like urban environments, campus built environment is also responsible for creating inclusive informal spaces.

This paper is an attempt to focus upon the role of walkability in informal campus spaces as a means to create access and inclusion. It uses the concept of campus walkability in the interpretation of accessible and inclusive planning issues for a technical higher education learning centre in an Indian context. Based on the ongoing research on campus walkability, it maps and defines the role of walkability to create a campus culture of inclusion and accessibility. It discusses the perspectives of contextual relevance of campus walkability with the users in informal spaces of a typical technical higher education campus. Measuring student perception, through a semi-structured questionnaire survey, reveals the key factors for meeting their needs of campus inclusion. The walkability factors that create a positive and inclusive experience for the users are identified. The results showed that compact, barrier free, comfortable and safe campus walking environment helps to create campus spaces that are inclusive for all.

KEYWORDS: walkability, campus, informal spaces, inclusive

Analysing Universal Design Principles Within Educational Institutes With Special Focus On Assam And Kerala

Ar. Barsha Kunda, Urban Designer, Assistant Professor,

(Department of Architecture, The Assam Royal Global University, Guwahati, Assam, India.)

Ar. Aysha Nezlin Chundakkadan, M.Arch.(General Architecture), Guest Lecturer (Department of Architecture, The Assam Royal Global University, Guwahati, Assam, India.)

Ar. Pratyasha Das, Urban Designer, Assistant Professor,

(Department of Architecture, The Assam Royal Global University, Guwahati, Assam, India.)

Ar. Pooja Singh, Assistant Professor,

(Department of Architecture, The Assam Royal Global University, Guwahati, Assam, India.)

ABSTRACT : Universal Design performs as a basic framework for advancing inclusion, independence and engaged contribution in society by designing products, spaces, and services that are accessible and functional for individuals for all ages, abilities, and backgrounds. In preference to retrofitting for accessibility, it highlights the preventive elimination of barriers, supporting not merely individuals with disabilities but also boosting the overall user satisfaction for multicultural population. This paper analyses the implementation and perception of Universal Design (UD) principles within educational institutions, with targeted attention to accessibility and inclusivity in architectural spaces. This study is composed of two parts: the first section evaluates selected international examples of educational institutions that seamlessly incorporated UD, that features the best practices and innovations globally. The second section evaluated Indian context, investigating the perspective and presence of UD elements in educational campuses through an analytical comparison of two states – Kerala and Assam. Using insights from small-scale questionnaires distributed among students, faculty and administrative staff, this section detects prevailing attitudes, and infrastructural gaps. The findings emphasize key challenges such as limited awareness, financial limitations and lack of regulatory enforcement, while also identifying areas of potential for policy and design interventions. The paper concludes by mapping out critical issues and future directions for integrating UD more effectively in India's educational infrastructure.

KEYWORDS: Universal Design, Infrastructure, Educational Institutions, Design, Accessibility, Inclusivity.

Reclaiming Open Spaces in Unauthorized Colonies of Delhi: Towards Achieving SDG 11.7

Ar. Farah Naz, Research Scholar , Department of Architecture and Ekistics, Faculty of Architecture and Ekistics, Jamia Millia Islamia, New Delhi, India

Dr. Ayla Khan, Associate Professor , Department of Architecture and Ekistics, Faculty of Architecture and Ekistics, Jamia Millia Islamia, New Delhi, India

ABSTRACT : This study explores the availability and classification of open spaces in three unauthorized colonies (UACs) of Delhi—in the context of Sustainable Development Goal (SDG) 11.7, which calls for universal access to safe, inclusive, and accessible green and public open spaces. Using mixed method approach which includes satellite imagery, spatial analysis, and policy document reviews, the research identifies a critical deficit in per capita open space well below the many regulatory benchmark. Marginal lands such as drainage buffers, roadside verges, and vacant government plots are often informally appropriated by residents for recreational use but remain unmapped and unrecognized in planning frameworks. This paper demonstrates that Master Plan for Delhi 2041, URDPFI Guidelines and other policies governs these open areas while SDG open space monitoring tools exclude UACs because of their legal status. The research suggests that informal colonies should be regularized through legal comprehensive flexible planning framework. It emphasizes the reform of institutional planning mechanisms that advocate safe, inclusive, and accessible green and public open spaces, so that urban sustainability policies are more closely aligned to the principles of equity that embedded in SDG 11.7.

KEYWORDS: Unauthorized Colonies (UACs), Urban Informality, Open Space Access, Spatial Justice, SDG 11.7

Paved over stories: The unintended consequences of urban modernisation in Gandhi Bazaar, Bengaluru

Ar.Pranathi S Udupa, Assistant Professors

Faculty of Architecture, PES University, 100 Feet Ring Road, Hoskerekhalli, Dwaraka Nagar, Banashankari, Bengaluru, Karnataka

Ar.Anusha M P, Assistant Professors

Faculty of Architecture, PES University, 100 Feet Ring Road, Hoskerekhalli, Dwaraka Nagar, Banashankari, Bengaluru, Karnataka

ABSTRACT : UGandhi Bazaar, nestled in the heart of old Bengaluru, has long been more than just a marketplace; it has been a living, breathing part of the city's soul. Known for its bustling flower stalls, traditional eateries, & the everyday rhythm of community life, the area once offered a unique blend of culture, commerce, and connection. But in recent years, this iconic stretch has undergone a wave of "urban design" that, rather than enhancing the space, has stripped it of its original charm. This research explores how such design interventions, often driven by a one-size-fits-all idea of modernization, can do more harm than good, especially in heritage-rich areas like Gandhi Bazaar. What was once an organically evolved, people-friendly space has now become less accessible, less intuitive & far less inclusive. The new design not only fails to meet the principles of universal accessibility but also disregards the daily needs of the very people who give the place life: street vendors, senior citizens & long-time residents. As Jane Jacobs once said, "Cities have the capability of providing something for everybody, only because & only when, they are created by everybody." [1] This paper takes that idea to heart, arguing that meaningful urban design must emerge from the ground up, respecting the people & stories that already define a place. Through field visits, conversations with local stakeholders & visual documentation, this study reflects on what gets lost when urban planning overlooks context and culture. It raises an important question: does every space really need to be "redesigned"? Or do some places simply need to be respected, preserved & supported in their existing form? Gandhi Bazaar stands as a powerful example of how urban interventions, if not rooted in empathy & understanding, can erase more than they improve. This paper calls for a rethinking of what urban development means in cities like Bengaluru, where progress should not come at the cost of identity.

Boosting Local Economies through Accessible Public Spaces: A Toolkit-Based Approach

Sayandeep Chakraborty, Independent Researcher, Kolkata, India (sayandeep.official@gmail.com)

Meghna Mallick, Independent Researcher, New Delhi, India (meghna.mallick@outlook.com)

ABSTRACT : As cities expand and adapt to increasing population pressures, inclusive urban design has emerged as a key priority for sustainable development. In line with India's Sugamya Bharat Abhiyan and the global shift toward accessibility, this paper proposes the development of a universally applicable toolkit to assess the accessibility of public spaces. Accessibility in urban areas is often approached from a regulatory standpoint, yet practical implementation and evaluation remain inconsistent. Despite an abundance of barrier-free design guidelines, there remains no consolidated, scalable, or certifiable system for evaluating existing infrastructure.

This paper undertakes a comparative review of national and international universal design guidelines, using common criteria such as physical design elements, sensory inclusion, digital accessibility, etc.; as well as overlooked criteria like climate-responsive materials, social inclusion and cultural adaptability. Based on this analysis, a modular, metrics-driven toolkit is designed for rapid field assessments. The toolkit is further validated through pilot testing in varied urban typologies, including heritage sites, transit nodes, and neighborhood parks.

The proposed model addresses overlooked dimensions of accessibility and aims to boost footfall, civic engagement, tourism, and local economic development. For instance, applying the toolkit to a historic marketplace enabled the identification of cost-effective interventions that improved navigation for wheelchair users and enhanced digital wayfinding for visually impaired visitors—leading to measurable increases in vendor footfall. In doing so, it seeks to move beyond compliance to enable systemic change. The proposed model also lays the foundation for a future certification or rating system for accessible urban environments, adaptable across diverse global contexts.

KEYWORDS: Inclusive design toolkit, Rapid field assessment, Economic empowerment, Barrier-free bench-marking, Adaptable certification

Inclusive Design For Elderly In Public Libraries: A Case Of Bangalore

Vaishnavi S, Dayananda Sagar College of Architecture, Bangalore, India

Vidhya M S and Rama R Subrahmanian, Shavige Malleshwara Hills, 1st Stage, Kumaraswamy Layout, Bengaluru, Karnataka 560111

ABSTRACT : Public libraries are vital venues for education, social interaction, and community involvement. However, particularly in urban areas like Bangalore, their design frequently ignores the unique needs of senior users. In this study, the inclusive design features of Bangalore's public libraries will be examined, with particular attention paid to how the libraries accommodate senior citizens through programs, furniture, lighting, accessibility, and spatial

design. The study was conducted at Bangalore's State Central Library (Sheshadri Iyer Library), where senior citizens' needs and accessibility were given top priority. A questionnaire with 35 answers, field trips, and semi-structured interviews were used to gather primary data. A qualitative, exploratory design was used to determine the library's accessibility and inclusivity. Data were analyzed both quantitatively and qualitatively to measure user satisfaction, comfort, and digital inclusiveness and recommendations provided to enhance age-friendly library designs. The research discovered that 45.7% of older people go to the library once a week and the main reason is to read. Although satisfaction with resources such as large print and audiobooks is high, variable responses on support from staff and facilities show areas for action. Also, 17% of older people need support with digital literacy. This study addresses avoid in knowledge on seniors' library needs, more specifically in regard to staff assistance and computer literacy. It further illuminates discontinuities in service delivery not fully explored in earlier research. Enhanced staff training and digital literacy initiatives are crucial for enhanced senior participation. The results may assist libraries in developing more inclusive and age-friendly spaces, which can lead to increased social inclusion and perhaps lower costs related to unmet needs.

KEYWORDS: Inclusive design, Public libraries, Elderly, Accessibility, Bangalore.

Resilient Women, Resilient Settlements: Enhancing Gender-Inclusive Urban Adaptation Strategies in Informal Bangalore

Lavanya B, Dayananda Sagar College of Architecture, Bangalore, India

Nalini N Subramanyasastry and Rama R Subrahmanian, Shavige Malleshwara Hills, 1st Stage, Kumaraswamy Layout, Bengaluru, Karnataka 560078

ABSTRACT : In rapidly urbanizing cities like Bengaluru, informal settlements are critical to the functioning of the urban economy and are primarily sustained through the labor, resilience, and spatial agency of women. This study critically examines the role of women-centric spaces in shaping the spatial, social, and economic dynamics within informal settlements. Adopting a comparative qualitative methodology, the research analyzes two distinct settlement typologies: self-built squatter settlements (e.g., Vivekananda Colony, Srirampuram) and state-constructed housing under the Karnataka Slum Development Board (e.g., Pantharapalya). Field observations, spatial mapping, and semi-structured interviews with women residents form the empirical basis of the study.

The research identifies and categorizes key spatial variables—including shared/common spaces, accessibility, proximity to essential services, and infrastructure quality—through a gendered lens. Spatial mapping uncovers the emergence of gendered micro-infrastructures such as home-based enterprises, informal childcare hubs, and semi-public thresholds that support caregiving, livelihood activities, and social interaction, particularly in self-built environments. These spatial practices reflect a high degree of adaptability, informality, and community-oriented planning that contribute to neighborhood resilience and cohesion.

Through the analytical lenses of sociability and informality, the study foregrounds women's roles in producing and sustaining informal urban space. It critiques state-driven redevelopment models for their neglect of these lived spatial dynamics, often resulting in environments that inhibit women's everyday practices and support systems.

The research advocates for inclusive and participatory urban design that centers women's spatial contributions, proposing women-led community infrastructure as essential to achieving equitable and resilient informal urbanism.

KEYWORDS: Gender-inclusive urbanism, informal settlements, women-centric spaces, spatial practices, community resilience, Bengaluru

User-Centered Street Design: An Approach to Develop a Holistic Street

Tushar Sharma and Prof. Pooja Lalit Kumar, Department of Architecture, School of Art and Architecture (SAA), Sushant University, Sector 55, Golf Course Road, Gurugram, Haryana 122003, India

ABSTRACT : This paper examines the street and inclusive design guidelines and their implementations while being mindful of diverse street user groups to evaluate how a user-centered design approach is required for street design. There are many street users who have trouble navigating these streets and the approach of street design leads to a standardized design which is not inclusive in nature. People, who are the main users of the street, are being neglected and forced to give up their needs and vision of the streets. There is a need for a more cohesive way to design the streets, one which considers the users in its design and construction process of the street. This will prove to be beneficial for the user groups and their needs would be considered. The study will be concentrated around the current condition of neighborhood collector roads and analyzing them with their street and inclusive design guidelines to find gaps in their implementations and cohesiveness for the diverse user groups on those streets. These gaps would help in evaluating how a user-centered design approach improves the functionality and inclusivity of neighborhood streets for diverse user groups.

KEYWORDS: Inclusivity, user-centered design, street design, diverse user groups

Pedestrian Infrastructure and Legal Compliance in Indian Cities: A Case Study of Post-Ruling Lucknow

Divya Verma, Vishwajeet Sachan and Saurabh Verma
Faculty of Architecture and Planning, AKTU, Lucknow

ABSTRACT : In May 2025, India's Supreme Court upheld pedestrian-friendly footpaths as a constitutional right under Article 21, directing all states to ensure safe, and inclusive pedestrian infrastructure. With over 30,000 pedestrian fatalities reported in 2022 alone, the ruling marks a critical shift from vehicle-centric urban planning to people-first street design.

This study critically examines the post-ruling status of pedestrian infrastructure in selected nodal Central Business District (CBD) areas of Lucknow, a Tier-2 Indian city. Using a grounded case study method, it examines how legal regulations are being interpreted and applied on the ground, especially for marginalized groups like people with disabilities, older persons, and informal workers.

The research finds persistent institutional and spatial gaps and borrows best-practice global pedestrian-forward models to outline actionable interventions and participatory planning arrangements.

KEYWORDS: Pedestrian infrastructure, legal compliance, inclusive mobility, Lucknow, Article 21, walkability.

Economic Sustainability is the foundation of a Successful City - a Critical discussion on Indian Cities

Mona Chandra, Amity School of Architecture and Planning, Amity University
 Dr. Ila Gupta, Amity School of Architecture and Planning, Amity University
 Panchgaon, Gurugram, India

ABSTRACT : India had robust cities before colonization with local texts and traveler accounts mentioning well laid out and beautiful urban settlements of their time. Colonization forcefully replaced the inclusiveness of cities, skill sets, local industry and trade by entirely new systems leading to a torn urban fabric and redundancies across skill sets. Post independence we hope to address our issues for inclusivity and accessibility in the economy in general and the urban setting in particular as we continue to follow the principles and practices formulated to maintain the hegemony of the Global North. The reserve currency status of the pound sterling and then the US dollar after WWII for international trade and commerce and especially the compulsory trade of petrol in the US dollar, maintained the buoyancy of these currencies supported by the demand from the once colonized nations of the Global South. Half of the foreign exchange of UK is generated not because of what they produce, their intellectual property or their trade but rather because of the vast volumes of international trade dealings passing thru their banks. France still controls the raw materials and industry of many Sub-Saharan nations of Africa like ___ by supporting self-serving dictatorships as they mine the natural resources of their land at a pittance in exchange for defense protection.

This paper will critically examine the affordability range of India's population, without appreciating which, we will not be able to address the chaos in our cities. It traces the unique path all developing nations in general, and India in particular, have taken that reinforces spatial disparity and socio-economic chaos. It critically examines and establishes 'affordability' as the key criteria for manifesting accessible, inclusive and universal cities. India, with an 80% 'lower-middle class to distressed' population, as per economic criteria established by the World Bank, is chasing the enticing dream of 'upper-middle class and rich' countries of the Global North either thru voluntary professional agreements to plug into international commerce or by being forced to follow norms of the World Bank, International Monetary Fund or similar against the promise of easy loans for survival and development. It is important to 'do the math' before freezing our choices. World Bank data on per capita gross national income (GNI) and per capita gross domestic production (GDP) on purchasing power parity (PPP) have been compared to establish the economic status of India with respect to countries in the Global North. Government and private survey data from socio-economic surveys, the break-up of the components of the GDP of India, the demographic profile of India and the level of formal skills has been correlated to the spatial-socio-economic position of the population. Two study areas, one the planned colony of Vaishali and the other a spontaneous settlement of Khoda Colony both in Delhi National Capital Region (NCR) have been comparatively analyzed for road network typology, densities, local and global centrality using OSMnx. Their transformation over 30 years with respect to typology of housing, change in land value and land use, type of population it attracts, livelihood opportunities, vehicle ownership, growth of their informal markets have been documented after discussions with residents, visual surveys, pilot survey by questionnaire in Khoda Colony.

KEYWORDS: Inclusive; affordability; economic sustainability; livelihoods

Architectural Parameters for an Autism- Friendly Built-Environment: A Scoping Review

Nandini B. Sharma, Ph.D. Scholar, Department of Architecture, School of Planning and Architecture, New Delhi, India

Prof. Dr. Bandana Jha, Professor, Department of Architecture, School of Planning and Architecture, New Delhi, India

Dr. Priyanka Bhabu, Founder, CRIA Foundation, New Delhi, India

ABSTRACT : The experience of the built environment by an individual is a summation of the cognitive, affective, and conative components of the interaction, wherein cognition is the driving force of the whole occurrence. Neurodiversity is the field of study that focuses on the diversity in the ecosystem of the human brain and the variations in the above-mentioned attributes from person to person. Autism, ADHD, and Asperger's syndrome are some manifestations of neurodivergent disabilities and are on the rise in current times. The interaction between the environment and neurodiverse individuals is a crucial point for research in this field. Individuals with autism tend to have difficulty in establishing a steady dialogue with their environment as a consequence of poor cognition. This scoping review provides an overview of the presently available literature on the relation between the built environment and individuals with autism, through an architectural lens. This study concludes with a discussion on the built environment parameters to be considered for the design of spaces for individuals with autism. Further, the review aims to identify the gaps in the literature, thus building scope for future research.

KEYWORDS: Architecture; built-environment; autism; neurodiverse; cognitive; conative

Sustainable Residential Building Envelopes in Uttarakhand

Sonia Chaudhary, Dr. Mariam Ahmad

Department of Architecture, f/o Architecture & Ekistics, Jamia Millia Islamia, New Delhi

ABSTRACT : This paper addresses the critical issue of unsustainable construction practices in the Indian Himalayan state of Uttarakhand, a region characterized by fragile ecosystems, complex microclimates, and high vulnerability to seismic and climate-induced hazards. Rapid urbanization has spurred the proliferation of generic, high-embodied-carbon buildings that disregard local context, leading to poor thermal performance, environmental degradation, and the erosion of traditional building wisdom. This research proposes a framework for designing high-performance residential building envelopes that synergize vernacular architectural principles with modern building science and low-carbon materials. The framework prioritizes a multi-objective approach encompassing thermal insulation, thermal mass, moisture control, seismic resilience, and low embodied carbon. Through an analysis of local and international case studies. The paper concludes that a systemic transition towards context-responsive, resilient, and low-carbon building envelopes is not merely a technical imperative but is fundamental to enhancing thermal comfort, ensuring energy security, and fostering long-term socio-ecological resilience in the Indian Himalayan Region.

KEYWORDS: Building Envelope, Thermal Comfort, Climate-Responsive Design, Low-Carbon Materials, Vernacular Architecture, Resilience.

Do the Current Child-Friendly Frameworks Support Infants and Toddlers and Caregivers (ITCs)? A Review-based Study

Reshma P. S and Amritha P. K

Department of Architecture and Planning, National Institute of Technology Calicut, India

ABSTRACT : Cities are changing to sustain their economies. Exclusion of the vulnerable, specifically the younger children (0-5 years old) and their caregivers has unintentionally led to creating a competitive world that is significantly car-centric. This has led to devastating effects on their health and welfare due to changes in climate conditions, mental health, behavioural issues, and resource exploitation. Human beings have immense potential but are heavily reliant on caregivers during the initial life stages, making the necessity for inclusive planning approaches for Infants, Toddlers, and Caregivers (ITCs). This study aims to understand existing child-friendly frameworks, tools and models and their limitations in including ITCs needs. With this, the research scopes to identify the diverse dimensions necessary for developing a spatial planning framework for ITCs. To study this, a literature study was conducted from Google Scholar, Web of Science and Scopus databases, followed by studying the existing frameworks, tools and models addressing the spatial needs and concerns for children and their caregivers. The Study highlights the importance of inclusive planning that accommodates play and leisure for young children and caregivers. However, the reviewed frameworks mentioned adopt a generalized approach to children's needs, without adequately addressing age-specific requirements. Whereas it lacks empirical evidence to capture the concerns of caregivers of infants and toddlers. Also, underscoring the importance of developing region-specific adaptations of ITC frameworks. This paper explores the needs and concerns for ITCs outdoor physical activity and examines the current framework's inclusivity towards addressing their requirements.

KEYWORDS: Infants, Toddlers, and Caregivers (ITCs), Urban Planning, Frameworks

Study of Existing Tourism Accessibility at Historic Monuments through Universal Design Approach

Ar. Rujuta Makarand Pathak

B.Arch., PCET's S. B. Patil College of Architecture and Design, Nigdi, Pune, India

ABSTRACT : India is known as a country with diverse tourist attractions, offering a diverse range of experiences for travelers. India is often called "Incredible India" because of its vast cultural, geographical, and ethnic diversity, along with its deep-rooted history and rich traditions. From historic monuments, ancient temples and forts to serene beaches and lush forests, India boasts a rich heritage and natural beauty. As per study, India witnessed over 20 million tourists at historic monuments.

Tourism is a fundamental human activity that should be accessible to all, irrespective of age, ability, or background. However, many existing tourist destinations in India still present barriers that hinder full participation. This study investigates the current state of accessibility in established tourist destinations which explores and identifies key areas where universal design can be applied. The sites were chosen for geographic and typological diversity. By examining the case studies and current practices on the basis of accessibility of historic monuments in a structured manner, this study utilized a comprehensive assessment framework based on Universal Design principles, aligned with both national and international accessibility standards and guidelines. The study identifies challenges faced by diverse visitors, including those with mobility, sensory, and cognitive impairments. In the pursuit of inclusive tourism, the integration of Universal Design principles into existing infrastructures is crucial. This paper explores the strategic recommendations for adopting Universal Design principles to enhance accessibility in established tourism sites and promotes social inclusiveness

KEYWORDS: Historic monuments; challenges faced; universal design; social inclusiveness; diverse visitors

Reimagining Urban Green Infrastructure: A Study on the Efficacy and Sustainability of Miyawaki Forests in Chennai's Urban Fabric

Vimita J. Prasanna, Mahima S. Sarada, Varsha B., Assistant Professor, School of Environment Architecture and Design, SRM Institute of Science and Technology, Ramapuram Campus, Chennai – 600 089, India

ABSTRACT : India's urban landscapes are experiencing a green transformation due to the growing adoption of the Miyawaki method. Chennai, one of the first cities to adopt this method, has seen remarkable success in creating dense, self-sustaining green spaces. However, this method of greening is gradually losing its appeal in recent times due to the high cost and intensive maintenance required for planting and nurturing these forests. The objective of this paper is to study the implementation of Miyawaki forests in Chennai's evolving cityscape, with a focus on understanding the factors contributing to their limited success. Based on the findings, the research will offer recommendations focusing on both environmental solutions, human-centric and universally inclusive approaches. Through this investigation, the paper seeks to identify key barriers and propose potential solutions for improving the effectiveness and long-term viability of Miyawaki urban forests in Chennai.

KEYWORDS: Miyawaki forests, urban green infrastructure, community engagement, ecological restoration, inclusivity

Equal Access by Design: How Road Design Can Transform Urban Accessibility - Evidence from Tender S.U.R.E Roads

Surjyatapa R. Choudhury, Jana Urban Space Foundation, 3rd Floor, Sair Bagh, 19/4, Cunningham Road, Bengaluru, 560052, Karnataka, India

Katie F. Pyle, Janaagraha Centre for Citizenship and Democracy, 3rd Floor, Sair Bagh, 19/4, Cunningham Road, Bengaluru, 560052, Karnataka, India

ABSTRACT : In fast-growing Indian cities, poorly planned and vehicle-centric road infrastructure has long undermined safe, inclusive access to public space. However, beyond motorised thoroughfares, roads are a fundamental element of networked infrastructure in a city. They can enable the movement of people, goods, and services, serve as conduits for utilities (e.g. sewage, storm water drainage and power) and have the potential to promote economic and social activity. However, this is not the reality of roads in Indian cities. The Tender S.U.R.E. (Specifications for Urban Road Execution, abbreviated as TS) initiative seeks to address this gap in road design through principles that conceive urban roads as multi-functional, equitable corridors for all users. This paper presents findings from a Monitoring, Evaluation, and Learning (MEL) study of 10 TS roads in Bengaluru, compared with three control roads, to assess implementation and impact of the design.

The evaluation focused on twelve key design features that underpin TS's inclusive intent including continuous wide footpaths, uniform travel lanes, landscaped buffers, dedicated cycle tracks, street lighting, integrated bus stops, vendor zones, and underground utility corridors with access chambers. The implementation as well as combined impact of these features were assessed through a mixed-methods approach. This combined on-ground audits, pedestrian and traffic volume surveys, and structured perception interviews with users including pedestrians, motorists, engineers, and traffic police.

This paper provides compelling empirical evidence that key design features can materially transform urban streets into inclusive, accessible public spaces. This is especially so for pedestrians, women, the elderly, and other marginalized groups. For example, findings show that TS roads not only saw 228% more pedestrian traffic and greater gender and age diversity in users (e.g. 629% more elderly on TS roads) but were also rated significantly higher on safety (from crime as well as accidents) and walkability. Additionally, roads with stronger implementation fidelity to the design guidelines tended to outperform others on these metrics.

KEYWORDS: Urban infrastructure, road design, inclusive mobility, Tender S.U.R.E, Indian cities, Bengaluru, public space, sustainable urban planning.

Urban Oasis: Strategies for Jaipur

Anjali Malya, Research Student, School of Planning & Architecture, New Delhi, India

Prafulla Parlewar, School of Planning & Architecture, New Delhi, India

ABSTRACT : Around the world, cities are facing challenges related to various urban issues, such as rapid expansion, loss of green cover, climate extremes or declining public life. This research explores solutions to these problems by understanding the potential of urban oases as transformative frameworks to improve environmental resilience, livable spaces and sociocultural wellbeing. For this study, Jaipur is selected as the case city on the basis of spatial, demographic and ecological indicators. This study focuses primarily on four aspects. For environmental and climate analysis, GIS tools were used to map vegetation health (NDVI), land surface temperature (LST), waterbody proximity, and pollution levels, highlighting ecological stress zones. For spatial and infrastructure analysis, the evaluation of public open spaces and amenities is performed by understanding their spatial distribution, typologies or accessibility. For sociocultural wellbeing analysis, areas around cities are evaluated on the basis of inclusiveness, cultural vibrancy, safety and public life. For institutional analysis, a detailed study of stakeholder roles, public-private partnerships (PPPs), financial models, and policy frameworks was performed. The findings from all four aspects were then combined through a composite weighted index to classify city zones on the basis of their urban oasis potential. On the basis of this assessment, four interlinked strategic frameworks are proposed: creating an urban oasis network that links small oases with green or blue public spaces; improving environmental and climate resilience through afforestation or cooling solutions; enhancing sociocultural well-being through more inclusive, vibrant public spaces; and developing institutional mechanisms via governance reforms, financing models, and policy support. Through these strategies, not only Jaipur but also cities worldwide have a broader framework to address the issues of environmental decline, social fragmentation, and institutional inertia, demonstrating the potential of the urban oasis model for global relevance and adaptability.

KEYWORDS: Urban Oasis; Livability; Climate Resilience; Public Spaces; Jaipur

Enhancing Inclusivity: Addressing Left Handedness Challenges in Architecture Education

SAvishka Saxena , Sushama S. Dhepe

Bharati Vidyapeeth(Deemed to be University), College of Architecture, Pune

ABSTRACT : Architectural education especially at initial stages relies heavily on manual tasks like drafting, model-making, and the use of specialized tools, which can pose significant challenges for left-handed students. These challenges often go unnoticed in conventional educational settings. This research seeks to illuminate an overlooked area of inclusivity in architectural education by identifying and addressing these challenges. The study aiming at to investigate the specific obstacles faced by left-handed architectural students in institutions and understands their learning experience. The key objectives include analyzing the physical and ergonomic difficulties encountered by left-handed students, assessing the psychological impact of these challenges on their performance and confidence. Utilizing mixed-method research approach the study involves purposive and snowball sampling to gather the diverse participant pool of left handed architectural students. Data collection employs closed -ended questionnaires with qualitative insights coded and quantitatively analyzed to identify patterns and determine the frequency and significance of challenges. The study focuses on left-handed students enrolled in Architecture Programs, investigating their experiences with drafting, designing, and tool usage across diverse educational settings. It is limited only to architectural institute. This research emphasizes need of inclusive solution to create equitable learning environments for left-handed students in architectural education.

KEYWORDS: Left-handedness; Architectural education; Manual drafting; Tool ergonomics; Ergonomic challenges.

Inclusive Street's Design in Indian Cities: Fundamental needs of a city

Shreya Tiwari, M.Plan, Ar. Saurabh Verma

Faculty of Architecture and Planning, Dr. A.P.J. Abdul Kalam Technical University

Tagore Marg, C.S.I.R. Colony, Mukarimnagar, Hasanganj, Lucknow, Uttar Pradesh 226007

ABSTRACT : This paper explores the various aspects of accessible and inclusive street's design with the incorporation of universal design principles in the Indian streets context. It focuses on the need for developing strategies of street designing and planning which includes accessibility for all and uses universal design principles.

India is a very welcoming country with every city having its own relevance. It has some of the very old cities from the world like Varanasi. As India is a democratic country which is rich in hospitality and invites people from different walks of life, so are the streets on the Indian cities. India is a diverse country yet it encourages and includes people from diversified nature. The cities not only need active and rapid transportation but also inclusive transportation which amalgamates people with all special abilities. The streets as a transportation facility should be designed in such a way that it is usable for all the people with the same ease to the physically challenged as it is to the other people.

The paper emphasizes on the needs of accessible and inclusive streets which are safe and sociable for people in diverse cities, the need for the streets to highlight the nature or characteristic qualities of a city along with assimilating the universal design principles within the streets of the city. Streets are one of the most common places for social interaction, so there is a need for an active, environment-friendly and pedestrian friendly zones within the streets. This paper highlights the strategies which can be used for designing streets and make them socially, culturally and universally richer in the rapid growing environment today.

KEYWORDS: Accessible, diversified, social interactions, inclusive planning, amalgamates, transportation, special abilities, universal design, rapid transportation, and environment.

"Workspace Reimagined": Toward Inclusive Design and Neurodivergent-Friendly Environments in India

Ar. Snehal H. Chaudhari, Ar. Nikita D. Gaikwad
S.B. Patil College of Architecture, Nigdi, Pune

ABSTRACT : The modern Indian workplace is gradually shifting towards embracing diversity, equity, and inclusion. However, the specific needs of neurodivergent individuals—such as those with autism, ADHD, dyslexia, and sensory processing challenges—are still not fully addressed in typical office design. Many Indian office spaces rely on traditional layouts that often create sensory overload, lack flexibility, and follow a "one-size-fits-all" approach. These environments can be overwhelming and uncomfortable for neurodivergent employees, affecting their well-being and productivity.

This research focuses on how architectural design in India can become more inclusive and responsive to the needs of neurodivergent individuals. It explores how workplace environments can be planned and built to create more comfortable, adaptable, and supportive spaces. Drawing inspiration from inclusive design, environmental psychology, and neuroarchitecture, the study examines existing Indian office setups and identifies the physical and sensory challenges neurodivergent users face.

The research includes site visits, expert interviews with architects, occupational therapists, and neurodivergent individuals, as well as a review of international design strategies. Key design elements such as sensory zones, nature-inspired features (biophilia), flexible layouts, and clear wayfinding are found to play a vital role in creating neuroinclusive workspaces.

The outcome of this study is a set of practical, context-based design guidelines tailored to Indian office culture. These guidelines aim to help architects, builders, and employers create workspaces that not only accommodate but also empower neurodivergent employees. By rethinking the way we design offices, this research encourages a shift towards work environments that value and support cognitive diversity, ultimately leading to healthier, more productive, and more inclusive workplaces in India.

KEYWORDS: Neuroarchitecture, Inclusive workplaces, neurodivergent employees, neurodivergent-friendly environment.

Accessible Inclusive and Universal Design Inclusive Environments for Growing Cities

Ar. Ashok Kumar, Ar. Durga Haldkar

School of Architecture & Planning, Lingayas Vidyapeeth, Faridabad, Haryana 121002.

ABSTRACT : This paper provides a comprehensive and timely exploration of inclusive urban Development within the context of rapidly growing cities, with a strong emphasis on India's urban transformation. The multidisciplinary approach effectively integrates Urban planning, architecture, governance, and community engagement, highlighting the multifaceted nature of inclusivity. By examining diverse case studies from both The global north and south, the paper illuminates practical strategies such as Participatory planning, affordable housing, inclusive mobility, universal design, and Smart technologies that enhance accessibility and social equity. Its focus on Marginalized populations, including those in informal settlements, women, children, The elderly, and persons with disabilities, strengthens its relevance to real-world Challenges. The paper successfully connects policy frameworks with on-the-ground Realities and offers actionable recommendations for equitable urban growth. This Study is a valuable contribution for planners, policymakers, and stakeholders seeking To create resilient, inclusive, and people-centered urban environments amid rapid Urbanization.

Urbanization is accelerating at an unprecedented rate, with over 68% of the global Population projected to live in urban areas by 2050. As cities expand, the need for Inclusive environments becomes critical to ensure equitable access to opportunities, Resources, and quality of life for all residents. This paper explores the concept of Inclusive urban development within the context of rapidly growing cities, emphasizing Spatial, social, economic, and digital inclusion. It investigates how inclusive Environments can be planned, designed, and implemented to accommodate diversity In age, gender, ethnicity, ability, and socioeconomic status.

Developing a Framework to Assess Accessibility and Inclusion in Urban School Infrastructure for Children with Disabilities

Umesh Kumar, Department of Building Technoogy, Lovely School of Architecture and Design, LPU Phagwara Punjab, India

Haimanti Banerji, Department of Architecture & Regional Planning, IIT Kharagpur, West Bengal, India

ABSTRACT : India's rapid urbanization presents both opportunities and challenges, particularly in ensuring inclusive and sustainable infrastructure. Equitable access to basic services—such as housing, healthcare, transportation, and education—is critical to building a resilient society. However, approximately 25% of India's population requires universally accessible infrastructure for a dignified life. Within the education sector, children with disabilities face multiple barriers including physical inaccessibility, socio-economic exclusion, and biased curricula, which hinder inclusive learning environments. These challenges not only undermine educational equity but also hinder progress towards the Sustainable Development Goals (SDGs).

This research addresses the need for an inclusive educational framework by developing an Accessibility Assessment Tool designed to evaluate and improve accessibility in mainstream schools. The focus is on enabling physical, digital, and social inclusion for students with disabilities. A pilot study was conducted in two senior secondary schools in Delhi using role-playing simulations to mirror the experiences of disabled individuals. Among 400 potential participants, 50 took part in the exercises. Data was collected using participatory surveys and feedback mechanisms, revealing critical infrastructural and systemic barriers to inclusion.

The outcome of this study is a comprehensive accessibility assessment tool that includes a detailed audit checklist to evaluate school infrastructure. It enables schools to score their accessibility levels and identify areas for improvement. The methodology blends technical evaluation with experiential learning by engaging able-bodied participants in simulating disabilities. The findings provide a foundation for creating retrofitting strategies and action plans to enhance school accessibility. This research promotes inclusive education and equitable urban development by highlighting the importance of accessible built environments for all.

KEYWORDS: Inclusive Education; Accessibility Assessment; Disability Inclusion; School Infrastructure; Built Environment Evaluation

Incarcerated and Ignored: A Barrier-free Design Assessment of Indian Jail Infrastructure

Scholar, Dakshayani Sinha, School of Art and Architecture, Sushant University, Gurugram
Asst. Prof. Ar. Pallavi Keswani, IES college of Architecture, Mumbai

ABSTRACT : Correctional facility architecture has a significant impact on the conduct, well-being, and rehabilitation paths of inmates. Prison systems are frequently disregarded in the context of public design, despite the expanding global conversation on inclusivity and barrier-free spaces. The purpose of this paper is to examine how closely Indian jail architecture adheres to inclusive and barrier-free design principles, especially in light of global norms like the Nelson Mandela Rules and universal accessibility recommendations. The study will analyse how current spatial configurations meet the needs of diverse prison populations, such as women, people with disabilities, the elderly, and LGBTQ+ inmates, by critically analysing existing literature, architectural typologies, and primary data gathered from facilities such as the District Jail of Dehradun. The study will investigate how combining universal design principles and international best practices could influence architectural strategies that prioritize rehabilitation over punishment, equity, and dignity. This includes examining the potential adaptive reuse of jail spaces to create accessible facilities and strategies for separating vulnerable groups without reinforcing segregation. The study will also explore the integration of barrier-free, compassionate design solutions that may aid in psychological healing and support reintegration into society. The report aims to highlight current gaps and add to the conversation on inclusive and accessible correctional environments.

KEYWORDS: Prison architecture, inclusivity, barrier-free design, rehabilitation, accessibility, psychological well-being, equitable environments

Assessing School Commute Patterns Around Selected Schools in Pune City: The Role of Distance, Travel Mode, and Pedestrian Infrastructure

Dr. Amruta Amey Kakirde, Assistant Professor
Planning Section, Civil Engineering Department, COEP Technological University, Shivaji Nagar,
Pune, India

ABSTRACT : Children's daily commute to school is a critical component of urban mobility, especially in growing cities like Pune, where transport infrastructure and land use patterns are undergoing rapid transformation. Understanding how distance to school, choice of travel mode, and the quality of pedestrian infrastructure interact is essential for designing child-centric urban environments. This study assesses school commute patterns in Pune by examining how these three key factors influence the mobility behaviour of school-going children in selected schools of Pune city.

The research employs a mixed-methods approach combining primary data collection through surveys with school and their parents, pedestrian infrastructure audits around selected school zones, traffic volume count and pedestrian volume count surveys, and spatial analysis using Geographic Information Systems (GIS). The study encompasses a representative sample of schools to understand their mode of travel, distance to school, accessibility, and pedestrian infrastructure availability. Results show a strong correlation between shorter travel distances (less than 1.5 km) and the likelihood of walking to school. However, poor pedestrian infrastructure, including discontinuous footpaths, encroachments, a lack of crossings, and traffic hazards, significantly deters walking even at walkable distances. Motorized modes such as private vehicles and school buses are more commonly used when distances exceed 2-3 km or where walkability is compromised.

The findings reveal that poor pedestrian infrastructure, parental perceptions of safety, gender, and age of the child also influence mode choice. The study highlights the urgent need for improved pedestrian planning around selected schools, such as traffic calming zones, continuous footpaths, and designated crossing areas. It recommends integrating school commute planning into broader urban mobility policies to foster safe, active, and independent travel for . This research contributes to child-centric urban planning discourse and supports SDG 11 by promoting inclusive and sustainable mobility solutions in Indian cities.

KEYWORDS: Child-centric Mobility, distance to school and mode choice, Walking preferences of school , Pedestrian Infrastructure, Inclusive Urban Planning, mixed method approach

Designing Unbiased Cities: A Gendered Perspective on Public Space and Livability

Pankaj Khandelwal, Guru Gobind Singh Indraprastha Unit, Delhi
Beena Narian, Vastu Kala Academy College of Architecture, New Delhi
Institutional Area, 9/1, Aruna Asaf Ali Marg, Opposite JNU East Gate, Qutab Institutional Area, New Delhi, Delhi 110067

ABSTRACT : This paper provides a critical and timely examination of how gender influences experiences of public space and urban livability. By foregrounding diverse gender perspectives—including those of women and transgender individuals—it challenges conventional urban design that often overlooks inclusivity and safety. The comparative case studies from Vienna, Delhi, and Kigali enrich the analysis by highlighting varied socio-cultural and spatial contexts, making the discussion globally relevant. The integration of concepts such as “Right to the City” and proxemics demonstrates a thoughtful theoretical grounding. The emphasis on everyday design elements like lighting, visibility, and amenities underscores practical interventions to foster inclusivity. Importantly, the paper advocates for participatory design processes that redefine safety as collective togetherness rather than isolation. Overall, this research advances urban planning discourse by promoting a human-centered, equitable approach to public space design, with clear implications for building more unbiased, livable cities.

KEYWORDS: Gender, Public spaces, Safety, Urban planning, Inclusivity, Architectural design, Right to the City

Assessing Metro-Induced land use/land cover change in Planned and Unplanned Settlements

Nauman Khan, PhD Scholar, Jamia Millia Islamia, New Delhi – 110025, India

Dr. Taiyaba Munawar, Professor, Jamia Millia Islamia, New Delhi – 110025, India

ABSTRACT : The Development of metro stations within a region can significantly impact both urban and rural land dynamics. many studies talk about the impact of MRTS in urban areas, but rural studies are rare. Also, there is no comparable study between urban and rural impacts of metro stations. This study intends to present an impact assessment of metro stations on the surrounding land cover patterns, focusing on a region that encompasses both urban and rural areas. The primary goal is to comprehend how the introduction of metro stations influences land cover changes and urbanization trends. The methodology involves the use of remote sensing data, and geographic information systems (GIS) to analyze land cover changes over time. By comparing land cover patterns before and after the establishment of metro stations, this research aims to shed light on the direction and magnitude of change.

This study examines the land use / land cover dynamics in rural villages, contrasting them with planned areas to assess the impact of urbanization. Analyzing data pre- and post-implementation of Mass Rapid Transit Systems (MRTS), significant shifts in land cover are observed. Sarfabad and Hoshiyarpur represent examples of unplanned rural settlements, experiencing considerable increases in built-up areas indicative of unregulated development. Surprisingly, similar percentage changes in built-up areas are observed in the planned area, suggesting that even rural unplanned areas undergo urbanization at a comparable pace. These findings underscore the challenges of managing rural development and the need for comprehensive planning strategies to address unplanned growth in rural areas owing to introduction of a MRTS station.

KEYWORDS: Urban and rural Interface, Land use/land cover change, Noida Metro Station

Universal Design and Effective Aging: Reimagining Public Spaces in India

Keerti Mishra, PhD Research Scholar (Amity University, Haryana) and Associate Professor at Sushant University, Gurugram

Dr. Ila Gupta, Director, Amity School of Architecture and Planning, Amity University, Haryana

ABSTRACT : The built environment places significant restrictions on the ability of certain social groups to access indoor and outdoor services in cities. This includes individuals with disabilities, the elderly, children, pregnant women, parents pushing strollers, and others with special needs. The goal of universal design is to create spaces and products that are accessible to individuals of all abilities. India's rapidly aging population presents unprecedented challenges for urban planning and public space design. With over 138 million elderly individuals projected by 2036, the need for age-friendly, universally designed public spaces has become critical. This review examines few recent research papers addressing universal design principles and their application to aging populations in Indian public spaces. The study reveals significant gaps in current infrastructure, highlights successful interventions, and proposes comprehensive frameworks for creating inclusive environments that support healthy aging while accommodating diverse user needs.

KEYWORDS: Universal design, aging population, public spaces, accessibility, age-friendly cities, special needs

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Social, Cultural, and Cognitive Equity

Creating truly inclusive cities means ensuring that all communities are represented, valued, and engaged. Social equity involves fair access to opportunities, resources, and safety for all genders and backgrounds.

Cultural equity reflects local identity and continuity in urban design, preserving the social fabric while accommodating growth. Cognitive equity ensures that urban spaces are mentally stimulating and supportive of neuro-diverse needs, fostering environments where everyone can thrive.

By integrating cultural identity, social representation, and cognitive diversity, cities can empower communities and build resilience in an ever-changing landscape.

- **Perceived Social Inclusion:** Designing safe and inclusive public spaces that support equitable development.
- **Cultural Continuity and Urban Character:** Integrating traditional knowledge and practices into modern urban planning to preserve local identity and strengthen urban character.
- **Harmonizing Cognitive Ability:** Developing spaces that support cognitive diversity and mental well-being through inclusive and culturally sensitive design.



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Delhi's Transit-Led Gentrification: Charting Equity Frontiers from Sikanderpur to Kalkaji

Rahat Varma, Ph.D. Scholar, Sushant University, Gurgaon

Dr Suruchi Modi, Senior Professor and HOD, Sushant University, Gurgaon

Dr Preetha Sajin, Associate Dean, Pearl Academy

ABSTRACT : As a process of urban change, gentrification frequently makes inequality worse by uprooting marginalised communities and weakening sociocultural ties. This study examines how metro-led development reconfigures access to space, identity, and opportunity by placing transit-induced gentrification in Delhi NCR within the larger framework of social, cultural, and cognitive equity. Concentrating on two opposing situations Sikanderpur, a well-known business district that is actively experiencing gentrification, and Kalkaji Mandir, a residential and religiously significant neighbourhood that has the potential to become gentrified, offer a backdrop for comparing the various effects of transit-oriented development in the Delhi-Gurugram metropolitan area. We use a mixed-methods approach to examine how metro infrastructure interacts with existing socio-economic structures and influences neighbourhood transformation in areas. These sites provide contrasting urban contexts that enable a nuanced analysis of these relationships. Using a mixed-methods approach, this study examines how transit-oriented development affects urban equity by looking at changes in housing tenure and affordability (social equity), how local cultural practices are adapted or eroded (cultural equity, such as in Kalkaji vs. Sikanderpur), and how residents perceive their sense of inclusion and exclusion in the face of rapid urban change (cognitive equity). According to the findings, Kalkaji's cultural resilience slows displacement but faces latent pressures from tourism-centric commercialisation, while Sikanderpur's high-density TOD policies prioritise economic growth at the expense of long-term residents. The study makes the case for equity-sensitive transit planning that redistributes the advantages of gentrification, incorporates community voices, and protects intangible heritage. This study rethinks urban development as a tool for inclusion rather than exclusion by placing a strong emphasis on equity.

KEYWORDS: Transit-oriented development (TOD); Urban gentrification; Social equity; Cultural displacement; Inclusive urbanization.

From Margins to Mainstream: Exploring Urban Poverty and the Need for Inclusive Livelihood Strategies in Ghata Gaon, Gurgaon

Vaidehi Sisodiya, Department of Urban Planning, Sushant University, Gurgaon

Ria Kapoor, Department of Urban Planning, Sushant University, Gurgaon

ABSTRACT : Urban poverty presents a multifaceted development challenge, significantly influencing the quality of life for both long-term residents and recent migrants, particularly those engaged in the informal economy. This research investigates the manifestations and implications of urban poverty in Ghata, an urban village situated within the rapidly urbanizing region of Gurgaon. The study specifically examines how precarious living conditions, limited access to essential infrastructure, and informal employment dynamics affect the livelihoods of individuals residing in this peri-urban settlement. Primary data were collected through structured household surveys, in-depth interviews, and ethnographic field observations. Key indicators analyzed include housing quality, sanitation facilities, access to public healthcare, personal safety, and social protection mechanisms. Moreover, employment in the informal sector characterized by low wages, job insecurity, and absence of legal protections exacerbates economic vulnerability and undermines long-term livelihood sustainability. The research identifies a cyclical relationship between informality, inadequate service provision, and urban poverty, which collectively erode the resilience capacities of low-income populations. The study situates these issues within broader urbanization dynamics, drawing analytical linkages between migration, informality, and the persistence of poverty in urban villages like Ghata. The study concludes with policy recommendations focused on inclusive urban planning, emphasizing the need for targeted interventions that enhance access to affordable housing, improved sanitation, healthcare services, and formal employment opportunities. By articulating the lived experiences of the urban poor through empirical evidence, this research aims to inform policy frameworks that promote social equity and urban resilience by incorporating context-specific policy tools and an expanded intersectional approach to better address the multi-dimensional nature of urban poverty in urban villages.

Designing Public Spaces for Cognitive Equity in Lucknow

Mohd Rehman, Department of Architecture, Jamia Millia Islamia, New Delhi
Shuchi Jain, Department of Architecture, Jamia Millia Islamia, New Delhi

ABSTRACT : In metropolitan settings, public spaces have a significant impact on social inclusion and mental health. This research paper examines the critical role of cognitive equity in the design and governance of public spaces in Lucknow, focusing on the experiences of neurodivergent users, persons with mental health vulnerabilities, and those with cognitive disabilities. Recognizing urban public spaces as vital for social participation, health, and well-being, the study interrogates how current Indian standards—including the National Building Code, Harmonized Guidelines, and Universal Design norms—address or fall short in ensuring cognitive and sensory accessibility. Through literature review, analysis of policy frameworks, and Lucknow’s urban context, the paper identifies existing challenges and best practices and proposes actionable strategies for strengthening cognitive equity. The paper puts forward policy and design recommendations to bridge the gap between accessibility standards and lived urban experience, aiming to inform city planners, architects, and policymakers working towards a more inclusive, mentally healthy, and resilient urban future.

KEYWORDS: Cognitive equity, public spaces, urban mental health, neurodivergence, policy, inclusion.

Participatory Urban Design as a Tool for Inclusive Local Area Planning: A Studio-Based Approach

Dr. Suruchi Modi

Senior Professor and Head of the Department (Department of Architecture, School of Art and Architecture, Sushant University, Gurugram, Haryana, India)

ABSTRACT : This paper presents an innovative urban design studio model rooted in an inclusive, community-driven approach, conducted under my direction at the School of Art and Architecture. The studio engaged students, faculty, local government representatives, residents, and other smaller groups of stakeholders in a co-creative process aimed at developing Local Area Plans (LAPs) for urban wards. Through structured participatory methodologies, community mapping, walks, storytelling sessions, and co-design workshops, the studio facilitated inclusive dialogues across diverse social and cognitive spectra. The design process consciously centered voices often excluded from planning: informal settlers, women, senior citizens, children, and differently-abled individuals.

The studio not only generated context-sensitive LAP proposals, but also functioned as a platform for capacity strengthening, building awareness, skills, and collaborative mechanisms among all stakeholders. Emphasis was placed on cultural continuity, spatial justice, and knowledge equity, promoting shared ownership of the urban vision. The outcomes demonstrate how academic institutions can serve as neutral and catalytic spaces to bridge gaps between citizens and governance systems. This case contributes a replicable framework for equitable, participatory urban design practice, especially relevant for Global South contexts undergoing rapid urbanization.

KEYWORDS: Inclusive, Local Area Plan, Co-creative Process, Capacity Strengthening, Equitable urban design

Cityscapes of Meaning: Leveraging Intangible Cultural Elements for Sustainable City Branding — Case of Cuttack

Parichita Mohapatra, Department of Design, Indian Institute of Technology, Guwahati 781039

Udaya Kumar Dharmalingam, Department of Design, Indian Institute of Technology, Guwahati 781039

ABSTRACT : In an era where urban competitiveness and identity are increasingly shaped by cultural distinctiveness, integrating intangible cultural heritage (ICH) into city branding strategies presents a promising path toward sustainable urban development. This study explores how traditional, non-material cultural attributes can be meaningfully embedded within the physical and symbolic fabric of cities to create authentic, resonant, and enduring urban identities. Using Cuttack, one of the oldest cities in eastern India, as a case study, this research examines the potential of its rich cultural tapestry—spanning age-old festivals like Durga Puja, Kartika Purnima and Bali Yatra, traditional crafts such as silver filigree (Tarakasi), and deeply rooted social practices—to contribute to a more inclusive and sustainable city branding approach.

This paper, through a mixed-methods approach—combining interviews, surveys, spatial analysis, and archival research—examines the underrepresentation of intangible cultural heritage in Cuttack’s urban landscape. Despite the city’s rich cultural identity, reflected in its festivals, crafts, and social practices, these elements are often absent from contemporary planning and design. The study reveals a disconnect between community traditions and the formal imagery used in city branding. It advocates for reintegrating cultural memory and intangible heritage into urban design, treating them as dynamic, living resources. It further explores the use of interpretative strategies in cityscape design to enhance brand positioning and cultivate a distinctive destination image by moving beyond the serial reproduction of generic urban forms.

The study proposes a culturally grounded framework for sustainable city branding that promotes authenticity and urban resilience. It offers recommendations for aligning cultural sustainability with spatial planning, advocating for a reimagined cityscape that balances economic and tourism goals with the preservation of cultural continuity and community identity.

KEYWORDS: Intangible Cultural Heritage; Sustainable City Branding; Urban Identity; Cultural Cityscape; Cuttack

Inclusive Urbanism for All Life: A Life-Centric Framework for Sustainable and Equitable Cities

Safir Abbas Zaidi, Abhijeet Pal, Mohammad Abul Hasan
MBS COLLEGE Sector 09, PSP Area, Dwarka, New Delhi, India

ABSTRACT : This research proposes a paradigm shift in urban planning through the lens of Life-Centric Urbanism, a framework that prioritizes ecological interdependence, multispecies cohabitation, and regenerative design principles. In response to the ecological and psychological detachment induced by conventional anthropocentric urban models, this study critically repositions the city as a complex living ecosystem—one that must honor, integrate, and adapt to the needs of both human and more-than-human life. Drawing from theoretical models of ecological urbanism, biophilic design, and nature-based solutions (NBS), the research interrogates current planning paradigms by evaluating global precedents from Singapore, Amsterdam, and Freiburg. It introduces a Life-Centric Urbanism Index (LCUI) comprising five key domains: biodiversity integration, multispecies infrastructure, ecological functionality, human-nature relationships, and governance metrics. These are assessed using measurable indicators such as habitat connectivity, species presence, soil health, and environmental literacy. Aligned with the UN Sustainable Development Goals (SDGs) particularly SDG 11 (Sustainable Cities), SDG 13 (Climate Action), and SDG 15 (Life on Land)—the study advances implementable design and policy strategies that regenerate fragmented ecosystems, mitigate climate vulnerability, and democratize access to nature. The research critiques technocratic approaches that commodify green infrastructure while ignoring relational, place-based definitions of nature, and instead promotes radically relational urbanism that fosters emotional, sensory, and ethical connections between humans and non-humans. By advocating for participatory, site-sensitive, and post-anthropocentric design processes, this work contributes to the evolving discourse on ecological justice, urban resilience, and the co-evolution of culture and nature. It offers a replicable model for cities aiming to transition from sustainability as maintenance toward sustainability as mutual flourishing.

The Eyes on the Street: Case of street vendors in sector 46 and 56 Huda Market's Social fabric

Aditi Azad, Rhea Kapoor Dheer
Student

Department of Planning and Research, Sushant University,
Sector 55 Golf course Road, Gurugram, India

ABSTRACT : Urban informality is an important part of many Indian cities. It shows how economic and spatial activities often occur outside of formal rules. One key feature of this informal sector is street vending. Street vendors are vital for supporting livelihoods and providing affordable goods and services to a large segment of the urban population. India has an estimated 10 million or more street vendors, which makes up 2 to 2.5 percent of the population in major Indian cities. In Gurgaon, a rapidly industrializing city in Haryana since the late 20th century, the conflict between formal urban planning and informal economic activity is especially evident. Gurgaon's growth accelerated with the establishment of the Haryana Urban Development Authority (HUDA) in 1977. This introduced a structured planning system based on distinct sectors. The model aimed to guide organized development and infrastructure. However, as the city expanded, informal markets emerged naturally in both residential and commercial area. These markets developed in response to the needs of a growing population and unutilized economic opportunities. This study focuses on Sectors 46 and 56 of Gurgaon to explore how informal street vending interacts with, negotiates, and reshapes urban cities. The research seeks to understand how informal vendors claim space, create value, and influence the formal planning rules of HUDA markets in Gurgaon and highlights urban informality as important contributors to urban life and space production. It emphasizes the complex and sometimes conflicting realities that arise when planned and unplanned practices coexist. By promoting participatory planning models that involve civil society, informal actors, and state institutions, the paper contributes to broader discussions about spatial justice and inclusive urban development. The findings indicate that recognizing informality as a crucial part of the urban landscape is vital for developing more flexible, fair, and sustainable cities.

KEYWORDS: Urban informality, street vending, HUDA Markets, relational urbanism, right to the city, placemaking, sustainable urban planning, spatial justice, inclusivity.

The Impact of Religious Architecture in the Fantasy of Gaming: Examining The Legend of Zelda: Breath of the Wild

Manasa M. Koratagere

Faculty of Architecture, PES University,

100 Ft. Ring Rd, B.S.K 3rd Stage, 560085, Bengaluru, Karnataka, India

ABSTRACT : In the realm of gaming, architecture transforms digital landscapes into immersive sanctuaries, where every pillar or spire invites players to experience stories, cultures, and a sense of wonder, all with a screen. This paper explores the profound impact that religious architecture has on the built environment and user experiences within video games. Religious structures often carry rich symbolism and serve as foundational elements that can mold several facets of game design, including storyboarding, environmental layouts, user interactions, and cultural representation. These built influences contribute to the creation of expansive virtual worlds that hold their own unique spirituality and narrative depth.

By examining the alliance of sacred spaces and immersive environments, elements are produced that inherently enhance players' emotional connection not only to the gaming world but also, unknowingly, beyond the screen. Architectural motifs and spatial designs may guide player journeys, evoke a sense of reverence, and build deeper encouragement and engagement with the lore of the gameplay. At the same time, the theological and mythological inspirations that crafted said lore resonate with the aesthetic quirks of the game.

Using The Legend of Zelda: Breath of the Wild as a case study, the fabrication of its built environment to the user's experience is explored by weaving through several real-world religious architectures. Ultimately, the demonstration of theology and built environments are not merely decorative, but rather hold invitations of spiritual and cultural narratives for the player to experience both through this game and also to reflect in their own lives. The stark stance of cultural and spiritual narratives are threads that weave themselves into the game that players retain as they journey, decide, and work towards their goals, all leading to their own conducive and personal storyline for finishing the game.

KEYWORDS: religious architecture; cultural representation; symbolism in game design; virtual worlds; user experience; immersive environments

The Influence of Patriarchy on Vernacular Domestic Architecture in South India

Meghana H, SVV Shiva Saketh Kumar
PES University, 100 Feet Ring Road, Dwaraka Nagar,
Banashankari Stage III, Bengaluru 560085, India

ABSTRACT : This paper attempts to set up a framework for the methodology of trying to assess the possible influence of patriarchy on the planning and development of traditional residential architecture, particularly in South India. The framework is designed in such a way that it can be applied to any set of chosen case studies from across South India to draw the relevant inferences and answer the question of whether the system of patriarchy has manifested itself into the planning of these structures. While functional factors such as climate, topography, and privacy played a huge role in the planning of dwellings, the culture and societal norms that were deeply rooted in patriarchy at the time, certainly influenced the evolution of spaces to adhere to the patriarchal philosophies aimed at confining women to predetermined spaces. This prioritized gender segregation and the regulation of women's mobility. The general confinement of women to the functional spaces of the house such as kitchens and backyards, while the men moved about freely, both within and without the house, mirrors a bigger norm prevalent in society where the women were limited to caregiving and household chores, while men controlled economic and social interactions beyond the domestic sphere. The framework utilizes a multi-disciplinary approach that includes literature review of scriptures and oral history and case studies, along with documentations, study on the evolution of culture and vernacular architecture, and analysis of the findings. Cross-referencing the findings of the study, we aim to reveal how design perpetuated women's exclusion from public life and limited their autonomy. The application of this framework into live case studies will provide great insights into domestic architecture as both a product as well as a tool of patriarchal ideologies, and how it has molded itself over time well into today's modern society.

KEYWORDS: patriarchy; vernacular architecture; theoretical framework; South India; social norms; spatial confinement

Semiotics of Designed Spaces

Dr. Sachin Datt, School of Design, Sushant University, Golf course road, Gurugram

Deepak Kumar, School of Art and Architecture, Sushant University, Golf course road, Gurugram

ABSTRACT : This research is a review of designed spaces from the lens of the affordance Theory proposed by James J. Gibson, which offers a perspective for understanding how designed spaces invite or encourage particular behaviours. An affordance is a property of the relationship that exists between an actor and their environment. The theory establishes that the built environment guides human behaviour. For example, a chair "affords" sitting for a human, a doorknob "affords" twisting, and a flight of stairs "affords" ascent or descent. Instances of affordance of space can be, a bedroom inviting a human to 'rest' while a kitchen encourages 'work' associated with cooking. The Affordance theory can be extended to semiotics of space, where signs, symbols and other visual representations, coupled with physical and spatial elements can enable a complex set of behaviours in actors or agents interacting with a given space. These behaviours can include not only functional actions of doing a task like opening a door, but also ethical ones such as recycling plastic or keeping a classroom clean after use, guided by 'designed 'spatial semiotics rather than strict rules of conduct. Intentional environments can be created by designers that "afford" pro-social or ethically desirable actions, while simultaneously designing out affordances for undesirable behaviours. The design of fire safety systems, for example, relies heavily on a combination of affordances and semiotics: clearly marked, unobstructed escape routes and easily operable emergency exits afford rapid and safe evacuation in an emergency.

While the affordance of an object or a designed space is largely limited to concrete actions a user can do in that space, this paper concludes by proposing a new framework for designing spaces with abstract affordances that cater to the aspects of benefits that a subject has the potential to draw from an environment rather than the actions that a person can perform in the environment. The concept of abstract affordances, we argue, lends itself to the design of more meaningful spaces from human perspective.

KEYWORDS: Affordance Theory, Space Design, Semiotics, Abstract Affordances

User Experience in Themed Restaurants through the analysis of Lighting, Materials and Color Psychology

Pooja S Anand, Nalini N Subramanyasastry, Rama R Subrahmanian
Dayananda Sagar College of Architecture, Bangalore, India
Shavige Malleshwara Hills, 1st Stage, Kumaraswamy Layout, Bengaluru, Karnataka 560111

ABSTRACT : This study investigates the impact of lighting, material choice, and color psychology on user experience in themed restaurants. As restaurants become immersive spaces, it is important to understand the interaction of sensory design factors. The research investigates how lighting—ambient and focal—impacts mood, spatial perception, and behavioral intentions, noting that warm, low-level lighting can increase intimacy and satisfaction, while cooler colors can decrease perceived comfort. Material selection adds to authenticity and haptic involvement, with natural materials such as wood and stone providing warmth and cultural connection, while synthetic materials can detract from thematic immersion. Color psychology plays a central part in influencing emotional reactions; red and yellow have been shown to stimulate hunger and enhance perceived quality of service, while blue and green may create a sense of calm but likely reduce satisfaction ratings. With a multidisciplinary perspective integrating environmental psychology, sensory design, and hospitality studies, the study highlights the significance of unified design approaches that integrate lighting, materials, and color palettes with the theme of the restaurant to create an improved user experience. Results indicate that a conscious and harmonious integration of these factors can promote high levels of customer satisfaction, engender increased stays, and create positive behavioral intentions, thus providing useful lessons for designers and restaurateurs who seek to develop engaging themed dining spaces.

KEYWORDS: Color Psychology, Lighting, Material, User Experience, Theme

Impact of Commuting on Well Being of Commuter

Bhupender Vashisth

Jamia Millia Islamia, Sushant University

ABSTRACT : Rapid urbanization and economic growth are intensifying migration patterns and commuting demands, making it essential to understand the impact of daily commuting on individual well-being. This study examines commuting patterns and their impact on commuter satisfaction among the working-age population. Employment-related travel was most common, followed by household and social activities. Personal transport users reported higher satisfaction than public transport users, citing discomfort in public transit. Shorter commuting times (10-30 minutes) were linked to higher satisfaction, with 73.8% of participants preferring under 30 minutes for well-being. Traffic congestion, air pollution, and poor road infrastructure were key sources of dissatisfaction. Findings highlight the need for improved public transport comfort, reduced travel times, and better infrastructure to enhance commuter well-being and productivity.

KEYWORDS: Commuting, Well Being, Dissatisfaction, Fatigue, Stress, Anxiety, Health, Satisfaction

Designing Equitable Public Spaces: Exploring Urban Parks through a Socio- Cultural and Cognitive lens

Aparajita Shrivastava , Dr.Suruchi Modi
Sushant School of Art and Architecture, Gurgaon, India

ABSTRACT : Urban parks and diverse green spaces are essential components of growing cities for a livable environment , providing immense benefits to an individual's physical and mental well-being. The research examines how social inequalities are manifested and navigated in the spatial organization of cities' public spaces such as urban parks and greens . However, the idea of designing and creating accessibility to such spaces can reinforce social, cultural, and cognitive inclusions , remediating existing disparities in health,social inequalities , social cohesion, and economic opportunities. This research explores the intersections of social, cultural, and cognitive equity in urban parks and green spaces, with a focus on exploring and designing inclusive and accessible public spaces and open up avenues for opportunities and participation in social life .

This study aims to investigate how diverse communities reciprocate socially and culturally in the existing environment of Urban parks and greens . Assessing the function of cognitive factors, such as perception, memory and wayfinding, in learning and shaping user experiences of public spaces; and establishing evidence based design principles to create and develop equitable public spaces through Socio- Cultural and Cognitive lens.

The methodology of the research follows a mixed approach, through case studies, observations and spatial understanding . Gathering design data and the use and impact of urban parks and green spaces.The research aims to contribute to the development of inclusive and equitable urban Parks and green spaces that optimize accessibility, social cohesion, and user-centered design. The outcome is seeking to create public spaces that promote equity, well-being, and quality of life for individuals of all abilities and genders.

KEYWORDS: Equitable Public Space, Urban Parks, Green Spaces, Cognitive equity.

Exploring Youth Preferences in Urban Public Spaces: Environmental, Social, and Cultural Perspectives in Indian Cities

Ujjal Halder, Research Scholar, Department of Architecture and Planning, IIT Roorkee, India

Dr. Harshit Sosan Lakra, Assistant Professor, Department of Architecture and Planning, IIT Roorkee, India

Dr. Saptarshi Kolay, Assistant Professor, Department of Architecture and Planning, IIT Roorkee, India

ABSTRACT : Urban public spaces are crucial for fostering social interaction, cultural identity, and youth participation. In India's rapidly urbanizing cities, heritage-rich areas, such as traditional markets, often face challenges catering to the changing needs of the younger generations. This research explores how public spaces can be reimagined to suit the preferences and behaviors of youth, using Bapu Bazar in Jaipur as a case study. This study identifies key environmental, social, and cultural factors that impact youth engagement through a combination of literature review, field observations, and structured surveys. These findings emphasize the significance of thermal comfort, safety, inclusivity, and opportunities for cultural expression. Based on this analysis, a youth-focused conceptual framework is proposed, that serves as a practical tool for evaluating and redesigning public spaces in heritage settings to promote youth participation. This study offers actionable insights for planners and urban designers to create more inclusive, lively, and culturally rooted urban spaces that appeal to young users.

KEYWORDS: Youth Preferences, Public Spaces, Urban Design, Environmental Factors, Cultural Relevance, Social Inclusivity, Heritage Markets

Comparative Review of Indoor Climate Conditions in Residential Buildings of India and the Kingdom of Saudi Arabia

Mohd Faheem, School of Art and Architecture, Sushant University, Gurgaon, Haryana, India
Mohammed Fahad Alghafis, Department of Architecture, College of Architecture and Planning, Qassim University, Buraydah, Saudi Arabia

ABSTRACT : Rapid urbanization in India and Saudi Arabia presents significant challenges in ensuring indoor environmental quality. To address these issues, this study conducts a comparative literature review to examine ambient environmental conditions, occupant behavior in residential buildings. This review compares climatic context, thermal comfort standards, occupant behavior, passive design strategies, and energy use patterns between both countries, with attention to diverse age, gender, cultural behaviors, income groups, and regional conditions in residential buildings. The study found that climate-adaptive behaviors and passive design strategies are significantly influenced by cultural factors, while existing standards offer limited scope for inclusivity and accessibility in residences. A healthy indoor climate helps in plans for sustainable and accessible residence and is supported by Sustainable Development Goal 11, which aims to make cities and human settlements inclusive, safe, resilient, and sustainable. The findings provide useful advice for shaping inclusive building policies in climate change and urban expansion.

KEYWORDS: Indoor environment, Residential building, Adaptive opportunities, Climate adaptation, zero-energy building

Enhancing User Experience Through Artificial Lighting in Retail Interiors: A Study with a Focus on Bengaluru

Spoorthi M Krishnamurthy, Nalini N Subramanyasastry, Rama R Subrahmanian
Dayananda Sagar College of Architecture, Bengaluru, India
Shavige Malleshwara hills, 1st stage, Kumaraswamy layout, Bengaluru, Karnataka 560111

ABSTRACT : Artificial lighting plays a crucial role in shaping consumer perception and behavior within retail interiors, influencing not only visibility but also emotional response and brand association. This study investigates the impact of artificial lighting on user experience in retail environments across Bengaluru, focusing on key factors such as mood enhancement, product visibility, spatial comfort, and alignment with brand identity. The study was executed through on-site case study, user surveys (n=30), stakeholder interviews(n=2), and visual documentation of lighting environments for three typologies: jewelry, apparel, and footwear retail. Firstly, over 70% of users reported feeling comfortable with the lighting while shopping, and around 60% were satisfied or very satisfied with the overall lighting, indicating a generally positive lighting experience. Secondly, product visibility was enhanced by effective lighting, with more than 75% of respondents confirming that products were easy to see, although some noted room for improved spotlighting. Thirdly, lighting had a strong emotional influence, with about 60% describing the atmosphere as inviting and 65% reporting a positive effect on their mood. Additionally, a majority preferred cool or neutral lighting, and about 65% desired more natural light in stores, suggesting important directions for future lighting design. Limited research has been done focusing specifically on Indian urban shopping spaces to assess lighting's emotional and spatial influence based on case-based evidence. Enhanced illumination has the potential to enhance customer satisfaction, brand loyalty, and commercial performance through improved product display and increased user comfort.

KEYWORDS: Accent lighting, Ambient light, Brand perception, Retail interiors, User experience

Embedding Social and Cultural Sustainability in Indian Architectural Education for Inclusive Urban Futures

Krishnokoli Dutta

ABSTRACT : This paper is based on a doctoral dissertation which investigates the incorporation of social and cultural sustainability in architectural education in India, focusing on its relevance to contemporary socio-cultural needs of the users, and architectural professional responsibilities. The research is divided into three phases, drawing on subjective epistemological approach. The first phase involves detailed content analysis of the ethos and curricula of top 100 ranking schools of architecture in India. The finding reveals a disbalance in coverage of the topic in theory and practical lessons with minimal integration of the topic in design assignments. The second phase comprises of primary data collection through a questionnaire survey and semi-structured interviews of the various stake holders. The third phase analyses the findings, which highlight a consensus on the eminence of contextual learning. The respondents expressed concern about the West-centric pedagogy that lacks regional relevance and overlooks inclusive user needs. The limited accountability, inadequate teacher training and curricular reforms of the Council of Architecture is criticised. The study concludes that there is a gap between the socio-cultural realities and the architectural education system of India. Different approaches are suggested in the paper that will help in bridging this gap. It also offers recommendations for curricular reform. This paper aims at fostering cultural awareness and professional empathy among the future architects of India.

KEYWORDS: Social Sustainability, Cultural Sustainability, Architectural Education, Curriculum reform, Contextual learning

The Role of Social Feasibility in Sustainable Development of Tribal Communities

Ar. Meenu Babu, Research Scholar (Amity School of Architecture & Planning, Amity University Haryana, India)

Dr. Pallavi Sharma, Professor (Amity School of Architecture & Planning, Amity University Haryana, India)

ABSTRACT : Indigenous tribes often face issues including cultural disturbance, displacement or loss of natural resources due to external development initiatives. Sustainable development of tribal communities requires careful consideration of economic growth, environmental conservation, and social well-being. Social feasibility plays a crucial role in the holistic and long-term sustainable development of a tribal community. It ensures that the development aligns with the cultural, social and economic aspects of the tribal populations. It seeks to integrate local customs and practices, ensuring the community's way of life is preserved while fostering sustainable growth. The paper explores the role of social feasibility in the sustainable development of the tribes, emphasizing the importance of cultural sensitivity, community participation and equitable inclusion. The study is based on qualitative research, including successful and unsuccessful case studies of developmental projects in tribal areas, interviews and analysis of policy frameworks. The study assess the relationship between social feasibility and long-term sustainability in tribal areas, identifies the barriers for social sustainability in tribal development and proposes solutions to overcome them.

KEYWORDS: Sustainable development, tribal community, cultural sensitivity, social feasibility, community participation

A Study on Interior Design for Collaborative and Flexible Coworking Spaces Among Designers in Bangalore

Anubhuti Trivedi, Vidhya M. Surendran, Rama R. Subrahmanian

Dayananda Sagar College of Architecture, Bangalore, India

Shavige Malleshwara Hills, 1st Stage, Kumaraswamy Layout, Bengaluru, Karnataka 560111

ABSTRACT : Coworking spaces have reimaged traditional offices by fostering flexibility and collaboration, though balancing openness, privacy, and functional efficiency continues to pose a significant challenge. The study aims to analyze coworking spaces' spatial configuration, user behaviour, and functional efficiency through the comparative case studies of Jaaga and Work Theater in Bangalore. This research uses a mixed-method approach to explore spatial efficiency and user satisfaction in coworking spaces. Two Bengaluru-based coworking spaces, Jaaga and Work Theater, were selected for their contrasting spatial layouts. The analysis is guided by the theoretical framework of workplace activity modes—focus, collaborate, learn, and socialize—to assess how spaces support diverse user needs. Behavioral mapping was conducted over twelve hours in each space, documenting user movement, space use, and interactions. A structured survey of sixty-three users gathered feedback on collaboration, acoustics, privacy, and functionality, analyzed for trends and concerns. Additionally, five expert interviews provided insights into flexible and user-friendly workspace design. The findings were synthesized through comparative analysis, identifying strengths, limitations, and opportunities for design improvement. This methodology ensures a comprehensive understanding of user-centric coworking design. The study highlights how spatial layout significantly affects user experience, efficiency, and collaboration in coworking spaces. The findings from the case studies of Jaaga and Work Theater reveal that open-plan designs foster interaction but often lack acoustic comfort. Zoning and structured layouts improve privacy and user satisfaction. Behavioral mapping showed 82% of users preferred semi-private areas for focused tasks. Survey data found 84% favored a mix of open and enclosed spaces, 78% preferred adaptable furniture, and 61% valued break-out areas for relaxation and informal chats. Overall, the findings emphasize the need for balanced spatial planning with flexibility, zoning, and acoustic quality to support both collaborative and individual work. This study addresses the overlooked spatial dynamics in coworking environments by linking space utilization and behavioural patterns to user experience. The study offers design insights to enhance coworking efficiency, foster social interaction, and support economically sustainable workspace models.

KEYWORDS: Coworking Spaces, Spatial Configuration, Collaborative Work Environments, User Behavior, Workplace Efficiency

Artisans as custodians of Sustainable Living: A case of Kenduli Community, Bishnupur

Aditi Gupta, Student, School of Art and Architecture, Sushant University, Golf Course Rd, Gurugram, Haryana 122003, India

Aryan Gupta, Student, School of Art and Architecture, Sushant University, Golf Course Rd, Gurugram, Haryana 122003, India

Asst. Prof. Chandni Thadani, Asst. Professor, School of Art and Architecture, Sushant University, Golf Course Rd., Gurugram, Haryana 122003, India

ABSTRACT : Bishnupur, a historic municipal town in West Bengal's Bankura district, is renowned for its medieval terracotta temples and vibrant cultural heritage. Known as the 'Temple Town,' its architectural legacy was shaped under royal patronage, fostering a tradition of craftsmanship that persists today (Prasad, 2022, p. 98). The Kenduli village is a community that is said to be the home to the artisans of Bishnupur's terracotta temples. Still, in today's rapid development, it seems to have been pushed back instead of being included. By analyzing the tangible (terracotta architecture) and intangible (artisanal knowledge, cultural patronage) aspects of their heritage, the paper highlights how the Kenduli community embodies socio-cultural and environmental sustainability. As architecture students, we realize the need for coexistence between urban cities and cultural communities. Bishnupur's case demonstrates how heritage communities can drive sustainable development through socio-cultural resilience, advocating for design interventions through prototypes that protect artisanal livelihoods and vernacular architecture in rapidly urbanizing landscapes. The paper aims to establish a balance between the lost cultural aspects in Indian urban city prospects, highlighting the need to develop socio-cultural equity in both rural and urban settlements through a detailed understanding of the Kenduli village and the Happy City Index.

KEYWORDS: Kenduli, socio-cultural equity, sustainable living, communities, happy city index

Analysing the perception of people for using neighborhood greens and its impact on social cohesion

Mohammad Juned, PhD Scholar/ Asst. Professor, Department of Architecture, Jamia Millia islamia, New Delhi

Qamar Irshad, Professor, Department of Architecture, Jamia Millia islamia, New Delhi

ABSTRACT : Cities have been experiencing rapid urbanization, and people migrate to metropolitan areas because of their service economy. These cities grow through the amalgamation of different cultures. For the proper functioning of a society, there is always a need for social cohesion that will bind people from different cultures and diverse backgrounds, so that they can live together in coexistence and harmony. Neighborhood green acts as a life line where people from different walks of life and socio-cultural groups interact with each other in a healthy environment, which can help in building inclusive communities. This paper attempts to identify the reasons for people of different age groups to visit Neighborhood Green and to analyze the impact of their meeting on social cohesion.

This research aims to explore how neighborhood green spaces contribute to interactions among various groups and help build a sense of community by exploring the various activities and facilities within these areas that attract different age groups and encourage social interactions. By understanding the contribution of green spaces to social cohesion, urban planners and policymakers can make informed decisions to create more inclusive and harmonious environments. This research utilizes a mixed-methods strategy, integrating quantitative surveys with qualitative interviews to collect detailed information on how parks are used and the nature of social interactions within them. The findings are expected to help identify the specific features and attributes of neighborhood green spaces that are most effective in promoting social cohesion among diverse populations. This study aims to contribute valuable insights to the growing body of literature on urban planning, social integration, and the essential function of accessible green spaces in enhancing community wellbeing.

The study also examined the potential barriers to social interaction in neighborhood green spaces, such as safety concerns, accessibility issues, or cultural differences. By identifying these challenges, this study can provide recommendations for overcoming obstacles and maximizing the social benefits of urban green areas. Additionally, the findings highlight the role of community engagement and participatory planning processes in creating green spaces that truly reflect the needs and preferences of diverse local populations.

KEYWORDS: Urbanisation, Neighborhood greens, Diverse backgrounds , Social Cohesion, Social Interactions, Sense of community, Inclusivity

Finding Historical Gardens of Bundelkhand through Oral History corroborated with Archival Research and Satellite Imagery

Anjaneya Sharma, Faculty of Architecture and Planning, Dr.A.P.J.Abdul Kalam Technical University, Lucknow, India

ABSTRACT : Bundelkhand is a region in central India identified based on its uniform cultural practices. During 18th Century, Bundelkhand was divided into several princely states under the rule of respective kings. The royal families of these princely states created several gardens, which are now part of the cultural heritage of Bundelkhand. These are produce gardens having a unique typology with respect to its distinct layout, elements and architectural characteristics. An NGO from Belgium, ITRHD undertook two such gardens for conservation. Following the work of ITRHD Belgium, the author discovered a series of thirty gardens in Chhatarpur district of Madhya Pradesh. The methodology is based on the data collection through oral history corroborated with archival research and satellite imagery from Google Earth. The research highlights a methodology to discover such landscapes, which are unknown to the outside world in absence of written records.

KEYWORDS: Oral History; Regional Gardens; Ethnographic Survey; Historical landscapes; Gardens; Bundelkhand; Archival Research; Satellite Imagery.

Walking through the Culture of Basavanagudi, Bengaluru - Bridging the Tradition and Urbanism through Heritage Trails.

Shwetha K Purohit, BMS College of Architecture, Design and Planning, Bull Temple Road, Bengaluru, Karnataka, India

ABSTRACT : Bengaluru, often celebrated as India's technology capital, is equally a city layered with rich cultural and architectural heritage. As the metropolis experiences rapid urbanization, its historic neighborhoods present opportunities to balance modern growth with cultural preservation. Among these, Basavanagudi stands out as a district where deep-rooted traditions and urban dynamism coexist in a uniquely vibrant urban fabric.

This paper explores how heritage walks can serve as an inclusive strategy to reconnect communities with their cultural landscape, while fostering sustainable tourism and public engagement. Focusing on Basavanagudi, home to revered landmarks such as the Bull Temple and Dodda Ganapathi Temple, bustling traditional markets like Gandhi Bazaar, and the renowned VV Puram Food Street, the study investigates how curated pedestrian experiences can bridge historical narratives with contemporary urban life.

Drawing on spatial mapping, ethnographic observations, and stakeholder interviews, the research identifies key elements of the neighborhood's intangible and tangible heritage and examines the potential of walkable cultural trails to enhance public space and promote economic inclusivity. Particular attention is given to how local traditions—spiritual, culinary, and communal—can be celebrated through interpretive design and community participation, ensuring the designed trails remain authentic and locally grounded.

The paper concludes that such heritage-led regeneration offers a replicable model for growing cities, demonstrating how cultural continuity and urban inclusivity can be fostered through innovative placemaking and collaborative design approaches.

KEYWORDS: Basavanagudi Culture, Cultural Trails, Inclusive Urbanism, Tangible and Intangible Heritage

Inclusive education: Identification of Persons with Non-Verbal Learning Disability in Design Domain

Sonali Roy Chandra,

PhD Scholar, Department of Architecture, Smt. Manoramabai Mundle College of Architecture, RTM Nagpur University, Nagpur, India

Assistant Professor, University School of Architecture and Planning, Guru Gobind Singh Indraprastha University, New Delhi, India.

Roopal Deshpande, Associate Professor, Department of Architecture, Smt. Manoramabai Mundle College of Architecture, RTM Nagpur University, Nagpur, India.

ABSTRACT : Social and cognitive equity in cities cannot be realized in its true essence if its education system is not made Inclusive. Design domain education is no exception where the thrust should be on enhancing design ability for all neurodiverse students. Design ability has been strongly linked to Visuospatial cognitive skills by researchers since the past century. In spite of the focus of research on the said domain, the differences in theories and terminologies evolved by different researchers renders it extremely difficult to comprehensively understand the constructs of Visuospatial cognitive skills. In this paper, the authors have brought forth the Theoretical underpinnings of Visuospatial cognitive skills requisite for development of Design Abilities of an individual through Literature Review and Meta-analysis highlighting the independent variables of visuospatial skills against the dependent variables of Design ability. Further, the study has delved deeper to understand the co-relates of above for a Universal user group focusing on the Individuals with Learning disabilities (ILD) especially, the persons with Non-verbal Learning disabilities (NVLD) mapping their potentials and challenges of Visuospatial cognitive skills. The Literature review is further cross validated thorough conduction of an Analytical Hierarchy Process (AHP) with experts from Design and Psychology domains to define and rate the constructs of NVLD in design domain. Initially a Pilot AHP questionnaire is designed and checked for validation and reliability through an initial sample of 15 experts. Firstly, the study highlights the pressing need to Design a design domain specific test for evaluation of visuospatial cognitive skills critical for developing design ability. Secondly, it also brings forth the challenges in identifying Persons with Non-verbal learning disabilities in design domain and the lack of test tool kit for the same. The discussion in the paper demonstrates and sets a tone for further research in this multifaceted multi-disciplinary arena of Visuospatial cognition for Design ability having its far-reaching effects on domains of educational policies, Universal Design for Learning, Design practice, Product design, WEB design and everyday life affairs at large.

KEYWORDS: Inclusive Design education; Visuospatial cognitive skills; Non-Verbal Learning Disability.

Reforming the Sacred: Exploring Social, Cultural and Cognitive Inclusion in Hindu Temple Spaces

Ar. Devendra S Deshpande, Ph.D. Scholar, Department of Architecture, Smt. Manoramabai Mundle College of Architecture, RTM Nagpur University, Nagpur, India.

Dr. Roopal R Deshpande, Associate Professor, Department of Architecture, Smt. Manoramabai Mundle College of Architecture, RTM Nagpur University, Nagpur, India.

ABSTRACT : Hindu temple spaces have always served as hubs for ritual, identity and hierarchy since historically. This study attempts to explore how these spaces might change to foster social, cultural and cognitive inclusiveness in modern society. As the need for fair public space became more widely recognized, the research investigates ways to incorporate inclusion in to temple architecture, regulations and rituals in a meaningful way without diminishing their spiritual value. Particularly, cast, gender, cognitive diversity and physical ability are amongst the historical and contemporary barriers to inclusion in Hindu temple spaces that will be critically examined in the study. This paper investigates how religious behaviours, architectural design and spatial organization in temples affect inclusion or exclusion. Additionally, the study looks for crucially aware tactics that might advance diversity without specifying temple's spiritual and symbolic significance. A qualitative approach is adopted, which involves ethnographic observation on selected temples, case studies of inclusive temple projects, spatial analysis and expert interviews with priests, scholars and temple architects. to get an arrangement on the best practices for inclusive temple design, the Delphi technique is employed. Preliminary findings suggest that, tradition and inclusive principals may be reconciled through community led reforms, flexible rituals and adaptable spatial interpretations. Temples have the capacity to evoke from private places of worship in to communal cultural spaces that embody Indian society's heterogeneous nature.

KEYWORDS: Inclusive Design, Temple Architecture, Cultural Continuity, Social Equality, Cognitive Diversity, Sacred Spaces, Public Participation

Identify and suggest strategies to optimize daylight in compact built forms of Shukrawar Peth and Indira Nagar, Pune

Sanjana S. Kulkarni, Bharati Vidyapeeth Deemed to be University College of Architecture, Pune India.

Asst.Prof. Amey V. Naphade, Bharati Vidyapeeth Deemed to be University College of Architecture, Pune India.

ABSTRACT : This study investigates daylight enhancement strategies in two contrasting urban settlements of Pune: Indira Nagar and Shukrawar Peth. The research aims to assess the effectiveness of passive design interventions specifically internal wall paint reflectance, the implementation of light shelves, and variations in window specifications on indoor daylight levels. A comparative field study was conducted, wherein lux level readings were taken at three time intervals (8:00 AM, 12:00 PM, and 4:00 PM) in selected dwellings from both locations. The onsite data collection was complemented by daylight simulations using Ecotect to model and evaluate the influence of the identified strategies. Results indicate that enhancements such as lighter internal finishes and optimized window design significantly improved daylight distribution, particularly during early and late daylight hours. The study highlights the potential of low-cost design modifications to improve visual comfort and reduce dependence on artificial lighting in dense urban housing typologies.

KEYWORDS: Daylighting, Reflectance, Light shelf, Lux levels, Ecotect, GIS, Visual Light Transmittance, Efficiency.

Embodied Narratives from the desert cities of India: Exploring the socio-cultural identity of Jodhpur and Jaisalmer through spatial study

Aditya Dev, B.Arch 4th year student, School of Art & Architecture, Sushant University, Gurugram, Haryana

Payal Taneja, Assistant professor, School of Art & Architecture, Sushant University, Gurugram, Haryana

ABSTRACT : Cities in Rajasthan, India, Jodhpur and Jaisalmer, are renowned for their rich heritage, unique architectural styles, traditional neighborhoods, and deep-rooted cultural identities. This study examines how urban environments shape a sense of place and identity, both visually, socially, and culturally. The context of cities was explored in an academic excursion, and a study was conducted through experiential learning on four fundamental aspects: materiality, imageability, social setting, and cultural heritage. The documentation of data was acquired by a 42-member student group through observations, personal reflections, and visual mapping for analysing how urban identity is built and experienced.

The research draws a deeper analysis of the two historic cities through a qualitative case study based on the work of urban planner Kevin Lynch's theoretical framework of "The Image of the City" to analyze how people read and remember cities, particularly the concept of "districts," or areas with a distinct character through the perceptual structure and legibility of the cities. Primary data was collected through field observations, photographic documentation, and cognitive mapping exercises. Additional insights were gathered from semi-structured interviews with local residents, tourists, and tour guides to understand the collective memory and mental imagery of the cities.

Data was organized into thematic categories to evaluate the cities' urban imageability. Supplementary literature review and visual content analysis supported the contextual framework of the study. The results demonstrate that the identity of districts in these cities is greatly connected to social stratification and historical background. The distinction between caste, clustering, and detailing in the filtering of architecture and material continuity is more effective in defining boundaries and shaping the nature of space than formal visual legibility alone. While Lynch's ideas provide a valuable lens, their application in traditional Indian cities requires cultural grounding to truly capture how people experience and relate to space.

KEYWORDS: Urban environment, traditional indian cities, Visual mapping, Social setting, Cultural identity, Heritage, Architectural styles.

Railway Margins as Community Margins Traditions, Transformations, and the Appropriation of Public Space in Transitional Urban Edges

A Case Study of Railway Land in Pimpri-Chinchwad (PCMC)

Ar. Pooja Arvind Kudale, Department of Architecture, S.B. Patil college of Architecture and Design, Nigdi, Pune, Maharashtra, India

ABSTRACT : In many Indian cities, those strips of land next to railway lines are often seen as nothing more than leftover, neglected infrastructure. But look closer, and you'll find they're buzzing with life – dynamic, in-between spaces where people stop to rest, sell their wares, gather, and sometimes, even build homes without formal permission. Take Pimpri-Chinchwad (PCMC), especially around the Chinchwad and Akurdi stations. Here, these "margins" act like special gateways, neither fully public nor private, not quite legal nor illegal, and definitely not designed, yet incredibly organic. Despite being overlooked and often fought over, they quietly support a vibrant, informal way of life, highlighting a deep, unmet need for public spaces that are truly open, welcoming, and adaptable for everyone.

This research dives into how these marginal lands, often claimed for temporary livelihoods or unofficial housing, can be reimaged as true "community commons." We're talking about spaces that open up access for all, encourage people to connect, and champion fairness in how we use urban land. Using hands-on tools like field mapping, walk-alongs, and heart-to-heart interviews with those who know these spaces best – vendors, commuters, residents, and elders – this study uncovers how everyday users navigate and reshape these urban edges. The project also suggests simple, community-driven design ideas that could bring both short-term relief and lasting improvements.

Ultimately, this work aims to shift our perspective: railway margins aren't just empty spaces or problems to be cleared. They are potentially lively public areas, where the informal life, with all its complexities, offers invaluable lessons for creating urban plans that are fair, inclusive, and truly rooted in how people live.

KEYWORDS: Railway margins, informal settlements, temporary urbanism, socio-spatial thresholds, urban commons, fringe land, Pimpri-Chinchwad, participatory design.

From Fragmentation to Fabric: Integrating Cognitive and Cultural Equity in Historic Urban Street Networks – A Case Study of Charminar, Hyderabad

Mounika chaluvadi, Associate professor Architecture College, Hyderabad, India

Mounica Pulipati, JBR Architecture College, Hyderabad, India

Monika Yadav, JBR Architecture College, Hyderabad, India

ABSTRACT : This study examines how Hyderabad's historic Charminar precinct—once a continuous urban fabric—is becoming more geographically, culturally, and cognitively fragmented due to unchecked expansion, traffic, and discriminatory design. The study offers a strategy for reimagining and reviving the urban street network around Charminar while preserving both material and intangible heritage by combining cognitive mapping and cultural equality frameworks. The study evaluates how various users view, move through, and interact with the area using Kevin Lynch's elements—paths, nodes, landmarks, edges, and districts. Surveys of cognitive mapping show that visual clutter, inadequate signage, and spatial neglect reduce the clarity of wayfinding. At the same time, clusters of religious and craft activities—like Muharram processions, Ramzan bazaars, and bangle makers—that are not spatially recognized in official urban plans are identified using cultural mapping.

Interviews with stakeholders highlight sentiments of vulnerability and isolation, especially with street sellers. Context-sensitive interventions, such as pedestrian-first zones, shaded arcades, vending kiosks that showcase regional crafts, and cultural signage that incorporates stories into the urban landscape, are the responses provided by the suggested design framework.

The study's ultimate goal is to make Charminar a resilient, inclusive, and emotionally legible precinct that, via careful spatial integration, preserves livelihoods, respects memory, and upholds common cultural traditions.

KEYWORDS: Cognitive Mapping, Cultural Equity, Urban Fabric, Heritage Preservation, Charminar Precinct

Regional Disparity in India's Maritime Belt: Socio-economic Dimension and Historical Perspective.

Urooj Fatima, Research Scholar, Department of Urban Planning, School of Planning and Architecture, New Delhi-110002

Vinita Yadav, Department of Urban Planning, School of Planning and Architecture, New Delhi-110002

ABSTRACT : Maritime states of India have historically served as important hub for economic development, cultural exchange, and trade. These states have geographic advantages like access to marine trade and natural resources. But at the same time these states have exhibit significant regional disparity in term of development. The paper investigates the regional disparity considering internationally recognized parameters by analyzing socio-economic indicators such as share in Gross Domestic Product (GDP), Human Development Index (HDI), and Poverty level. The study shows that states like Gujarat and Maharashtra perform better on metrics of economic and human development. Eastern maritime states like Odisha and West Bengal lag behind, indicating uneven growth despite geographical proximity. The historical factors such as colonial trade patterns, preference in industrial investment and port-centric economic policies have contributed significantly to this disparity. The paper highlights how the colonial period development in Indian ports have benefited the long- terms economic advantages and development. In contrast, the eastern region has been heavily exploited for resources with no growth in development. The results emphasize the necessity of policy that promote inclusive coastal development through overcoming the pattern of disparity based on the historical and institutional principles. The paper also suggest recommendation for improving regional disparity by diversifying the economy, increasing connectivity, as well as investing in human capital in the lagging maritime states.

KEYWORDS: Regional Disparity, Gross Domestic Product, Human Development Index, Maritime States, Economic Development

Living Heritage of Todaraisingh, Rajasthan: An Exploration of the Intersection of Culture and Architecture of the Settlement

Diya Bhardwaj, 3rd year B.Arch student, School of Art & Architecture, Sushant University, Gurugram, Haryana

Payal Taneja, Assistant Professor, School of Art & Architecture, Sushant University, Gurugram, Haryana

ABSTRACT : With the diversity of Indian cities and their long history over ancient periods, it's hard to understand the socio-cultural and architectural intricacies of various zones in the country. This research presents an exploration of the indigenous rural settlement in northern India in the state of Rajasthan. It investigates the settlement's traditional socio-cultural systems and community dynamics that define the Toda Rai Singh way of life. Through an interdisciplinary approach that combines ethnographic fieldwork, historical analysis, and architectural context, it explores how the Toda Rai Singh community's social organization, kinship structures, and religious practices shape their day-to-day existence and their interaction with the surrounding landscape.

The settlement's architecture, with its distinct vernacular structures, provides valuable insights into the adaptation of traditional designs to the harsh climatic conditions of Rajasthan. The study emphasizes on the role of local materials, construction techniques, and spatial organization in the design of residential and communal spaces, highlighting the interplay between tradition and environmental sustainability. Of particular interest is the architectural typology of the Toda Rai Singh dwellings, which reflects not only the community's cultural identity but also their deep connection to the land and their resourceful adaptation. Also, understanding the challenges posed by external factors such as modernization, urbanization, and the increasing pressures of tourism. These forces have begun to reshape the architectural landscape and cultural practices of the Toda Rai Singh settlement, raising important questions about the preservation of indigenous traditions and living heritage in a rapidly changing world. This paper argues that safeguarding the architectural heritage of such settlements requires a holistic approach that integrates cultural continuity with sustainable development practices.

KEYWORDS: Socio-cultural, settlement study, architectural heritage, sustainable living, diverse community, urbanization challenges

Climate Responsive Inspired Public Spaces: Enhancing Social Equity in Growing Cities

Naina Grover Sood, School of Art and Architecture, Sushant University, Sector 55, Gurgaon, Haryana, India

Shubhi Khare, MBS College, Dwarka Sector 9, New Delhi, India

ABSTRACT : As population in cities grows across the globe, the form and character of public spaces have a crucial role in defining inclusive, sustainable, and resilient cities. This study explores how public spaces can be used as tools to promote social equity in fast-growing urban environments in response to climate. Through the incorporation of climatic information, socio-spatial trends, and city morphology, the study examines how adaptive design features such as passive cooling, green infrastructure, shade design, and water-sensitive planning can be made accessible and distributed equitably among various urban communities.

The research is based on comparative case studies of climate zones, governance systems, and socio-economic orders in Medellín, Colombia, Ahmedabad, India, and Copenhagen, Denmark. Using GIS-based heat maps, thermal comfort evaluations, and spatial equity graphs, the research translates differences in access to climate-mitigating urban spaces. Based on the study, it is found that integrated planning, wherein environmental adaptation is combined with community engagement, can bring about spatial justice, health resilience, and greater urban liveability, especially for vulnerable populations.

Findings highlight the importance of a climate justice approach to urban planning with a focus on inclusive design principles, particularly in the Global South. The paper ends with a design guidance and policy suggestions that can be replicated over climatic and cultural conditions to make public spaces not only climate-resilient but also socially inclusive and just. Through these insights, we will cohesively advocate for all the collaborators, like urban designers, policymakers, climatologists and local communities in creating public spaces that will respond to ecological, sustainable and social urgencies.

KEYWORDS: Sustainable, Resilience, Community Engagement, Inclusivity

Inclusive City for Children: A Road Map

Aruna Bhardwaj, School of Art and Architecture, Sushant University
Sector 55, Gurugram, Haryana, India. 122003
Juhi M. Bhatt

ABSTRACT : The importance of integrating child-responsive design principles into urban planning and urban design to ensure that cities are not only livable but also nurturing environments for children, is gaining momentum. However, in rapidly growing metropolitan Indian cities, addressing global impacts and rapid urbanization, children are among the most affected stakeholders, as they represent 30% of the urban population. Contemporary city expansions are planned reactively to immediate development needs, with Master Plans and building codes focusing on demographic and economic potentials for the future. Child-centric initiatives are limited to the provision of schools, parks, health centres, maternity homes and aanganwadi, in deference to planning norms. This approach shortchanges children, depriving them of opportunities to grow into healthy individuals with strong value systems. The vision and understanding of the urban child's needs are often lacking, as they require evaluation not only at the physical level of the built environment but also considering environmental and psychological factors. Through a meta analysis of existing literature, policy initiatives and case study analysis, this research identifies child friendly indicators that addresses the varied scales of the Indian urban built environment. It proposes a hierarchical approach should be employed both along age-group factors as well as along the architectural factors of Built Spaces, Services & Facilities, Safety & mobility and Ambient Environment. This conceptual framework addresses children issues at the built scale and the city scale and can be further tested out in future explorations to create a detailed child friendly city implementation policy.

KEYWORDS: Urban Child; Child-Centric City; Public Spaces; Public Buildings; Inclusive Cities

The Man Behind The Mask: Reviewing The Festival of Ramman Through The Eyes of Mohanlal

Sonali Joshi, Student, Department of Fine Arts, Graphic Era Hill University, Dehradun, 248001
Mandakini Sharma, Department of Fine Arts, Graphic Era Hill University, Dehradun, 248001

ABSTRACT : Mohanlal is a practising mask maker of Mukhota, the traditional ceremonial masks of Uttarakhand, in present times. He is the last of the mask makers of the twin village of Saloor-Dungra in Chamoli district, where the masks are mainly used during the performance of Ramman, a ritual storytelling performance of the community that is based on the events of the Ramayana and is performed every year during Baisakhi in an intricate way. The Ramman is a sacred festival with deep roots in its performance culture and a corresponding ritual structure that highlights community engagement with a consecrated history. It also includes the use of the Mukhota or masks, which are not just significant as a visual and material artefact, but also a ritual element of high importance and use during the festival. Mohanlal has been practising the art of mask-making since he was in his teens and has been an essential link to this traditional art that might be lost now. It was once a communal practice of making Mukhota in the village. But now with only one practising artisan left and several challenges to face in terms of passing it down as a craft for future generations, the transition and continuation of this skill is going through changes due to various socio-cultural factors. This research involved interviews with Mohanlal, field observations, and photography at the Ramman Festival in Saloor. The focus of this research work is the performative, ritual and cultural aspects of the masks in the framework of the Ramman Festival. The research underlines how a single individual tradition-bearer, in this case, Mohanlal, can be the representative of a community's identity, its memory, and also an essential part of intangible heritage threatened by neglect and changes to socio-cultural practices. In the same line, the research also underlines the need to document and support such endangered practices and contexts that hold a considerable historical and artistic significance within the regional performance tradition.

KEYWORDS: Mukhota (Traditional Masks), Ramman festival, Intangible Culture Heritage, Ritual Performance, and Artisan Tradition.

Assessing the Cultural Continuity and Equity through the Traditional Cuisine of Garhwal and Kumaon

Anjali Bailwal, Department of Fine Arts, Graphic Era Hill University, Dehradun Campus, Uttarakhand, Bailwalanjali.33@gmail.com

Mandakini Sharma, Department of Fine Arts, Graphic Era Hill University, Dehradun Campus, Uttarakhand, msharma@gehu.ac.in

ABSTRACT : Food Traditions in Garhwal and Kumaon (Uttarakhand, India) are not just a means for sustenance and survival, but also aesthetic, religious, social, and cultural practices. Indigenous communities have various festivals like Harela, Phool Dei, Makar Sankranti (Ghughutiya), Bikhoti, and others, which involve culinary offerings and rituals. These practices elevate the act of cooking to a spiritual and communal experience that nourishes and fortifies people and communities, keeping ancient traditions alive. These festivals treat food as an act of worship, a tool for inclusivity, cultural memory, and healing traditions. The study aims to comprehend the aesthetic, ritual, and health practices in festive foods and their meditative potential in Garhwali and Kumauni traditions. It also intends to understand how food serves as a tool for cultural identity, social cohesion, and economic sustenance in modern times. Garhwali and Kumauni food practices are the carriers of ancestral knowledge, regenerative and healing cultural practices, and meditative worship. The food rituals, such as kneading dough, roasting seeds and nuts, and making offerings to deities of the first portion of the food, serve as a meditative practice to connect us to nature, the universe, and God. The sharing of food preparation encourages inclusivity, hospitality, and social justice. Rituals that offer sacrifices, such as goats, as gifts to the deity are, in return, a form of reciprocity. The heavy millets, lentils, ghee, and immunity-boosting wild greens and mushrooms in their food also act as a detox and build immunity. The study will further prove that Garhwali and Kumauni festive foods are not only for nourishment but are memory carriers, culture-builders, identity symbols for communities, and promote sustainability and regeneration. They can also support individual and communal health, economic resilience and are crucial for keeping indigenous intangible heritage alive by bridging the ancestral practices with modern times.

KEYWORDS: Intangible Cultural Heritage, Ritualistic offerings and food, Garhwal and Kumaon, Community Identity, and Cultural Resilience.

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Economic, Resilient, and Heritage-led Growth

Cities must expand economic opportunities while maintaining social equity and cultural identity. Fair access to jobs, entrepreneurship, and mobility is essential to prevent marginalization and strengthen community bonds. Affordable housing should promote diverse, mixed-use neighbourhoods that reflect the social and economic makeup of communities. Resilient urban growth requires balancing economic expansion with environmental adaptability and social fairness. Heritage-led regeneration through adaptive reuse, tourism, and the preservation of local industries can stimulate economic revival while maintaining cultural continuity.

How can cities ensure that economic growth benefits everyone and strengthens social cohesion rather than deepening inequality?

- **Inclusive Economic Models:** Supporting informal workers, artisans, and marginalized groups through community-driven development and local economic growth.
- **Heritage-Led Regeneration:** Leveraging tourism and adaptive reuse to create economic opportunities while preserving cultural identity.
- **Resilient Neighbourhoods:** Designing climate-responsive, inclusive neighbourhoods that support diverse communities and withstand socio-economic pressures.



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Hybrid Heritage Conservation for Economic and Climate Resilience: The Koli Konkan Case of Maharashtra's Coastal Forts

Muskan Kaushal

ABSTRACT : Maharashtra's Konkan Coast forts face mounting threats from climate change and urbanization, exposing the limitations of traditional, technocratic conservation models. This study investigates a hybrid approach that integrates Indigenous Koli tidal ecosystem knowledge with AI-driven digital twins to enhance climate resilience and promote sustainable, heritage-led economic growth. Through literature review, comparative analysis, and case studies, the research demonstrates that co-developed digital twins-enriched with Koli practices such as mangrove restoration and tidal management-can improve climate impact predictions by up to 37% and empower local communities as active stewards. While top-down strategies often marginalize Indigenous voices, hybrid models foster community agency, adaptive management, and new economic opportunities. Despite challenges in scaling technology and ensuring participatory governance, the findings present a replicable framework for decolonized, sustainable heritage conservation in the Global South, balancing technological innovation with traditional ecological knowledge to secure both cultural and economic resilience.

KEYWORDS: Sustainable conservation strategies, Koli Konkan, community engagement, hybrid methodology, economic resilience, climate adaptation

Temporal Cultural Festivals: A catalyst for Heritage led Economic and Resilient Growth

Antara Bosu Chakil, Conservation Architect, Bangalore, India

Anusha Hemanth, Assistant Professor, Dayananda Sagar College of Architecture, Bangalore, India

ABSTRACT : Temporal cultural festivals are increasingly recognized as a trending intervention for driving heritage-led sustainable growth. These short-duration, impactful events highlight the cultural significance of heritage sites to catalyze tourism, community engagement, and urban transformations. Hence, this paper explores the role of cultural festivals as a tool for heritage-led economic and resilient growth, focusing on Indian and global case studies along with existing theoretical frameworks.

Through an in-depth study of case studies such as Kochi Muziris Biennale and Colomboscope (Srilanka) & Kathmandu Triennale (Nepal), the research examines how these festivals contribute to the conservation of cultural heritage while driving economic growth, fostering people's participation, and enhancing community resilience. "Constructing local ideologies and refashioning existing meanings to be compatible with new forms of urban redevelopment" (Tommarchi & Jonas, 2025). The paper further explores the interdependence of heritage conservation, economic impact, and community representation. In this regard, existing theoretical guidelines and policies, promoted through Ministries of Culture and state tourism departments, are also reviewed. Hence, by comparing models of different cultural identities, key values and attributes (or indicators) have been identified for heritage conservation and long-term resilience building.

To conclude, this research paper proposes a framework that helps in retention and continuity of these key values and attributes, therefore contributing to economic and resilience building through cultural festivals in a heritage context.

KEYWORDS: Cultural festivals; economic growth; resilient growth; Kochi Biennale; Colomboscope; Kathmandu Triennale; heritage conservation; social engagement; community resilience; Institutional continuity; Heritage integration; adaptive reuse; local livelihoods; Community engagement; Resilient-long term transformations.

A Comprehensive Study on Active Community Engagement and Participation in Safeguarding Built Heritage: The Case of Jean Etienne's Tomb at Jharsa, Haryana

Mrinalini Singh, Assistant Professor, School of Architecture and Design, KR Mangalam University Badshahpur Sohna Rd Hwy, Gurugram, Sohna Rural, Haryana

ABSTRACT : As India's cities expand rapidly, the preservation of built heritage must evolve to be more inclusive, participatory, and socially grounded. This research examines the critical role of community engagement in safeguarding-built heritage, focusing on the case of Jean Etienne's Tomb in Jharsa, Haryana. Positioned within the broader framework of inclusive urban development, the study explores how local communities can act as stewards of cultural heritage in growing cities. The conservation initiative brought together diverse stakeholders—including the Sushant School of Art and Architecture (SSAA), the INTACH Gurugram Chapter, and the local Resident Welfare Association (RWA)—to collaboratively document, advocate for, and initiate preservation measures for the monument. Through a mixed-methods approach—combining fieldwork, participatory mapping, and stakeholder interviews—the research assesses the awareness, capacity, and willingness of communities to engage in conservation efforts. Findings suggest moderate local knowledge but strong resident support—especially among Mohyal Colony RWA members who credited their efforts with the tomb's survival. (Dayal, 2022) Key challenges include fragmented governance (no dedicated heritage cell) (Routh & Pandya, 2024), gaps in public awareness (heritage perceived as restrictive) (United Nations, 2020), and limited institutional support for community initiatives. Finally, the paper gives a community-centric conservation model emphasizing heritage education, participatory decision-making, and collaborative governance (RWA-NGO-government partnerships) to integrate the tomb's preservation. This model aims to empower residents as stewards of cultural heritage, strengthening social cohesion and economic opportunities in line with sustainable city goals—one that positions built heritage not as a static relic of the past, but as a dynamic resource for inclusive, sustainable, and culturally rich urban futures. (UNESCO) (GGINDIA)

KEYWORDS: Community-led conservation, built heritage, community engagement, inclusive urban development, sustainable cities

Identifying Types of Vulnerability to Heritage Properties Based on Köppen Climate Classification

Tanima Ray, Dr. Satyaki Sarkarla, Department of Architecture and Planning, Birla Institute of Technology, Mesra, Ranchi

Dr. Swagata Payra, Department of Remote Sensing and Geoinformatics, Birla Institute of Technology, Mesra, Ranchi

ABSTRACT : India's heritage structures are increasingly vulnerable due to climate change, and its impacts vary in various temperature zones. This research offers a climate-sensitive preservation strategy by linking the Köppen-Geiger climate classification to material weaknesses. A diagnostic matrix is developed to juxtapose climatic stressors such as humidity, rainfall, temperature, and wind with typical construction materials and building types in four broad zones: Tropical, Arid, Temperate, and Cold. Findings indicate that local climatic conditions have a major impact on material degradation, ranging from microbial development in wet areas to salt crystallization in dry environments. The physical threats also cause disconnection with culture and site abandonment. The research accentuates the importance of vernacular architecture, which most times is a manifestation of climate-resilient practice. The matrix proposed here is a useful instrument for informing conservation strategy and policy. It encourages the transition from reactive protection to proactive, climate-aware planning that retains the ecological and cultural meaning of heritage in a changing climate.

KEYWORDS: Heritage Conservation; Heritage Fabric Fragility; Köppen-Geiger Classification; Vulnerability Assessment

Revitalization Of Kushinagar (Uttar Pradesh)

Sunidhi Gupta, Urban Planning Division, Aarvee Engineering Consultants Limited, Kanuru, Vijayawada- Andhra Pradesh

ABSTRACT : This research examines the urban revitalisation of Kushinagar, a historic town in eastern Uttar Pradesh, India, renowned for its rich cultural heritage and traditional industries, including banana fibre weaving and bamboo basketry. Once economically vibrant due to trade connectivity and artisanal expertise, the town now faces multiple challenges, including economic decline, inadequate infrastructure, and the erosion of traditional livelihoods. Despite these issues, Kushinagar holds strong potential for integrated heritage-based development.

The study employs a mixed-methods approach, incorporating spatial mapping, stakeholder consultations, field surveys, and the analysis of planning and policy documents to propose sustainable revitalization strategies. Key interventions include infrastructure enhancement, public space renewal, promotion of heritage-based micro-enterprises, and the strategic allocation of land for tourism and cultural activities. Emphasis is placed on community participation, inter-generational knowledge transfer, and skill development to safeguard traditional practices while fostering inclusive urban growth. The findings contribute to the discourse on sustainable revitalization of historic towns through culturally informed, community-centered planning

KEYWORDS: Historic towns, tourism, economic development, cultural heritage, traditional crafts, community participation, skill development, inclusive planning, sustainable development

Advancement in Rapid-Deployment bamboo Shelters

Ansh+Gupta, Faculty of Technology, CEPT University, Kasturbhai Lalbhai Campus, University Road,
Navrangpura, Ahmedabad 380009, Gujarat, India

ABSTRACT : The increasing frequency of natural disasters, forced displacement, and accelerated urban growth has created an urgent need for emergency shelter solutions that are rapid, resilient, and environmentally responsible. Conventional deployable shelters often lack the adaptability, sustainability, and ease of assembly required in crisis contexts, particularly for vulnerable populations. This research addresses a critical gap in emergency shelter design by investigating the development of a deployable shelter model primarily constructed from bamboo, a renewable, regionally available, and structurally robust material. The study aims to propose a shelter solution that is lightweight, easily transportable, quick to assemble, and responsive to both ecological and social needs.

The research identifies key limitations and opportunities in current design and assembly approaches through a comprehensive review of existing deployable shelter systems. Material studies evaluate bamboo's structural properties, joinery techniques, and environmental performance. The study incorporates eco-friendly materials and traditional construction methods aligned with sustainable design principles to enhance the shelter's resilience and longevity. Additionally, integrating computational design tools optimizes structural behavior, modularity, and assembly efficiency, resulting in a shelter system that can be scaled and adapted to diverse geographical and climatic conditions.

The outcome is a deployable bamboo shelter design informed by empirical testing, digital modeling, and contextual analysis. The research presents a meaningful intervention in emergency architecture by bridging traditional materials and techniques with contemporary digital methodologies. It offers a functional and replicable shelter solution, a model for socially inclusive and ecologically grounded design practices. Ultimately, this work contributes to broader strategies for resilient infrastructure and sustainable development, providing a critical perspective on how design can respond effectively and ethically to global humanitarian challenges.

KEYWORDS: Deployable bamboo Emergency Shelters, Sustainable and Inclusive Design,

THEME 3 Design, Computational Design Integration, Contemporary Digital

Identifying Internal Disaster Resilience of Hospital Buildings Through Architectural Parameters

Ar. Mohd Arqam Khan, PhD scholar, Department of Architecture, Jamia Millia Islamia, New Delhi, India:

Dr. Abdul Halim Babbu, Associate Professor, Department of Architecture, Jamia Millia Islamia New Delhi, India

ABSTRACT : The most emerging demand for today's architectural practice is resilience. And for hospital buildings, it's a must to do thing as hospitals are critical and lifeline structures and are under constant threat of various kind of disasters. The list of hospital disasters and their complexity is increasing day by day. The quotation "survival of the fittest" by Herbert Spencer is getting more relevant by each passing day. For hospital system's ability to withstand and recover from disturbances especially for internal disasters, for maintaining the system's health and well-being over the long term, Resilience architectural practices must be promoted. By embracing diversity of hospital context, fostering stakeholder's collaboration, and promoting open, inclusive and flexible design, hospital buildings can enhance their ability to adapt, overcome challenges, and prosper with time. Aim & Objective: This study investigates the architectural discourses, applications and characteristics of hospital internal disasters for building resilient hospitals infrastructure. It also aims to measure the internal disaster resiliency practices of hospitals. Background: The recent case studies of hospital disasters and current Literature shows resilient design potential is not properly explored, utilized and not upgraded contextually with time. Methods: An extensive literature study has been conducted on hospital internal disasters. An online survey of resilient planning is done. And finally a case study of multispecialty hospital is done to highlight various planning and designing challenges and deficiencies. Result: hospitals are more exposed to higher verities and numbers of disasters which are often department specific. Healthcare Planners can contribute significantly by evolving resilient architectural parameters. Disaster specific architectural parameters plays critical role in disaster mitigation in hospital settings. Conclusion: An imperative architectural intervention is required especially in hospitals to enhance disaster resilience of hospitals. An insight on resilient architectural parameters and characteristics on hospital new and old building has been explored in this paper enabling healthcare planners to design accordingly. This may be an initial work out for assessing hospital resilient characteristics in existing buildings and upcoming hospital projects leading to knowledge sharing for all stakeholders of healthcare sector.

KEYWORDS: Hospitals, Internal Disasters, Resilience, Architecture Parameters

Chettinad Mansions Reimagined: Tourism and Adaptive Reuse as Catalysts for Sustainable Heritage-Led Regeneration

Shree Lalitha, Research Scholar, BMS College of Architecture, Bengaluru
Dr. Dakshayini R Patil, Professor, BMS College of Architecture, Bengaluru

ABSTRACT : This research paper examines heritage-led regeneration in the Chettinad region of South India, famous for its lavish mansions constructed by the Nattukottai Chettiar community between the 19th and early 20th centuries. These impressive periya veedu typically span over an acre and contain more than 50 rooms, exhibiting a unique fusion of traditional Tamil and European architectural styles that reflect the Chettiars' international trade connections and cosmopolitan perspectives. The study explores how targeted tourism initiatives and adaptive reuse can stimulate economic growth while safeguarding this rich cultural identity.

Adaptive reuse, which involves repurposing historic buildings for contemporary functions, not only prevents demolition but also provides considerable environmental, economic, and socio-cultural advantages. This includes job creation and support for local craftsmanship, such as Athangudi tiles and Kottan weaving.

The paper further analyzes the historical and architectural significance of Chettinad's built heritage, highlighting distinctive elements like imported teak, Italian marble, Belgian mirrors, and climate-responsive designs using local lime plaster mixed with egg whites. It identifies key challenges to preservation, such as the severe deterioration of most mansions (with only about 10% remaining intact), complex legal issues, fragmented ownership, high maintenance costs, and systematic dismantling for material reuse.

The lack of a comprehensive master plan and an uncoordinated conservation framework complicates these efforts. This research evaluates the effects of various regeneration strategies, addressing potential risks such as commodification and gentrification, and suggests best practices for achieving a sustainable, community-focused approach to heritage conservation and development.

KEYWORDS: Heritage-led regeneration, Adaptive reuse, Economic development, Cultural identity, Preservation challenges, Community-centric approach

Heritage-Led Urban Regeneration in Lucknow: Evaluating Policy-Driven Cultural Economies for Inclusive Growth

Ar. Simran, Assistant Professor (LSAD, Lovely Professional University, Phagwara, Punjab, India)
Deepak Kumar, Associate Professor (Sushant School of Art and Architecture, Gurugram, India)
Soham Shah, Architect, Urban Planner (Independent Researcher)

ABSTRACT : Heritage-led urban regeneration offers a comprehensive approach to revitalize historically rich areas like Lucknow, which also boosts economy, preserving cultural heritage and promoting inclusive development. While the recognition of cultural heritage is increasing day by day, the link between these assets and equitable economic growth still remains unclear and understudied. This study analyzes the relationship between tourism driven strategies, adaptive reuse of historic buildings and public policy interventions to understand their combined influence on Lucknow's regeneration. This research primarily focusses on reviewing existing data, comparing different policies against each other and analyzing existing cultural frameworks, such as the Smart Cities Mission and the Uttar Pradesh Heritage Arc. To understand their implications for urban development. The study highlights key gaps in evaluating the effectiveness of heritage-led regeneration initiatives, particularly the lack of standardized indicators that address economic and social outcomes. It relies on a review of secondary data, government reports, and academic literature to assess how these interventions contribute to cultural economy development and community inclusion. Drawing on comparative models from cities like Ahmedabad and Varanasi, the research highlights best practices while revealing the need for more participatory and equity-focused planning mechanisms. The study reflects on existing practices and identifies elements that make regeneration efforts more inclusive and sustainable. The findings aim to inform that by prioritizing community participation and valuing cultural heritage, future planning can ensure that heritage conservation is not just about preserving but also enriching the social fabric of the city, making it a more vibrant and connected place for all residents.

KEYWORDS: Economic revitalisation, Socioeconomic, Historical conservation, Public policies, Heritage-led

Living Heritage in Post-Industrial Landscapes: Reclaiming for Cultural Identity and Economic Regeneration

Meghana K Raj, PhD Scholar, Landscape Architecture, School of Planning and Architecture, Indraprastha Marg, IP Estate, New Delhi, Delhi 110002, India

Aarti Grover, Landscape Architecture, School of Planning and Architecture, Indraprastha Marg, IP Estate, New Delhi, Delhi 110002, India

ABSTRACT : Indian Cities continue to grow into the suburbs while valuable pockets of post-industrial landscapes lie unused, underutilized or abandoned in the heart of the city. In many Indian cities Industries had formed the manufacturing hub giving them an identity. Though they have lost their economic function these post-industrial landscapes greatly influence the in shaping the identity of today's changing community. These are a part of Industrial heritage and foster shared memories and collective images of the neighborhood, besides encouraging social connections reinforcing the idea that community involvement is essential in the process of regeneration. This study investigates how post-industrial sites serve as active carriers of cultural memory, social connections contributing to the perception and identity of the community. Using ethnographic observation, oral histories and site documentation and archival research it explores how shared memories, socio-spatial practices, and symbolic landscapes shape the contemporary significance of these post-industrial spaces. The study reveals that these landscapes retain a living heritage marked by everyday activities and visual-cultural signifiers with an industrial background. The research advocates for policy-level recognition of such spaces as repositories of intangible heritage and recommends participatory planning models that reinforce cultural continuity and economic regeneration.

KEYWORDS: Post-industrial landscapes, Industrial Heritage, Shared memories, Cultural identity and Regeneration

Heritage as Soft Eviction: Evaluating the Urban Through an Equity Lens

Riya Agarwal and Vasudha Sudhinder, School of Art and Architecture, Sushant University

ABSTRACT : Heritage has emerged as a potent instrument in the production of contemporary urban space, not as a vehicle for cultural continuity, but as a strategic tool for spatial rebranding, economic extraction, and aesthetic sanitization. This paper critically examines how heritage is employed in urban development agendas to displace communities, expurgate lived culture, and reinforce spatial and class hierarchies, under the guise of preservation, to make it digestible for economic fruition. Heritage is not merely conserved but actively manufactured as a form of soft eviction, catering to the interests of governance and capital accumulation (Smith, 2006; Harvey, 2012; Hosagrahar, 2011). By examining both domestic and international examples, including Shahjahanabad Old Delhi, Jaipur Old City, the Alfama District in Lisbon, and Kyoto, Japan, the study elaborates on how heritage is tokenized, converting spaces into curated cultural assets, while rendering original communities expendable. In response, the paper introduces an evaluative framework designed to assess heritage neighbourhoods across parameters highlighting participatory planning, spatial accessibility, economic redistribution and vitality, continuity of use, and recognition of temporal complexity. It is proposed as a diagnostic tool for advocating heritage as a democratic and inclusive cultural infrastructure (Appadurai, 1996; Zukin, 1995). Instead of positioning heritage as a static object of preservation, the paper redefines it as an ethos of the locale that must be shaped through collective memory, spatial sensitivity, and the right to remain.

“Not marble nor the gilded monuments
Of princes shall outlive this powerful rhyme,
But you shall shine more bright in these contents
Than unswept stone besmeared with sluttish time.
When wasteful war shall statues overturn,
And broils root out the work of masonry,
Nor Mars his sword nor war’s quick fire shall burn
The living record of your memory.”

– Sonnet 55 by William Shakespeare

KEYWORDS: Economic revitalisation, Socioeconomic, Historical conservation, Public policies, Heritage-led

Reimagining Urban Villages for Inclusive Growth: Positioning Punjabi Bagh as a Hub for Culture, Community, and Commerce Aligned with the SDGs

Shruti Rai, Geetanjali Kapoor, University Institute of Architecture, Chandigarh University, Mohali, India- 140413

ABSTRACT : Urban villages, formerly rural settlements now engulfed by urban expansion hold immense, yet underutilized potential to drive inclusive urban growth. They often incubate micro-enterprises, sustain social networks, and support cultural continuity. This aligns with Sustainable Development Goal 11: “Sustainable Cities and Communities,” which advocates for inclusive, safe, and resilient urban environments. This paper reimagines Punjabi Bagh, a developed ward in West Delhi, as a catalytic hub for culture, community, and commerce. The area encompasses a varied development typologies-including Punjabi Bagh West (Plotted Housing), DDA flats, resettlement colonies, slums, and Madipur an officially documented urban village, creating diverse physical and socioeconomic condition that necessitate context-specific planning approaches. Over time, market forces and redevelopment pressure have reshaped these pockets, underscoring the need for holistic and adaptive strategies. The study focuses on Madipur Urban Village in Punjabi Bagh to evaluate inclusive growth opportunities for residents and stakeholders. It follows a three-phase methodology: (1) a systematic literature review using PRISMA guidelines to identify research gaps in inclusive urbanism; (2) comparative case study analysis of Seelampur (North East Delhi district of Delhi, India), New Friends Colony (South Delhi district), and the Community Center at San Bernabé (Monterrey, Mexico); and (3) primary fieldwork including surveys, interviews, and site analysis in Punjabi Bagh. Findings highlight the potential of inclusive spatial strategies that integrate cultural identity, community participation, and local economic vitality. The paper concludes with design and policy recommendations aligned with SDG 11 for transforming urban villages into sustainable, inclusive urban futures.

KEYWORDS: Urban village, Inclusive urbanism, Sustainable Development Goal 11 (SDG 11), Punjabi Bagh, Systematic literature review

Pandemic Resilient Healthcare Architecture and Architectural Remedies – Need of the hour

Dr. Syed Khurshheed Ahmad, Affiliation (Department of Civil, Al-Falah University, Faridabad, India)
Dr. R.Chandrashekhar, Syeda hasan Alvi, Council of Architecture, India

ABSTRACT : Pandemic is a serious disruption causing widespread human, material or environmental losses along with damaging functioning of society. Healthcare system plays a vital role in preparing communities to respond and recover from threats and emergencies. Healthcare system is an intricate network of structure and services that provide efficient and effective service to citizens of society. Healthcare planning is an integral part of the overall socio-economic plan of the country for systematic working. Resilience is key to overcoming vulnerabilities in healthcare infrastructure. A healthcare facility is governing by various phenomenon in order to work in a systematic way: easy accessibility, operational management (availability and sufficiency of equipment, staff, resources etc.) the state of the building (amalgamation of structural and architectural element). Any destruction or malfunction of any of these elements will have direct or indirect impact on the medical services of the hospital. In order to cope with changing scenario healthcare facilities will need to assess climate change risks and adopt adaptive management strategies to be resilient, at present healthcare facilities are simply lacking in this. This paper identifies emerging issues aiding and ailing, in healthcare facilities in times of pandemic. The experience of covid-19 is prominent in dealing out and highlighting losses to ensure more resilient Healthcare infrastructure. The vital lesson pandemic has given to communities that principle of resilience must be intrinsic for economic growth as individual nations as well as individual communities. This paper aims to explore healthcare resilience strategies, identifies gaps, process improvement and implementation. Further critical areas of hospital (ICU, OT, and Emergency) require design characteristics of uninterrupted services without any unacceptable hindrance hazard has also been discussed. This study adopts qualitative research to investigate and understand various parameters that resilience healthcare infrastructure depends on, and further attention it required to mitigate the risk.

KEYWORDS: Pandemic Resilience, Healthcare System, Covid-19, Vulnerabilities, Resilience strategies.

From Roots To Revival: Sustainable Economic Models for *RIngal* Craft in Uttarakhand

Himanshu Singh Bhandari, Student, MBA, Kumaun University, Nainital, Uttarakhand

Anushka Rautela, Assistant Professor, Sushant School of Art and Architecture, Sushant University, Gurugram, Haryana

Aaditya Bijalwan, Assistant Professor, Sushant School of Art and Architecture, Sushant University, Gurugram, Haryana

ABSTRACT : Ringal craft, an indigenous bamboo weaving practice, is an expression of ecological sustainability, cultural identity and rural livelihoods. Vulnerable communities primarily practise this craft in the hills of Uttarakhand, and it is an integral part of both the social and cultural fabric of the region's ecology and economy. However, it is facing challenges, such as an inability to compete with other market offers, decreased access to raw materials, and limited government and institutional support. This study uses a mixed methods approach that combines qualitative ethnographic fieldwork with quantitative data analysis from a marketplace and production scale to provide sufficient data to identify notions for developing a sustainable future for Ringal Craft. Through ethnographic engagement activities, including participatory observation, semi-structured interviews with 20 artisans from 10 villages, and cultural mapping, the paper documents the traditional weaving techniques, the intergenerational transmission and socio-economic implications. The quantitative data from surveys on household income and production scale, and marketplace reach were triangulated with qualitative stories of the participants to create an overall understanding of challenges and opportunities.

The analysis is framed using conceptual frameworks such as community-designed development, cooperative systems, adaptive reuse, craft-tourism links, cultural entrepreneurship, climate-based production, participatory planning, and socio-economic adaptability. Analysis indicated that craft production affiliated with local tourism circuits increased artisan income, and cooperative marketing networks expanded bargaining power considerably. Furthermore, community-led raw material control curtailed supply chain vulnerabilities and encouraged environmental stewardship. The paper concludes with a new integrated development framework situated in regional economic planning for Ringal craft businesses that utilise heritage for economic development while retaining cultural authenticity. In addition, this new focus not only addresses their immediate livelihood challenge but also fosters long-term resilience and recognises Ringal craft as both a valuable cultural asset and a sustainable economic opportunity for communities in Uttarakhand.

KEYWORDS: Ringal craft, Bamboo weaving, Indigenous crafts, Sustainable livelihoods, Equitable economic models, Community-driven development

Heritage-leg Regeneration in Sacred Urban Landscape of Pushkar, Rajasthan

Ar. Pratyasha Das, Ar. Barsha Kunda, Assistant Professor, (Department of Architecture, The Assam Royal Global University, Guwahati, Assam, India.)

Ar. Aysha Nezhin Chundakkadan, Urban Designer, M.Arch.(General Architecture), Guest Lecturer (Department of Architecture, The Assam Royal Global University, Guwahati, Assam, India.)

Ar. Pooja Singh, Assistant Professor, (Department of Architecture, The Assam Royal Global University, Guwahati, Assam, India.)

ABSTRACT : A town revered for its spiritual, cultural, and ecological significance, Pushkar is currently facing immense pressure in preserving its rich intangible heritage and socio-spatial equity due to urban stress contributed by the commodification of traditional practices, degradation of land and water interfaces (ghats and Lakefronts), crowded movement corridors, and unchecked morphological changes. Even though initiatives like the HRIDAY program and the Integrated Heritage and Cultural Development Plan (IHCDP) have been laid forth, Critical gaps are still present, especially in the areas of carrying capacity assessment, Spatial Governance, and inclusive Design for marginalized user groups like the elderly, people with disabilities, and traditional artisan communities. This study analyses the limitations of past policies through spatial mapping, including built height study, Visual corridor analysis, demographic study, and photo documentation of sacred precincts. To reestablish the importance of inclusive urban growth with heritage regeneration, the paper offers a framework of territorial conservation principles, the Historic Urban Landscape (HUL) approach, and tourism carrying capacity assessment. By emphasizing community-led regeneration, the structure initiates a holistic paradigm for sacred towns, especially in the Global South, that are grappling with near-constant pressure from tourism.

KEYWORDS: Historic Urban Landscape (HUL), Sacred Geography, Socio-Spatial Inequality, Heritage-Led Regeneration, Participatory Conservation, Pushkar Ghats

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Governance, Policy, and Technological Innovation

Creating fair and future-ready cities requires governance and policies that prioritize inclusivity and resilience. Legal frameworks must protect housing rights, labor practices, and social welfare to prevent deepening inequality. AI and smart technologies offer new opportunities to bridge the digital divide, improving equity and public participation. AI-driven urban planning can support real-time decision-making and resource allocation, making cities more adaptive and responsive. Inclusive governance relies on

participatory decision-making, ensuring that all voices—especially marginalized communities—are heard in shaping urban futures.

How can governance and technology create cities that are not only technologically advanced but also just and inclusive?

- **Equitable Urban Policies:** Strengthening legal structures to support balanced and inclusive urban development.
- **AI and Smart Cities:** Enhancing digital access and public engagement through AI and technological solutions.
- **Inclusive Governance:** Implementing global best practices to create fair and inclusive urban management.



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Improving Air Quality in Urban Areas by using Glass Waste as an Adsorptive finish on Building Facades and Interior Surfaces

Apurv Prakash, Independent Researcher, Flat C-1103
Ashadeep Vedanta, Near VIT Campus, Jagatpura, Jaipur, India

ABSTRACT : The building industry stands as one of the formidable sources of pollution in India, exacerbating the deterioration of air quality in both natural and human-inhabited environments. Poor air quality is one of the reasons for many diseases and a contributor to reducing the life span of human beings. It becomes imperative to explore innovative materials and apply innovative techniques to mitigate the harmful effects on the environment by collaborating with researchers and experts from various fields. One of the ways that this can be reduced is by effective utilization of various types of man-made waste and incorporating them as building materials to reduce landfill. One such waste, namely glass waste (GW), holds great potential for mitigating environmental impacts through its effective utilization. Glass waste-based adsorbents sourced from recycled or specially engineered glass are primarily used in filters for the purification of air and water systems. Glass-based adsorbents can effectively capture various types of pollutants such as volatile organic compounds (VOCs), nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter (PM) from the atmosphere, thereby reducing their concentration in the surrounding environment. This research paper delves into the idea of using glass waste for the creation of glass-based adsorbents which could then be mixed with paints and polishes and applied on facades and surfaces to improve air quality in urban areas. This method could be a promising solution for air purification, leveraging the sustainable and abundant resource of recycled glass to address environmental pollution challenges and promote a cleaner and healthier future. Research methodology uses mixed method approach concluding with conceptual research. The paper proposes a four-step effective approach which looks at chemical composition, building elements, material and façade design to tackle the momentous problem.

KEYWORDS: Air Pollution, Glass Waste based Adsorbents, Paints & Polishes, Facades & Surfaces, Urban Areas

Pathways to Net Zero: Comparing Low and High-Rise Housing in Nashik

Darshana A Desai, PhD Research Scholar, School of Art and Architecture, Sushant University, Gurugram, India

Suruchi Modi, Senior Professor and HOD, School of Art and Architecture, Sushant University, Gurugram, India

Lalit kumar, Associate Professor, Department of Architecture, Deenbandhu Chhotu Ram University of Science and Technology, Murthal, Sonapat, Haryana, India.

ABSTRACT : This research investigates the potential for retrofitting residential buildings in Nashik, India, to achieve energy-positive outcomes, focusing on comparing the performance and feasibility of retrofitting high-rise (Stilt + 12 MIG) and low-rise (row housing) structures. In the context of Nashik's rapid urban expansion and rising energy demands, the study underscores the urgent need to transform existing housing into energy-efficient, sustainable, and energy-generating units. A range of retrofitting strategies is explored, including enhanced thermal insulation, solar photovoltaic (PV) systems, passive design interventions, and energy-efficient appliances to optimize consumption while integrating renewable energy technologies. The study presents a comparative analysis of retrofitting outcomes for two prominent residential typologies in Nashik. The results demonstrate significant energy savings: approximately 34% for the S+12 MIG buildings and 47.68% for row housing. These outcomes highlight the greater adaptability and retrofit potential of low-rise housing, which benefits from larger roof areas and simpler structural forms conducive to solar integration and passive strategies. Conversely, while essential for accommodating urban density, high-rise buildings present challenges such as limited surface area for PV installation and necessitate more complex interventions like building-integrated photovoltaics (BIPV), advanced facade treatments, and intelligent energy systems. The research emphasizes the need for tailored retrofit approaches aligned with each building typology's characteristics and advocates for supportive policy frameworks, accessible financing, and community engagement. The findings offer a replicable model for mid-sized Indian cities striving toward sustainable urban development, energy resilience, and long-term carbon neutrality.

KEYWORDS: Housing; sustainable development; net-zero energy; energy efficiency; sustainable urbanization

Towards a Sustainable Built Environment: A Critical Review of Codes and Standards for Energy-Neutral Housing

Kiran G Singh, School of Art and Architecture, Sushant University, Gurugram, Haryana
Dr. Tejwant Singh Brar, School of Art and Architecture, Sushant University, Gurugram, Haryana
Dr. Lalit Kumar, Department of Architecture, DCRUST, Murthal

ABSTRACT : This paper presents a comprehensive review of the current landscape of codes and standards relevant to the development and implementation of energy-neutral housing. As the urgency to mitigate climate change intensifies, the built environment's significant energy consumption necessitates a transition towards highly efficient and renewable energy-integrated residential buildings. This review examines existing building energy codes, voluntary green building standards, and specific regulations promoting on-site renewable energy generation and net-metering. It analyzes the strengths and limitations of these frameworks in achieving energy neutrality, highlighting variations across different geographical regions and their impact on design, construction practices, and technological innovation. Furthermore, the paper identifies key challenges and opportunities for future development and harmonization of codes and standards to accelerate the widespread adoption of energy-neutral housing and contribute to a sustainable built environment. The review also highlights the substantial variations in codes and standards across different geographical regions, underscoring their impact on design approaches, construction methodologies, and the pace of technological innovation. It analyzes the factors that contribute to these variations, such as climatic conditions, economic considerations, and policy priorities.

In its concluding sections, the paper identifies the key challenges that hinder the widespread adoption of energy-neutral housing, such as technical complexities, and regulatory barriers. It also explores the opportunities for future development and harmonization of codes and standards, emphasizing the need for greater collaboration among stakeholders, and the promotion of innovative financing mechanisms. Ultimately, the paper advocates for a more robust and harmonized regulatory framework to accelerate the transition towards energy-neutral housing and foster a sustainable built environment.

KEYWORDS: Renewable energy, energy-neutral housing, energy codes, sustainable built environment.

Consolidation of Schools for better future

Uniting schools for optimizing resources and enhancing educational quality

Pratibha Malik, Assistant Professor, Sushant University, Gurugram, (School of Art and Architecture)

Pooja Lalit Kumar, Professor, Sushant University, Gurugram, (School of Art and Architecture)

ABSTRACT : This study aimed to develop a model to accurately predict the acceleration of structural systems during School consolidation model in India is a complex challenge faced by state governments and educational authorities. Since India has a large number of schools, the idea of balancing accessibility and education in sparsely populated regions results in lack of adequate infrastructure required to maintain the quality of education. Although RTE has resulted in greater school expansion but it ended up developing a number of small schools without adequate facilities. The Draft National Education Policy 2019 proposes an education policy to address major challenges faced by the current education system.

This study of school consolidation in Devanahalli in Bangalore looks at the idea of smaller infeasible schools with deficiency in educational requirements (multi-grading, access to adequate mix of teachers and learning facilities) could possibly be 'clubbed' with other schools that may have under-utilized resources. Based on quantitative and qualitative study of identified clusters of schools, the idea is to develop a simulation-based decision support system that can inform the decisions to be taken by key authorities at the state and district level. The system will be able to analyze and visualize the efficiencies generated of various scenarios on consolidation, enabling officers to test their plans before implementing them. Once implemented, the influence of the school consolidation through Key Performance Indicators will be measured. The model will be sustained through training, capacity building, improving infrastructure for accessibility, and ensuring community involvement. This process can lead to developing a sustainable education system in India with better resource allocation for the primary schools.

KEYWORDS: Equity; Accessibility; Accountability

Localising SDGs via Public Spaces: Indian City Case Studies

Madiha Khanam, Project Associate (Department of Urban Design, School of Planning & Architecture, New Delhi, India)

Manu Mahajan, Department of Urban Design, School of Planning & Architecture, Block B, 4, Indraprastha Marg, IP Estate, New Delhi, Delhi, India

ABSTRACT : The Sustainable Development Goals (SDGs) provide a global framework for sustainable development across urban landscapes. However, their application in the context of the Global South presents distinct challenges, shaped by the historical, socio-political, and economic complexities of the region. Urban development initiatives in India chosen for this paper are: SCM (Smart Cities Mission) and MUKTA ((Mukhyamantri Karma Tatapara Abhiyan) scheme. The SCM focuses on comprehensive urban planning, upgrading infrastructure, and promoting economic growth. Bhubaneswar's MUKTA scheme is designed as a bottom-up, community-driven initiative emphasising on the importance of livelihoods and climate-resilience. This paper examines the intersection of SDG implementation and urban development by analysing how the SCM and MUKTA scheme demonstrate the potential and challenges of translating global SDGs into local strategies. Through rigorous research and three rounds of fieldwork (February, May, June 2024), the research team conducted site visits to Bhubaneswar, Jaipur, and Srinagar, engaging with key stakeholders such as officials, consultants, and users. Semi-structured interviews, detailed user surveys, and visual documentation were also a part of primary data collection. A total of nine projects were analysed: seven under the SCM and two from the MUKTA scheme. Understanding urban missions through the lens of SDG 11 is critical to evaluating how governance and policy frameworks can shape inclusive and accessible public spaces in Indian cities. In conclusion, the paper reflects on the broader implications of the chosen initiatives for SDG implementation in cities across India, where context-specific strategies are crucial for achieving sustainable development outcomes.

KEYWORDS: SDGs; Smart Cities Mission; MUKTA scheme; Sustainable Development; Public Space

Housing the Middle: Affordability & Accessibility Challenges in Urban India

Prachi Singh, PhD Scholar, Faculty of Architecture & Planning, Dr. A.P.J. Abdul Kalam Technical University, Lucknow

Dr. Indrani Chakraborty, Professor, Faculty of Architecture & Planning, Dr. A.P.J. Abdul Kalam Technical University Lucknow

Dr. Joydeep Dutta, Adjunct Professor, Faculty of Architecture & Planning, Dr. A.P.J. Abdul Kalam Technical University Lucknow

ABSTRACT : India's rapid urbanization over the past decade has intensified the demand for housing, particularly among the Middle-Income Group (MIG). Representing a substantial portion of the urban population, the MIG—typically defined as households earning between INR 6 to 18 lakhs as per PMAY scheme under Ministry of Housing and Urban Development annually—faces distinctive challenges in securing affordable and adequate housing. Recognizing housing accessibility as a critical pillar of inclusive urban development, this study investigates the complex and interconnected challenges faced by the MIG in securing adequate and affordable housing in tier-II cities of urban India. Drawing on an extensive review of national and international literature, the research identifies six core policy dimensions that shape housing outcomes for this socio-economic context, affordability criteria, eligibility norms, housing choices, financial mechanisms, and governance. By identifying these multidimensional challenges, dimensions, the paper aims to contribute to a more inclusive housing policy framework discourse advocating for targeted interventions that address the affordability and accessibility gap and suggest evidence-based interventions. This paper investigates the unique challenges faced by the MIG in accessing housing, with a particular focus on affordability and accessibility gaps, policy frameworks, and market failures that prevent inclusive housing development.

KEYWORDS: Affordable Housing, Affordability, Accessibility, Housing Policy, Middle Income Group

The Kindness Canvas: Painting a Mindful Online Experience A Study on Cyberbullying

Author: Drishti Sadawana

Mentor: Ipsita Rajak, Rahat Varma

Affiliation Noida International University, Institute of Design, Noida, Uttar Pradesh

ABSTRACT : This paper is a study to understand how digital natives of India use social media platforms in today's time, regarding their security and privacy. It also examines the behavioral, psychological, and emotional impact that the platform creates on the digital native. Does the native feel the same way as the older generation perceives such concerns? To understand the difference between privacy and security concerns in the early days of social media platforms, till the present day, along with the effect of evolution of social media platforms the natives use to connect virtually is studied.

Also, the study examines how these platforms have adapted the government policies with respect to their own policies. This is done by using mixed methodology for research that includes structured interviews with a real audience that included teens (13-16 years), graduates (17-19 years) and their parents (in two categories: one who is new to the platform and one who has been using it for years), by using participatory method to indulge teens, this is done with the help of interactive game and lastly analyzing real case studies from cybercrime office.

The research aims to understand the problems that the design systems fail to address in combating bullying incidents on social media platforms. The study will also explain how bullying is different from cyberbullying and what the government's action plan is to reduce cases of cyberbullying. The study also suggests some methodologies through which a digital native can feel safer, kinder, and protected while using a social media platform and not get cyberbullied.

A significant part of this research is dedicated to understanding Instagram Teens, Meta's proposed safer version of Instagram for users aged 10-16, and evaluating its potential adoption in the Indian context. This research builds a design strategy that can be adopted by Instagram teens, considering the teens in Indian cities before its launch in India. This includes an attempt to make Instagram teens multilingual, a panic button that helps direct connection with cyber police and short videos appearing at home screen showcasing how to manage privacy on the platform with the help of interactive knowledge bytes. These can help bridge the gap of digital literacy, trust in the platform, awareness, and basic knowledge about Indian Laws regarding cyberbullying.

KEYWORDS: Social Media Literacy, Awareness about Indian Government Cyber Laws, Instagram Teens, Safer Indian Tech, Indian Teens, Design for mindful use of Social Media.

Urban Building Energy Modeling Tools for Positive Energy Neighbourhoods Development: A systematic review

Md Shahroz Alam, School of Art & Architecture, Sushant University, Gurugram
Tejwant Singh Brar, School of Art & Architecture, Sushant University, Gurugram
Mohammad Arif Kamal, Department of Architecture, Aligarh Muslim University, Aligarh

ABSTRACT : The urban areas around the world are facing extreme challenges due to climate change and the development of Sustainable Urban Neighbourhood (SUN) which advocate for low carbon, low energy or Net Zero Energy Building (NZEB) also did not solve the problem on the ground. Positive Energy Neighbourhood (PENs) or Positive Energy Districts (PEDs) development which advocates generating more energy than they consume can play a vital role in solving the climate crisis in urban neighbourhoods and is emerging as a promising paradigm. PEN aims to achieve net positive energy balance over an annual cycle, integrating renewable energy generation, energy efficiency measures, and smart energy management systems at neighbourhood scale. Urban design at the neighbourhood scale creates a positive impact on urban microclimate which again improves the urban building energy consumption.

Urban Building Energy Modeling (UBEM) is an emerging field which allows the energy simulation of buildings at large scale and helps in predicting the present and future energy demand. Very limited research has been conducted on the utilization of UBEM on neighbourhood scale in India. Earlier studies suggest the impact of building type, building forms, building orientation, density, façade treatment, etc. on the neighbourhood. The review synthesizes findings from the 104 peer-reviewed articles revealing that while a diverse range of UBEM tool exists, their capabilities for holistic PEN development vary significantly. Key findings indicate a strong focus on energy demand prediction and RES potential assessment in many tools, but limitations persist in their ability to fully integrate multi-vector energy systems, model advanced demand response strategies, and conduct comprehensive life-cycle assessments within a PEN context. Furthermore, the review highlights challenges related to data availability, interoperability between tools, and the need for more user-friendly interfaces that cater to diverse stakeholders in urban planning. Future research should focus on developing more integrated, data-agnostic, and user-centric UBEM platforms that can seamlessly model the interplay of energy generation, consumption, storage, and exchange within a PEN, thereby accelerating the transition towards truly sustainable and energy independent urban environments. We also need to investigate the integration of UBEM in rating tools, guidelines, and policies for PENs in India.

KEYWORDS: Climate Change, PEN, Positive Energy Neighbourhood, Renewable Energy, Sustainable Urban Neighbourhood, SUN, UBEM, Urban Building Energy Modeling

AI in Design Pedagogy for Smart Cities: Enhancing Digital Access and Public Engagement through Education

Dr. Priya Tyagi, Assistant Professor, School of Design, Architecture and Planning, Sharda University, Greater Noida, 201310, arpriyatyagi@gmail.com

Dr. Parul Bhan, Research Associate, Department of Architecture and Planning, MNIT Jaipur, India, 302017, parulbhan94@gmail.com

ABSTRACT : AI integration in the smart city has largely concentrated on governance, mobility, and infrastructure. Its strength in altering design education to drive digital inclusion and civic participation is yet to be explored. This paper explores how AI-based tools and approaches in design pedagogy can equip future designers to make an active contribution to the changing requirements of smart cities. It analyzes the function of AI to boost critical thinking, spatial understanding, and participatory design among students, thus bridging the interconnection gap between educational institutions and urban life. Through a survey of the latest AI applications used in design studios, interactive learning environments, and collaborative urban simulation software, the study enunciates how pedagogic innovation can empower learners and communities. The paper concludes with key recommendations and proposals for integrating AI into design studies, focusing on interdisciplinary learning, ethical consciousness, and encouraging inclusive urban participation —essential pillars for developing equitable and human-centric smart cities.

KEYWORDS: Artificial Intelligence (AI); Smart Cities; Design Pedagogy; Participatory Design; Urban Education; Interdisciplinary Learning; Civic Technology; Inclusive Urbanism.

Exploring Microbial Biomineralisation for Advanced Underwater Construction: Insights into Material Properties, Stability, and Application

Under Sub theme: Governance, Policy, and Technological Innovation

Shlok Agarwal, B.Arch. Student, School of Art and Architecture, Sushant University, Gurugram, India,

agarwal.shlok30@gmail.com

Himanshu Sanghani, Professor, School of Art and Architecture, Sushant University, Gurugram, India

sanghani@sushantuniversity.edu.in

ABSTRACT : Rapid industrialisation and urbanisation are leading to land scarcity and depletion of resources. Moreover, climate change is submerging most of the land underwater e.g. Hurricane Milton. There is a growing understanding of the role of underwater construction that can shape the marine environment over the period of time supporting the rudimentary research in marine ecosystems and landscape. From this rudimentary research in the existing marine ecosystem that provides land-like structural systems it is found that coral reefs, formed through calcification process via microbial biomineralisation, offer a strong built foundation naturally. This paper is an attempt to investigate the potentials of microbial activity as an alternative process for the material exposition and underwater construction via the process of biomineralisation and contribute to the field of construction technology. The main objective of the paper is to understand the role of microbial biomineralisation as a sustainable, culturally relevant construction technique for underwater habitats and focuses on deriving a modular unit, akin to a block, using calcium carbonate derived from the process of biomineralisation. In this scenario the case of bacterium bacillus sphaericus, that aids in biomineralisation, shall be analysed thoroughly using Fusion 360 and Real flow. The research examines the process of Biomineralisation and the characteristics of Calcium Carbonate as a by-product underwater by simulating it on Fusion 360 to assess its structural stability, durability, feasibility of the modular unit to withstand underwater forces, and on Real Flow for probable shapes that could lead to understanding a form. The calcium carbonate has been found to be structurally stable underwater and thus mitigating the challenges induced by water and becoming the potential of a new futurist sustainable material of a new underwater construction in designated areas without disturbing the marine environment.

KEYWORDS: Biomineralisation - Calcification, Marine - Landscape, Microbial Activity - Coral, Biotechnology

From Cities to Smart Cities: AI for People and Progress

Siya Rawat, Department of Fine Arts, Graphic Era Hill University, Dehradun Campus, Uttarakhand
siyarawat062003@gmail.com

Mandakini Sharma, Department of Fine Arts, Graphic Era Hill University, Dehradun Campus, Uttarakhand
msharma@gehu.ac.in

ABSTRACT : AI-powered cities are not just better to live in; they are also more sustainable and resilient. Because of their flexibility, they are much better equipped to handle ever-changing demands and can adapt to a wide range of situations, which is essential. Security, diversity, and citizen engagement are among the other highly debated topics concerning urban AI adoption and implementation. With more city digitalisation efforts concentrated on infrastructure, technologies, and government, they require faster and more effective solutions, ethical governance, and data protection that ensure equal access to digital utilities. The lack of this has dire implications for growth, leading to inequality and exclusion. This research paper will focus on the difference between traditional cities and AI-powered ones, and the ways to change the legacy city into a sustainable, modern town through the necessary alterations in infrastructure, technologies, social changes, and others. We will also look at the advantages of AI in the city with a broader positive social impact beyond transport, energy efficiency, waste management, and personalised customisation. While many research works are there that explore AI and its impacts on improving urban systems, few resources are available that try to explore the trade-offs between efficiency and technology with more legacy values and systems, ensuring ethical and inclusive digitalisation. As urbanisation is happening at an accelerating pace, the existing problems related to it are also increasing, requiring more significant and effective changes. AI is the most potential technology that can revolutionise urban management systems as it provides the transition from reactive to proactive, data-driven management with automated functionalities that could optimise mobility, energy distribution and public services. In this case, our paper will aim to research the necessary changes in the legacy city to make it AI-powered by promoting urban intelligence tools and strategies leading to liveability. Literature is currently focused on providing a detailed overview of specific benefits in such domains as transport and energy management. At the same time, it has limited research on trade-offs with the traditional system that if not correctly aligned, can lead to social inclusiveness and equality to be compromised.

KEYWORDS: Artificial intelligence (AI), Smart cities, Urban sustainability, Ethical Governance, Citizen-Centric Development.

The Role of Digital and Social Media in Urban Studies: A Literature Review

Samruddhi Bhalerao, Research Scholar, Sushant University, Gurugram, India, ORCID

Dr. Suruchi Modi, Sr. Professor, Sushant University, Gurugram, India, ORCID

Dr. Neena Zutshi, Professor, World University of Design, Sonipat, India, ORCID

ABSTRACT : The rapid proliferation of digital and social media has significantly influenced urban studies, offering new methodologies for analyzing urban dynamics, enhancing civic participation, and informing policy decisions. A comprehensive review of literature related to previous research efforts has been carried out. The discussion is presented in a chronological order, so that it also indicates the underlying pattern of evolution of thoughts and ideas in the focused domain. Similarly, to the extent possible, care was taken to reproduce the original terminology used by the authors, to preserve the originality of the views. This literature review synthesizes key research on the intersection of digital technologies, social networks, and urban environments, focusing on their implications for urban communication, spatial analysis, participatory planning, and social behavior. The study examines diverse approaches, including the use of social media data in mapping urban movements (Florentino et al., 2014), citizen-driven data visualization for public engagement (Valkanova, Jorda and Moere, 2015, p. 4-16), and the integration of remote sensing and social sensing in urban sprawl assessment (Shao et al., 2021). Additionally, it explores the role of digital tools such as augmented reality (Sanchez-Sepulveda et al., 2019) and tangible user interfaces (Yan et al., 2021) in shaping urban experiences and decision-making. The findings highlight how digital platforms enhance public participation, improve urban functionality assessments, and contribute to more responsive and inclusive urban governance. However, challenges such as data privacy, algorithmic biases, and digital divides remain critical concerns. The study concludes by identifying emerging trends and future research directions, emphasizing the need for ethical frameworks and interdisciplinary collaboration to harness digital media's full potential in urban studies.

KEYWORDS: Digital media, participatory planning, social media, urban studies, urban analytics

Redevelopment and Green Gentrification in the context of 7 GPRA, New Delhi

Abha Shama, Meenakshi Dhote

Department of Environmental Planning, School of Planning and Architecture, I.P. Estate, New Delhi, India.

ABSTRACT : Urban centres follow their unique paths to growth, yet certain processes in this growth are universal. The process of urban transformation through redevelopment is embedded within the city's life cycle. It is a process of change and renewal and is a result of population influx, government policies, local laws, and the market economy.

The reasons for redevelopment are removal of urban blight that sets in due to neglect, economic impracticality of spaces and obsolete functions, often due to technological advancements in lifestyles. In Asian cities, one of the primary reasons, for redevelopment, has been to densify sprawls to make cities compact to accommodate a larger population. This is done for efficient land utilisation and for reduction of travel time.

Some perspectives on redevelopment are aligned with it as it is seen as an endeavour to make cities better places to live. Others caution on its bias towards the elite order that it tends to impose. Redevelopment is criticised for its tendency to cause displacements and societal gentrification. In the time of climate change, the biggest challenge, however, is its inability to address the green gentrification that it causes. The green gentrification further adds to already existing spatial inequalities that manifest in the form of pollution, chaotic traffic, water shortage, seasonal flooding, and urban heat island.

This paper looks at ongoing 'housing redevelopment' in Delhi to understand its role in green gentrification in the city. It looks at the gaps that exist in our acknowledging the phenomenon as acknowledging the reality can bring us to incorporate remedial measures in the process of redevelopment.

KEYWORDS: Redevelopment, , Green Gentrification, GPRA Housing

Evaluating Energy Efficiency and Solar Energy Integration in Residential Villas – A case of Hyderabad, India

Amitava Sarkar, Department of Architecture, School of Planning and Architecture, Vijayawada, 4/4, ITI Road, Vijayawada 520 008, Andhra Pradesh, India

Akash M., Department of Architecture, School of Planning and Architecture, Vijayawada, 4/4, ITI Road, Vijayawada 520 008, Andhra Pradesh, India

Amitava Sarkar, Department of Architecture, School of Planning and Architecture, Vijayawada, 4/4, ITI Road, Vijayawada 520 008, Andhra Pradesh, India

ABSTRACT : With the population of India projected to reach 1.7 billion by 2050, the need for housing will continue to rise, creating both challenges and opportunities for the housing sector. One of the biggest challenges facing the housing sector is the increased demand for energy and resources. The rapid expansion of residential areas is contributing to higher energy consumption, water usage, and waste generation, putting significant strain on existing infrastructure and natural resources. Hence, this research aims to evaluate the role of net-zero energy building (NZEB) approach in reducing residential energy demand by optimizing the villa's passive design strategies with integration of solar energy and energy-efficient technologies. The objective of this research is to optimize the design of residential villas using energy-efficient passive and active strategies to achieve the performance of NZEB. This includes evaluating the potential for solar energy integration within villas to offset energy demand through on-site generation. The building simulation tools are used for the computational comparative analysis in this study. A cost-benefit analysis is presented to compare the base case and proposed case villa designs, focusing on payback periods and long-term savings. The study has also identified the key challenges and barriers in implementing NZEB strategies within the Indian residential villa sector. The goal is to develop a scalable framework for sustainable NZEB villa developments, contributing to India's 'net-zero emissions' roadmap by 2070. The research is limited to residential villas in India and does not include high-rise apartments or commercial buildings. The findings from the comparative analysis between the baseline villa design and the proposed optimized villa design have shown the significant energy saving potential of 54% by optimizing the passive and active design strategies and potential for further energy saving of 5.7% (total 59.7% savings) by integrating the rooftop solar panels as a source of renewable energy.

KEYWORDS: Net-zero energy buildings; design optimization; composite climate; renewable energy; rooftop solar PV panels; pay-back periods

A Critical Review of Institutional Setup for Upliftment of Nomadic tribes in India

Ms. Harneet Kaur, Assistant Professor, Amity School of Architecture and Planning, Amity University Gurugram

Prof (Dr.) Ila Gupta, Professor and Director, Amity School of Architecture and Planning, Amity University Gurugram

Prof (Dr.) Preetha Ravisree Sajin, Dean, Amity School of Architecture and Planning, Amity University Mohali

ABSTRACT : The institutional framework, laws, and programs pertaining to India's nomadic and semi-nomadic tribes are examined in this article. It focuses on the state of these initiatives when they are put into practice locally. Tribes that are semi-nomadic or nomadic are socially excluded from the majority culture. They are denied their fundamental civil rights, and their level of atrocities is extremely high. To improve their social and economic circumstances, the Government of India's institutional framework carries out a number of policies. The survey that was done for the Kalbeliya, one of the nomadic tribes in Rajasthan, is used in the paper to analyze the results of these initiatives. The survey was carried out across the different Kalbeliya deras located in various Rajasthani zones. The literature review goes into detail about how different authors and researchers have viewed the Government of India's initiative. Despite the paucity of research on these marginalized groups, a summary is available. The success rate of government programs for nomadic tribes is summarized in the article.

KEYWORDS: Institutional setup, Nomadic tribes, Political empowerment, Denotified, Seminomadic tribes, Marginalization, Discrimination, Exclusion, Mainstream society, Nongovernmental initiatives, Policy framework.

Comparison of Daylighting Simulation Tools in Indian Residential Context: A Study of IES-VE, Design Builder and Climate Studio

Bikash Patra, PhD Scholar, School of Art and Architecture, Sushant University, Gurugram, India
Prof. (Dr) Tejwant Singh Brar, Senior Professor and HOD DoPAR, School of Art and Architecture, Sushant University, Gurugram, India
Prof. (Dr) Rajeev Garg, Adjunct Professor, Department of Architecture & Planning, NIT Kurukshetra, India

ABSTRACT : In residential buildings, daylighting is essential for increasing energy efficiency, thermal comfort, and occupant well-being, especially in countries with diverse climates like India. With the increasing emphasis on sustainable architecture, simulation tools have become essential for predicting daylight performance in the early stages of design. However, the effectiveness of these tools in addressing the complexities of residence in India has not been examined adequately. This research aims to critically evaluate the suitability of existing daylighting simulation tools for residential buildings in India, focusing on their relevance, adaptability, and accuracy in residential buildings across various climatic zones in India. This study includes publications published between 2011 and 2025 in journals indexed by Web of Science, Scopus, and Google Scholar. This study develops a comparative framework to evaluate prominent daylighting simulation tools recommended by the Energy Conservation Building Code (ECBC), namely IES-VE, Design Builder, and Climate Studio. The evaluation focuses on key criteria, including climatic responsiveness, user-friendliness, cost, simulation capabilities, compliance with Indian standards, IES-VE focusses on compliance and climate-based indicators, whereas Design Builder combines daylighting and energy modelling. Climate Studio, a fast and highly accurate Radiance-based tool, excels in radiation-accurate simulations ideal for climate-responsive design in Indian contexts. Effective daylighting in Indian dwellings necessitates localized simulation norms, improved technologies, and specialized design professional training. For optimal tool performance and adoption in Indian residential buildings, daylighting solutions must be climate-responsive, integrated, and user-focused.

KEYWORDS: Daylighting simulation; residential buildings; IES-VE; Design builder; Climate studio

Integration of AI and IoT for Inclusive Smart City Infrastructure

Ar. Durga Haldkar, School of Architecture & Planning, Lingayas Vidyapeeth, Faridabad, Haryana

Ar. Ria Kapoor, School of Art and Architecture, Sushant University, Gurugram, Haryana

Dr. Omkar Gupta, ICAR-Indian Agricultural Research Institute, New Delhi

Ashok Gupta, School of Architecture & Planning, Lingayas Vidyapeeth, Faridabad, Haryana

Corresponding author e-mail: durgahaldkar364@gmail.com

ABSTRACT : The evolution of urban ecosystems into smart cities demands a synergistic integration of Artificial Intelligence (AI) and the Internet of Things (IoT) to foster inclusivity, sustainability, and resilience. This paper presents a comprehensive framework for the integration of AI and IoT technologies aimed at developing inclusive smart city infrastructure that caters to diverse populations, including marginalized communities, the elderly, and people with disabilities. The proposed system utilizes sensor-driven IoT networks for real-time data acquisition across urban domains - such as transportation, energy, waste management, and public safety - and leverages AI algorithms for predictive analytics, decision-making, and resource optimization. More than 50 research papers from the year 2000 to 2025 have been analyzed and reports suggest significant improvements, such as up to 25% better energy efficiency, 30% reduced traffic congestion, and 40% optimized waste management through these technologies. Emphasis is placed on data interoperability, privacy-preserving mechanisms, and equitable service delivery through adaptive learning models. Case studies and simulations demonstrate how AI-enabled IoT solutions can address urban inequalities by enabling personalized services, accessible infrastructure, and responsive governance. The findings suggest that the strategic integration of AI and IoT not only enhances operational efficiency but also promotes inclusive urban development. This research contributes to the discourse on smart city planning by highlighting the role of intelligent technologies in achieving the UN Sustainable Development Goals (SDGs), particularly Goal 11: Sustainable Cities and Communities.

KEYWORDS: Inclusive urban development; Artificial Intelligence (AI); Internet of Things (IoT), Smart City Infrastructure, Sustainable Cities.

Decentralized sustainable Solid Waste Management Solutions for Commercial Development along National Highways

Ar. Amruta Konde, Assoc. Prof. Aditi Lanke

Bharati Vidyapeeth (Deemed to be University) College of Architecture, Pune India.

ABSTRACT : In the last few decades the intercity connectivity significantly increased. National & state highways is one of the flourishing transportation industries in terms of road side commercial development for ease of the user. In Maharashtra, National, State highways length is increased, benefiting farmers, small-scale industries, industrial townships and backward regions connecting them to important regional trade centers, etc. The businesses along the national highways including eateries, gas stations, hotels, and the like, are rising significantly with the expansion of national highways. They are economically viable but on the other side they are causing environmental issues like soil erosion, increase in solid waste, poor food quality, and increase in health issues in the nearby area. The littering of solid waste along the national highway has a larger impact on environmental sustainability. However, existing solid waste management systems in these regions are frequently insufficient, due to lack of infrastructural development, lack of services provided, etc. as this region does not fall under municipal limits leading to inappropriate disposal techniques like burning and open dumping of waste which poses serious hazards to human health and the environment. The study investigates decentralized sustainable solid waste management (SWM) solutions for commercial zones along national highway-NH 48. It runs from Delhi to Chennai (Delhi, Haryana, Rajasthan, Gujarat, Maharashtra, Karnataka, and Tamil Nadu.) Employing a quantitative research approach, the study encompasses field observations, surveys of various stakeholders, and waste quantification analyses. The selected case measures stretches of 2 km on national highway 48 -Stretch 1: - from Satara to Pune, stretch 2: - Pune to Satara are considered for study after identified as dense commercial nodes. The study identifies inefficiencies of current waste handling methods and highlights the need for decentralized, community-driven waste management systems. The research underscores the necessity for decentralized SWM systems that facilitate on-site waste segregation, composting, and recycling. The study recommends guidelines and solutions at individual and community levels to mitigate environmental impact of commercial activities along selected cases of national highway.

KEYWORDS: Decentralized Solid Waste Management, Waste Management Guidelines, Commercial Development, National Highways, Environmental Sustainability, And Waste Management Practices.

Investigation of Thermal Performance of Recycled Plastic Panel for Building Envelope: A Methodological Approach

Saloni Bharat Bandal, Prof. Archana Gaikwad, Prof. Priya Bangle,
Bharati Vidyapeeth (Deemed to be University) College of Architecture, Pune, India

ABSTRACT : The growing demand for sustainable construction materials magnified interest in innovative alternatives to reduce the energy consumption, with recycled materials emerging as a prominent focus. Recycled plastic has emerged as an alternative material in this context due to its durability, affordability, and environmental benefits. Currently recycled plastic is used in building components such as plastic lumber for decking and fencing, lightweight plastic bricks and blocks for low-cost housing, insulation materials etc. Incorporating recycled plastic into building envelopes presents an opportunity to reduce both waste and energy consumption. There are various methods used for assessing thermal performance, however in absence of adequate knowledge replication is limited. This paper aims to fill this gap by sharing learnings from a research project where both experimental and simulation methods were used to evaluate the thermal performance of recycled plastic panels used for building envelope to improve thermal comfort and reduce energy consumption and cost. The research is conducted using experimental and simulation methods to evaluate the thermal performance of recycled plastic panels in Pune's climate zone for over 6 months duration. Two panel configurations were evaluated: one recycled plastic panel coated with chemical-based cool paint and other with natural cow dung (gobar) paint. Use of data loggers enabled analysis of the temperature difference (ΔT) and thermal conductivity.

KEYWORDS: Recycled Plastic Panels, Experimental data, Dynamic simulation, Surface temperature measurement, Delta T analysis, Heat conduction analysis

A critical analysis of leverage of AI and Digital Technologies for sustainable smart cities

Dr. Mohit K. Agarwal, School of Architecture & Planning, BBD University, Ayodhya Road, Lucknow.

Ankita Gupta, School of Architecture & Planning, BBD University, Ayodhya Road, Lucknow
Himanshu Kasera, Faculty of Architecture, University of Naples Federico II, Naples, Italy

ABSTRACT : The contemporary cities all over the world are looking for innovative solutions for sustainable development due to the rapid urbanization. The integration of artificial intelligence (AI) with digital technologies has transformed these into smart cities. The aim of this research paper is to critically examine the leverage of AI and DT for sustainable smart cities. Critical review was carried out through the analysis of literature-based case studies from India and at global level. Research also investigates its applications, barriers, and future scope in sustainable city development. To analyze various cities, this research included six evaluating parameters: smart mobility, smart governance, smart living, smart environment, smart people, and smart economy. Analysis discloses that AI and DT can play an effective role in developing sustainable smart cities. The result of this study suggests that the cities leveraged with AI and DT can create sustainable, resilient, and livable environments, which can foster the better future and well-being of their citizens. Further, it concluded that AI-DT-equipped smart cities not only have the potential to promote sustainable urban development but also can optimize the e-governance process. The research findings provide insights to policymakers, urban planners, and various stakeholders looking at the potential of AI and DT in urban development. This research ends with discussing the challenges and limitations related to data privacy, security, and accessibility.

KEYWORDS: Sustainable smart city, AI, IoT, Digital Technologies

Need for Digital Model to Enhance Stakeholder Participation in Pedestrian-Oriented Development

Kanuru Yamunavalli, Jayprakash S Chadchan
School of Architecture, CHRIST University, Bangalore, India

ABSTRACT : Pedestrian oriented development (POD) plays a vital role in achieving Sustainable Development Goals (SDGs) and is gaining importance in promoting walkable environments. Surveys remain a widely used traditional method for gathering the stakeholders' opinions in POD studies. Surveys with a high response rate are more reliable as the results tend to be more accurate and representative. However a recurring challenge is the difficulty in recruiting a large participant base often leading to limited sample sizes. This undermines the reliability of findings and impairs the capacity to understand the stakeholders' opinions. To address this gap a critical review of literature on POD was conducted. The results revealed that researchers highlighted the need for large samples, representativeness, generalizability and inclusion of more factors in survey questionnaires. This stresses the need for an alternative approach for efficient data collection from wider participants while ensuring efficient use of resources. For this purpose a new digital model, the Public Preference Model (PPM) is proposed that leverages a mobile application to encourage the stakeholders' participation by providing incentives for data collection. Through this approach stakeholders' opinions can be gathered effectively and the same method can be applied for citizen participation while inviting for discussions on new developments. This proposed model benefits key stakeholders such as urban planners and designers, researchers, government authorities, private agencies with comprehensive data for informed evidence based decision-making in development of POD. This approach supports effective planning and implementation of POD which is directly aligned with SDG 3 (Good Health and Well-being), SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action).

KEYWORDS: Walkability; Pedestrian infrastructure; Decision-making; Digital Survey; Public participation; Sustainable cities

Biophilic Design Integration in Multi-Storeyed Housing: Enhancing Comfort, Well-being and Sustainability in India

Geetanjali Kapoor, University Institute of Architecture, Chandigarh University, Mohali, Punjab, India 140413

Meenakshi Singhal, Department of Architecture, Guru Nanak Dev University, Amritsar, Punjab, India 143005

ABSTRACT : India's rapid urbanization and land scarcity have driven a surge in high-rise residential developments, raising concerns related to livability, occupant well-being, and climate adaptability. This paper explores how biophilic design rooted in nature-centric architectural strategies can enhance occupant comfort, psychological health, energy efficiency, and climate-responsiveness in multi-storeyed housing. Evidence shows that elements such as daylight, cross-ventilation, indoor greenery, water features, and nature views improve thermal comfort and reduce stress. Passive techniques like vertical green walls, courtyard gardens, and shading devices help lower cooling loads and energy use. Despite these benefits, the application of biophilic design in residential projects especially multi-storeyed housing remain underexplored both globally and in India. Interest in biophilic environments increased notably during the COVID-19 pandemic, yet this momentum has not translated into widespread residential design practice. This research addresses the gap by analyzing how biophilic strategies can be meaningfully integrated into the context of Indian housing. A PRISMA-guided systematic literature review using the Web of Science and Biblioshiny was conducted, revealing a growing focus on biophilic concepts for sustainable buildings, but a notable gap in their application within the high-rise residential sector. The findings advocate for embedding biophilic principles into residential design as a pathway toward healthier, more sustainable urban living. This study offers critical insights for architects, planners, and policymakers aiming to align vertical growth with ecological and human well-being.

KEYWORDS: Biophilic design; Multi-storeyed housing; Occupant comfort; Thermal comfort; India; Systematic literature review; Sustainable buildings

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Professor & Research Head, School of Art and Architecture, Sushant University, Gurugram

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**Prof. (Dr.) Pooja
Lalit Kumar**

*Convenor, ICAAUS
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and Architecture,
Sushant University*

Dr. Pooja Lalit Kumar is Professor at the School of Art and Architecture, Sushant University, Gurugram with more than two decades of experience in industry and academia. She holds a B.Arch. from SSAA (2000), a Gold Medal in M.Ekistics from Jamia Millia Islamia (2017), and advanced certifications in Environmental Impact Assessment and Urban Planning from CEPT University. With over 17 years of professional practice, she has designed major corporate and institutional projects for organizations such as AHF India Cares, Bharti Group, and Hindustan Times. Her research focuses on resilience, sustainability, disaster-risk assessment, and urban socio-ecological systems.

She is also an empanelled access auditor with the Department of Empowerment of Persons with Disabilities, Government of India, contributing to inclusive and accessible built environments.



**Prof. Shanu
Agarwal**

*Co-Convenor, ICAAUS
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School of Art and
Architecture,
Sushant University*

Inclusive environments are essential to creating societies that uphold equity, dignity, and accessibility. As an architect and planner, I believe built spaces must extend beyond aesthetics to respond to diversity—enabling people of all abilities, ages, and backgrounds to participate fully. The conference creates a space for exchanging knowledge and fostering dialogue on inclusive design, equity in society and culture, resilient growth rooted in heritage, and the role of governance, policy, and innovation in shaping the built environment.

My role as co-convenor has been both meaningful and rewarding. It offered the opportunity to engage with experts, curate perspectives, and frame conversations that highlight inclusivity as a shared responsibility. The experience has strengthened my commitment to advancing design practices that are sustainable, accessible, and empathetic.



**Prof. Ria Kapoor
Dheer**

*Co-Convenor, ICAAUS
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School of Art and
Architecture,
Sushant University*

ICAAUS 2025 reflects my conviction that urban growth must be guided by equity and accessibility. Inclusion is both a personal value and a professional priority, and this platform offers an important opportunity to advance knowledge and practice. I value how such discussions foster critical reflection, unite diverse perspectives, and provide frameworks that can influence the mindset of decision makers. As cities expand, it is essential that they embrace diversity and respond to human needs with care. To me, ICAAUS is more than an event, it is a collective movement toward cities that truly belong to everyone. As an educator and advocate, I see my role as helping to advance this vision of inclusivity in every sphere of urban life



**Prof. (Dr.) Purva
Mujumdar**

*Publication Head,
ICAAUS 2025
School of Art and
Architecture,
Sushant University*

Organizing the ICAAUS 2025 Conference has been a highly rewarding and insightful journey. My involvement, particularly in the publication committee, provided me with first-hand experience in managing the entire process of planning and developing conference proceedings. From reviewing abstracts and full papers to structuring and compiling the final book, I learned the nuances of academic publishing and content development. This responsibility not only strengthened my attention to detail and organizational skills but also deepened my understanding of research communication. Working closely with the organizing committee was equally enriching, as it fostered teamwork, coordination, and problem-solving in a professional setting. Overall, the experience has significantly contributed to both my academic and professional growth.



**Prof. Keerti
Mishra**

*Graphics Head,
ICAAUS 2025
School of Art and
Architecture,
Sushant University*

As part of the Organising Committee for our college conference on Inclusivity, I feel privileged to contribute to an event that celebrates diversity, empathy, and collaboration. ICAAUS 2025 is not just about dialogue; it is about creating a safe and welcoming space where every voice is valued, regardless of background, identity, or perspective. Our team has worked tirelessly to curate interactive sessions that highlight the importance of equitable opportunities and mutual respect. By bringing together students, faculty, and experts, we aim to spark meaningful conversations that inspire change both within our campus and beyond. Inclusivity is more than a theme—it is a responsibility, and this conference is our step toward building a truly inclusive community. While handling the Creatives, from posters and digital banners to stage backdrops, every element was designed with the intention of making the theme of inclusivity not only heard but also seen and felt. Working alongside a passionate team, I ensured that our graphics amplified the message of belonging and equality.



**Prof. Deepak
Kumar**

*Treasurer, ICAAUS
2025
School of Art and
Architecture,
Sushant University*

Serving as the Treasurer for the organizing committee of ICAAUS 2025 at the School of Art and Architecture, Sushant University, has been a highly enriching experience. Managing finances for such an event required precision, transparency, and strong coordination with the entire team ensuring smooth financial planning for logistics, sponsorships, and resource allocation.

Working alongside faculty, students, and external partners offered valuable insights into collaborative problem solving. Overall, the experience enhanced my ability to balance responsibility with leadership, while contributing to the success of a prestigious academic event.



Prof. Kiran Singh
*Communication Head,
 ICAAUS 2025
 School of Art and
 Architecture,
 Sushant University*

Working as a core committee member for the First International Conference on Art, Architecture & Urban Studies (ICAAUS 2025) has been a profoundly enriching experience. Our team has collaborated to establish a platform that directly addresses the urgent need for inclusive environments in growing cities. The conference's alignment with the Sugamya Bharat Abhiyan and key UN SDGs—particularly those on equality and sustainable communities—underscores its real-world significance. My role has involved shaping the discourse to explore how leveraging innovative design, policy frameworks, and emerging technologies can create barrier-free urban spaces. This initiative has not only fostered cutting-edge research but has also inspired actionable strategies to build cities that are just, accessible, and responsive to the needs of all citizens.



**Ar. Naina Grover
 Sood,**
*Graphics Team,
 ICAAUS 2025
 School of Art and
 Architecture,
 Sushant University*

As a part of the Graphics Team for the International Conference on Art, Architecture, and Urban Studies (ICAAUS 2025), a three-day in-house event hosted at our college. Our team was responsible for designing the conference book, along with other visual assets, ensuring a cohesive and inclusive visual identity throughout the event.

It was a great opportunity to apply creative skills in a professional setting and contribute to an international platform. The experience of working alongside organizers, faculty, and speakers was both enriching and inspiring, allowing me to grow as a designer and team collaborator.



**Ar. Pratibha
 Malik,**
*Comparer, ICAAUS
 2025
 School of Art and
 Architecture,
 Sushant University*

Inclusivity, to me, is about more than accessibility—it is about dignity, belonging, and representation. As an architect, I see design as a responsibility to create spaces that welcome diversity and celebrate human experience. As an educator, I carry this ethos into my classrooms, ensuring every student's perspective is valued, and future architects are equipped to design with empathy and equity.

Serving as the compère for the International Conference on Inclusivity at ICAAUS and working closely with the organizing committee is a meaningful extension of this belief. It was inspiring to witness how participants—coming from different disciplines and backgrounds—share a common thought process: that inclusivity is not an add-on, but a core principle shaping both design and education today.

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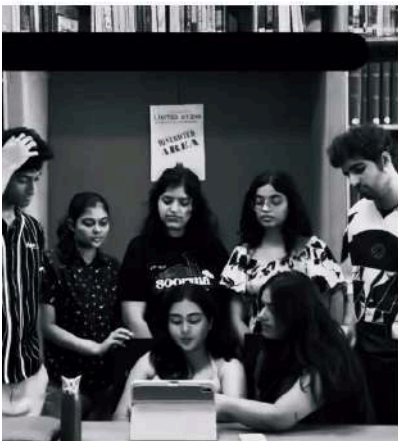


The Organizing Committee of ICAAUS 2025 extends its sincere gratitude to all authors, researchers, academicians, and industry professionals who have contributed their valuable work to this Book of Abstracts. Your scholarly inputs form the foundation of this conference and advance meaningful dialogue and innovation in the field.

We deeply appreciate the efforts of our keynote speakers, session chairs and co-chairs, reviewers, and advisory board members for their guidance and commitment to maintaining academic rigor. We also acknowledge the support of our knowledge partners, sponsors, and collaborators whose encouragement made this conference possible.

A special word of thanks is extended to the faculty, staff, and students of School of Art and Architecture, Sushant University for their unwavering dedication and effort in planning, coordination, and execution. Their commitment has been instrumental in ensuring the success of this international conference.

Finally, we thank all participants for their enthusiastic engagement and contributions, which truly make this conference a vibrant platform for knowledge exchange and collaboration.





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